RCRA CORRECTIVE ACTIONS
DESCRIPTION OF CURRENT CONDITONS AND INTERIM MEASURES REPORT

Former Hayes Lemmerz Site
Ferndale, Oakland County, Michigan
Site ID Number: MID 041 803 123
Waste Data System Number: 395519

ATC Project Number: NPDAX19001

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Prepared For:

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1.0 INTRODUCTION

ATC Group Services LLC (ATC) has been retained by Axle Holdings 1, LLC (Client) to prepare a Description of Current Conditons (DOCC) and Interim Measures (IM) Report in accordance with the Resources Conservation and Recovery Act (RCRA) Corrective Action Plan (May, 1994) for the former Hayes Lemmerz Site located on W. Eight Mile Road, Ferndale, Oakland County, Michigan (Site). Corrective Action will be guided and implemented via a Corrective Action Consent Order that is being drafted by EGLE and will be negotiated between the two parties.

The Site is a former hazardous waste storage facility regulated under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and its administrative rules (Act 451). The Site is identified with Environmental Protection Agency (EPA) ID Number MID 041 803 123. Under Part 111, an owner or operator of such facilities is subject to corrective action to establish environmental protection standards based on zoning and intended land use.

2.0 FACILITY DESCRIPTION

2.1 Site Location Information

The Site is located on W. Eight Mile Road in Ferndale, Oakland County, Michigan, on the north side of W. Eight Mile Road between Mitchelldale Avenue and Pinecrest Drive. The Site consists of approximately 34 acres. Refer to **Figure 1** in Appendix A for a Site Details Map.

2.2 Site and Vicinity General Characteristics

The Site is located in an area characterized by commercial business, light industrial, and residential use located in the city limits of the City of Ferndale, at the southern border of Oakland County. The Site is zoned light industrial (M-1) according to the City of Ferndale online Zoning Map Application. The adjacent parcels to the west, north and east are zoned light industrial, and further outlined predominately residential with some commercial properties lining the major corridor to the south. Refer to **Figure 1** in Appendix A for a Site Details Map.

2.3 Current Use of Site

The Site is currently formerly developed, partially graded, vacant land.

2.4 Intended Future Use of Site

The intended use of the southern portion of the Site is for the construction of an additional manufacturing building for the western adjacent Detroit Axle operation.

2.5 Topographic Setting

The Site is located in the west ½ of the southeast ¼ of Section 33, Township 1 North, Range 11 East, on the United States Geological Survey (USGS) 7.5 Minute Topographic Map, *Detroit, Michigan Quadrangle,* dated 1985. The Site is identified at approximately 665' above mean sea level. The topography across the Site and surrounding area is relatively flat with a gentle slope to the east. The Site location map is attached as in Appendix A as **Figure 1**.

2.6 Hydrogeologic Setting

The Site is located in the Clinton River drainage basin (HUC8: 0409003) of the River Rouge, which discharges to Lake St. Clair. The nearest surface-water body to the Site is identified as a pond on the Woodlawn Cemetery approximately 5,160 feet east/southeast of the Site. No wetlands were identified on the USFWS National Wetlands Inventory for the vicinity of the Site.

The USDA NRCS Soil Survey map of the area identifies surficial soils at the Site as primarily Fortress Family loamy sand with 0 to 6 percent slopes, which typically formed in sandy human- transported materials on the near-shore slopes of water-lain moraines and are characterized as moderately well drained with very low runoff potential. The Michigan Department of Environment, Great Lakes and

Energy (EGLE) GeoWebFace database identifies the Site as lying within a lacustrine sand and gravel plain overlying Upper Devonian- aged Antrim Shale. The brown to black pyritic organic-rich shale is identified as 60 to 200 feet thick in the area, with the bedrock surface approximately 100 to 150 feet below grade. According to prior reports, Oakland County Health Department records indicate that a 560-foot deep well was installed at the Site by Corsault Well Drilling looking for a source of cooling water; however, the well was terminated in dry shale. While records of this well are not currently available, there are other wells in the general area that confirm the depth to bedrock and general lithology. ATC will submit a FIOA request for records of the well.

The nearest water-supply wells identified in the EGLE Wellogic database for the area consisted of a cluster of geothermal wells operated by the City of Ferndale at 222 East 9 Mile Road. Those wells are developed approximately 400 feet below grade, having encountered bedrock approximately 120 feet below grade. The wells are located approximately 1.6 miles to the northeast of the Site. There are no boring logs available for these wells, however the Wellogic Well Records do provide descriptions of the sand, clay, and shale (bedrock) units. Generally, the sand unit lays on top with a thickness of 10 feet; the clay unit resides below the sand unit and extends down approximately 115 feet to the bedrock; the bedrock is Shale and has a thickness of approximately 55 feet (Wellogic).

Based on review of soil boring logs for the Site from current and previous Site Investigations, the Southern portion of the Site contains native sand of various grain size to approximately 20 feet below grade. The sand layer is followed by a clay layer approximately 115 feet thick that extends to the bedrock. In certain areas up to five feet of discontinuous fill containing brick, concrete, and glass debris, in certain locations, overlies approximately 20 to 23 feet of loose native sand above clay that extends to bedrock. On the northern portion of the property, the native sand is interbedded with clay, silty clay, and sandy clay. Boring logs for the Site can be found in Appendix C of this report. Cross sectional maps can be found in Appendix A as **Figures 18-21**. These cross-sections will be the basis for the conceptual site model (CSM) as additional investigation is performed.

Groundwater generally is encountered between 8 to 11 feet below surface grade (bsg). Groundwater gradient maps completed for the April and June 2020 groundwater sampling events indicate groundwater flow direction to be toward the east-southeast and can be found in Appendix A as **Figures 10 and 11**, respectively.

Topographic maps from 1939 and 2019 show current and historical drainage patterns at the Site. Current and Historical drainage patterns at the Site are from the West portion of the Site to the East. The 1939 historical topographic maps was obtained from the USGS website and can be found as **Figures 23**. Current topography was measured during a recent survey and can be found as a part of **Figure 18**.

3.0 FACILITY BACKGROUND

3.1 General Site Information and History of Ownership

The Site occupies the northwest corner of the intersection of West Eight Mile Road and Pinecrest Drive. The Site was developed with a multi-building research and development facility for chemical additives for gasoline products from the 1930s until the 1980s, when manufacturing operations took over the facility until 2012. The buildings were demolished in 2012-2013. Various building plans identified up to 38 buildings or building wings at the Site over its history. Underground tunnels reportedly linked several of the southern buildings, and several of the buildings reportedly were bunkered with earthen mounds as protection in the event of explosions. The locations of known tunnels can be found in **Figure 1**, however the possibility remains that there are additional unmapped tunnels. Additional investigation will be required to determine the full extent and location of all the tunnels on-site. As additional information is identified our CSM and cross sections will be updated. Buildings were reportedly heated principally by natural gas central steam systems, as available, that also extended along the underground tunnels. Refer to **Figure 1** – Site Details Map in Appendix A for a depiction of current and former site features.

The Site has been developed since the 1930s until 2012 when demolition of the entire Site began. A summary of the former ownership at the Site is as follows:

- Ethyl Corporation from 1936 to 1987;
- CMI purchased the site though a holding company (TC Realty) in 1987;
- TC Realty changed name to HLI Realty (operating as Hayes Lemmerz International) in 1999;
- HLI Realty transferred to Cedan Holdings VI, LLC 2012;
- Cedan Holdings VI transferred to Pinecrest Holdings, LLC purchased May 4, 2016;
- Pinecrest Holdings, LLC entered into a Land Contract with Axle Holdings 1, LLC (for a 6 acre portion of the Site) and a Land Contract with Axle Holdings 2, LLC (for a 28 acre portion of the Site).

3.2 Historical Facility Operations

The Site contains approximately 34 acres and was formerly owned and operated by Ethyl Corporation (Ethyl). Historical operations at the Site by Ethyl included blending of fuels, foundry operations, service operations, maintenance operations, chemical storage, incineration, and laboratory testing from the 1930s until the 1980s. Subsequent manufacturing operations by CMI-Tech Center (after 1987), TC Realty, Inc. (in the early 1990s), and Hayes Lemmerz International (after 1999) included researching various casting and molding processes, integrity testing automotive parts, computer- aided product assembly and product testing, and other engineering and analysis testing. The Site is currently vacant following demolition activities that occurred between 2012 and 2013. Below is a summary of the former buildings and uses located on the Site:

Building ID	Description of Former Building Use
A	Executive Offices, Printing, Cafeteria, Library, and Machine Shop
B	Experimental Operations, Machine Shop, Vehicle Servicing, and Ref. Technology
C	Engine Research and Dynamometer, Fuel Testing, Control Testing
DA	Chemical Research, Executive Offices, and Patent Department
E	Office, Auto Application Department, and Large Engine Dynamometer Testing
F	Maintenance, Pipe Shop, Carpenter Shop, Glass Blower Shop, and Manufacturing
H	Fueling and Oil Blending
J	Fuel Storage
M	Chemical Development Lab, Heavy Equipment and Manufacturing
N	Chemical Storage
O	Maintenance Storage
Q	Guard Shack
AL	Vehicle Fueling
AN	Emissions Laboratory, Dynamometer Testing Area, Dipping Operations, and Manufacturing
AC	Active Metal Storage
AH	Chemical Engineering Products
L	Bulk Chemicals
U	Chemical Res. And Pilot Plant
AF	Drum Storage
AJ	Can Storage
AB	Can Storage
R	Fleet Building
K	Chemical Supplies Storage
P	Chemical Storage

3.2.1 Former Waste Generation

Ethyl submitted an application for a hazardous waste permit for the generation and storage of hazardous waste generated during the research and development activities at the facility. The Part A Hazardous waste permit application listed spent solvent waste codes for the container storage of 6,400 pounds of F002 waste; 5,600 pounds of F004 waste; and 21,000 pounds of F005 waste. These wastes were listed as ignitable (D001), corrosive (D002), reactive (D003), and toxic (D000). During RCRA facility inspections conducted by the Michigan Department of Natural Resources (MDNR) in the early 1980s it was noted that Ethyl was generating organophosphate waste, 1,800 gallons of waste oil, and 4,500 gallons of waste gasoline.

TC Realty, Inc. (TCR) generated waste primarily from testing and analyzing automotive products. TCR generated mineral spirits (D001) from cleaning machinery that tests automotive parts. TCR also generated hydraulic oil and waste motor oil from automotive testing.

3.2.2 Former Waste Storage

According to a Preliminary Assessment/Visual Site Inspection Report, prepared by PRC Environmental in 1994, there were four former solid waste management units (SWMU) located at the Site. Ethyl submitted a notification of hazardous waste activity to EPA on August 6, 1980. The facility submitted a RCRA Part A Permit application on November 14, 1980. The application listed container storage (S01) of 5,000 gallons of hazardous waste, and the following waste codes: F002 (6,400 pounds); F004 (5,600 pounds); and F005 (21,000 pounds). Ethyl submitted a closure plan for its hazardous waste storage area SWMU-1 (former drum storage area) on June 3, 1983, which was approved by the EPA on October 11, 1983. The closure was reportedly completed and certified by the MDEQ on February 14, 1984 as a Clean Closure. A FOIA request was sent to EGLE on September 15, 2021 requesting the correspondence that certifies the Clean Closure. Ethyl did not file for EPA hazardous waste activity after February 1984. Additionally, TCR stored mineral spirits waste in a 500-gallon above ground tank and the waste oils were stored in 55-gallon drums at the SWMU-1 location.

3.2.3 Former Waste Disposal

Ethyl maintained no records for the generation, storage or disposal of waste onsite. However, according to correspondence from Ethyl to the Oakland County Health Department in 1985, laboratory wastes, residues, used glassware, foundry sands, and containers reportedly were buried in pits in the northern, central, and eastern portions of the Site from 1939 to the early 1980s. Oakland County Health Department records identified 11 pits in the vicinity of former Building AE in the northwestern portion of the Site. These locations have not been confirmed with geophysical or sampling investigations. The 11 pit locations can be found on **Figure 13** and are associated with AOC 2 and previously identified SWMU 2. Other disposal pits were reported north of former Building AI and in the vicinity of the eastern parking lot, where Ethyl Corporation reported that from about 1948 to 1962 metal pans containing residuals of the reaction of sodium compounds with water were disposed in shallow hand-dug holes. No information exists regarding disposal records or transportation for wastes generated by TCR. Additional investigation will be necessary to identify any potentially unknown pits. Geophysical anomalies have been identified and will be investigated.

3.2.4 Former Permits

Ethyl held a license from the U.S. Atomic Energy Commission (License #21-0064-01) from 1954 to 1957. According to the 2012 RJN Phase I ESA, the license was for the storage of a small amount of nuclear source material in the Soundproofing Room of Building C. A July 9, 1998 U.S. Nuclear Regulatory Commission (NRC) letter to CMI-Tech Center indicated that the license was terminated prior to 1985 and that there was insufficient information to justify

closure. NRC requested access to perform an inspection of the Site. Inspection results and current permit status were not identified on available online databases.

Hayes-Lemmerz Technical Center, Inc. was identified as RCRA MID 041 803 123, with additional listings under alternative names as Hayes Lemmerz International Inc., Hayes Lemmerz Tech Svc Inc., Hayes Lemmerz Inc., and Hayes Lemmerz Technical Center Incorporated, Ethyl Corp. R&D Labs, and CMI Tech Center, Inc. The CESQG was first identified in 1980 and last reported in 2006 as a generator of ignitable hazardous waste (D001). Violations were identified in 1995, 2001, and 2005 for pre-transport and records/reporting concerns. In 2005, the EPA identified no records of generated waste shipped to off-site facilities, managed on-site, or received from another off-site facility. The facility was identified on the CERCLIS database in March 1986, with Preliminary Assessments performed in March 1986, February 1990, and March 1992 that determined the Site did not qualify for NPL and deferred further response to RCRA Subtitle C. A CERCLIS NFAP determination was issued December 1995. The TSDF facility was identified as potentially subject to Corrective Action in June 1992 and assigned a low corrective action priority. A CORRACTS Stabilization Measures Evaluation performed in June 1992 determined that insufficient information was available relative to the facility to support implementation of stabilization measures or feasibility evaluation.

Hayes-Lemmerz Technical Center, Inc. was identified on the ICIS-AIR database as Facility MI00000000000A4646 and as State Registration Number A4646, having the following operating status listings:

PROGRAM CODE	PROGRAM DESCRIPTION	OPERATING STATUS
CAACFC	Stratospheric Ozone Protection	Permanently Closed
CAAFESOP	Federally Enforceable State Operating Permit – Non-Title V	Permanently Closed
CAAMACT	MACT Standards (40 CFR Part 63, Subpart RRR)	Permanently Closed
CAASIP	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards	Permanently Closed
CAATVP	Title V Permits	Permanently Closed

3.2.5 Former Storage Tanks

The Site contained numerous unregistered Underground Storage Tanks (USTs) operated by Ethyl ranging in size from 500 to 10,000 gallons. The USTs were used to store gasoline for research and development. In the mid-1980s the Ferndale Fire Department oversaw the excavation of the USTs. Additionally, CMI operated 1-15,000 gallon diesel UST and one-15,000 gallon gasoline UST. However, it is important to note that due to the lack of available documentation pertaining to regulated USTs (USTs which pre-date tank registration regulations) the exact amount of USTs previously located at the Site is currently unknown. A release (C-0185-96) of the CMI USTs was reported in 1996 and granted a Tier I Unrestricted LUST closure

granted in 1998. A summary of the former storage tanks (65 USTs as provided to ATC through historical documentation and/or previous reports) located on the Site is as follows:

Summary of Former Underground Storage Tanks					
Number of USTs	**Size (gallons)**	**Contents**	**Location**	**Date Installed**	**Date Removed**
8	2,000	Gasoline and/or diesel	West of former Building B	Unknown	1985
15	500	Unknown	North of former Building H	1942	1985
11	1,000	Unknown	North of former Building H	1942	1985
4	5,000	Unknown	North of former Building H	1942	1985
4	10,000	Unknown	North of former Building H	1942	1985
14	1,000	Unknown	North of former Building H	1948	1985
4	10,000	Unknown	North of former Building H	1948	1985
3	1,000	Unknown	Likely in the vicinity of former Buildings O,M,J,E, and/or L	Unknown	1985
1	15,000	Diesel	West of former Building C	1988	2008
1	15,000	Gasoline	West of former Building C	1988	2008

Please refer to Section 6.0 for details regarding the locations of former USTs located at the Site.

3.2.6 Summary of Releases

The Site is identified as a closed LUST site relative to one regulated gasoline UST. A release of gasoline was identified during the refueling of the gasoline UST and a secondary containment chamber (SCC) boot failure occurred in 1996. The gasoline UST was located on the west side of Building C (inclusive to ATC's identified area of concern (AOC) 11 – refer to Section 6.0 for

further details). Following removal of 90 cubic yards of gasoline impacted soil, unrestricted Tier I LUST closure was granted by the MDEQ on February 4, 1998.

A release of heating oil from a former UST located near the north end of Building D was identified based on the 1995 identification of non-aqueous phase liquid (NAPL) in a nearby monitoring well. Because the heating oil UST was not registered, the release was not recorded as a LUST site.

As discussed above, there have been a number of known releases at the Site. It should be noted that presumptively there have may been other historical releases at the Site whose source is unknown. This is evidenced by the presence of contaminants in locations other than where the known releases occurred. Additionally, historical petroleum and fuel additive releases are presumed to have occurred from multiple USTs in the south-central portion of the Site near Buildings B, C, D, E, and F.

4.0 SUMMARY OF ENVIRONMENTAL INVESTIGATIONS AND REPORTING

4.1 Previous Environmental Investigations and Reporting (1985 to 2019)

Previous environmental investigations and associated reporting, as summarized by Applied EcoSystems, Inc, (AE) RCRA Corrective Action Description of Current Conditions Report, dated November 27, 2019, are provided below:

Oakland County Health Department records indicate that Ethyl Corporation proposed gifting the Site to Oakland County in 1985. At the request of the County, NTH conducted a Preliminary Site Assessment of the Site that identified the previous removal of numerous USTs and the disposal of potentially hazardous waste materials in pits around the Site. December 15, 1985 observations by NTH identified several open boreholes, areas devoid of vegetation, and five 3-inch PVC monitoring wells. The monitoring wells were sampled and screened with a gas chromatograph that identified the tentative presence of toluene, tetrahydrofuran, and chloroform in the groundwater samples. A magnetometer survey was performed that identified the presence of buried metallic materials in at least three areas of the Site. NTH recommended additional investigations to evaluate further historical use and disposal of hazardous materials at the Site, groundwater contamination, and buried wastes. Oakland County declined Ethyl Corporation's offer on January 3, 1986.

Ethyl Corporation provided the MDNR with the results of their Site investigations, concluding that no threat to groundwater existed and no remedial actions were required. However, Ethyl Corporation cautioned that "future excavations should be made with the knowledge that the possibility of uncovering some contamination or an intact container would always remain." Based on review of the limited NTH investigation, MDNR concluded on February 19, 1986, "…this site has been adversely impacted and that additional hydrogeological data is necessary" and recommended the Site for scoring and placement on the Act 307 Priority List.

The April 3, 1997 Swanson Environmental LUST Closure Report addressed a release of gasoline which was identified during the dispensing of gasoline into the USTs and a secondary containment chamber (SCC) boot failure occurred in 1996. The USTs were located on the west side of Building C (inclusive to ATC's identified area of concern (AOC) 11 – refer to Section 6.0 for further details). MTBE, TMB, and ethylbenzene were detected in soil and/or groundwater above Part 213 Drinking Water, Drinking Water Protection, Groundwater/Surface-Water Interface, and/or Groundwater/Surface-Water Interface Protection RBSLs. Approximately 90 cubic yards of impacted soil were removed, and an unrestricted Tier I LUST Closure was granted in 1998.

The November 27, 2012 RJN Environmental Phase I ESA, conducted when the buildings were vacant but not yet demolished, documented removal of 240 cubic yards of impacted soil identified during the removal of two 10,000-gallon fuel oil USTs, located along the northern exterior portion of Building D (inclusive of ATC's identified area of concern (AOC) 10 – refer to Section 6.0 for further details). In 1995, an abandoned 1,000-gallon heating oil additive UST was discovered and removed that was identified as likely responsible for NAPL identified in a nearby monitoring well.

The December 2, 2012 RJN Environmental BEA identified the site as a "facility", based on soil and groundwater contamination identified during the 2012 Phase II ESA (as discussed following).

Groundwater contamination included 1,2-dichlorobenzene and trichloroethylene. In contrast to other reports that typically identified 72-78 historical USTs at the Site, the BEA reported over 100 USTs and over 10 ASTs, removal of which RJN reportedly verified prior to property transfer to Cedan Holdings VI LLC. Due to the discrepencies in the number of tanks that have been reliably located, it should be noted that additional investigation will be done to reliably estimate the amount of tanks that have been on site. Additional tanks or tank holds may be discovered as site investigations proceed. RJN considered impacted groundwater to be perched and stable, not posing a risk of off-site migration. Due to the age of the former USTs (pre-dating UST/AST registration rules) and lack of documentation; discrepancies with respect to the number of USTs and/or ASTs exists at the Site. ATC will continue to conduct additional evaluation to determine the location and contents USTs/ASTs, if such information exists.

The December 18, 2012 RJN Environmental Phase II ESA documented the installation of 30 soil borings and four hand-auger borings in selected areas of former waste disposal, USTs, and chemical storage. Eleven existing monitoring wells also were sampled. Various VOCs (including trichloroethylene), PNAs, and metals were detected above Part 201 DWP and GSIP criteria and arsenic was detected above DC cleanup criteria. No PCBs were detected.

The November 1, 2013 RJN Environmental Phase II ESA of the northern half of the former Ethyl Corp. Site documented the installation of an additional 15 soil borings and four hand-auger borings following completion of structural demolition and regrading and the sampling of five of the existing monitoring wells at the Site. Friable asbestos materials were removed from the buildings prior to their demolition; and airborne asbestos, cadmium and lead concentrations were monitored during demolition. Three areas of soil impact above GRCC were identified: (a) a former disposal pit northwest of Building AE reportedly used to dispose of laboratory glassware from 1939 until the early 1980s, (b) a former disposal pit north of Buildings AD and AF and northeast of Building YZ reportedly used to dispose of reactive sodium residues from 1948 to 1962, and (c) a disposal pit along the northern portion of the eastern parking lot reportedly used to dispose of laboratory glassware from 1939 to 1955 but in which no glass was identified. "Low" levels of VOCs slightly exceeding GRCC for DW were identified in groundwater, reportedly originating from the disposal pit northwest of Building AE. RJN concluded that the Site met then-current commercial and industrial criteria, requiring no remediation for those uses. For residential use, RJN suggested that excavation of the three former disposal areas would be required. RJN considered that such removal likely would reduce groundwater VOC concentrations below GRCC.

The PME November 3, 2015, Phase I ESA was prepared on behalf of CG Emerson Real Estate Group, Emerson Consulting LLC, Pinecrest Holdings LLC, and Cedan Holdings VI LLC. At the time, a 100-square-foot guardhouse (Building Q) remained at the Site. The ESA identified one on-site CREC, four on-site RECs, and two off-site RECs and recommended a Phase II ESA be conducted.

On June 17, 2016, PME submitted a BEA for the entire 34 acre parcel of the Site on behalf of Pinecrest Holdings LLC. The BEA documented additional subsurface investigations conducted in 2015 and 2016. An additional GPR survey was conducted on December 7-9, 2015 to evaluate the potential presence of orphan USTs. Four anomalies suggestive of USTs and one anomaly suggestive of a drum were identified on the central and southern portions of the Site. Hand auger borings were

conducted at the locations of three shallow anomalies but encountered refusal. A metal detector verified that two of the three anomalies were metallic. The deeper anomaly was not evaluated further, due to the lack of available equipment with the ability to reach required estimated depth (this deep anomaly is addressed under ATC's identified area of concern (AOC) 12. Refer to Section 6.0 for further details). On December 7-8, 2015, PME installed 21 soil borings, 16 temporary monitoring wells, and sampled four existing monitoring wells. A total of 19 soil samples and 20 groundwater samples were analyzed variously for VOCs, SVOCs, PCBs, and metals (arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc). On March 1, 2016, an additional 13 borings and 11 temporary monitoring wells were installed and two existing monitoring wells sampled. Samples were analyzed variously for VOCs, PNAs, PCBs, arsenic, lead, and mercury. Soil exceedances of GRCC for DWP, GSIP, VSI, and DC were identified; and soil exceedances of GNRCC for DWP DC, and VSI were identified. Groundwater exceedances of GRCC for DW, GSI, and VISL were identified; and groundwater exceedances of GNRCC for DW were identified. VSI and VISL exceedances were associated with TCE and mercury. The BEA concluded that the Site was a facility as defined under Part 201 of P.A. 451, as amended.

An October 5, 2018 MDEQ Interoffice Communication from Joe Rogers to Ronda Blayer, Nate Erber, and Clay Spencer documented completion of a Final Vapor Intrusion Screening Form relative to the Hayes Lmmerz/Ethyl Corp. Site. The Conceptual Site Model identified the main constituents with potential for volatilization to the indoor air pathway to be TCE and possibly PCE. Other potential contaminants were identified as including benzene, toluene, ethylbenzene, xylenes, naphthalene, phenanthrene, acenaphthylene, anthracene, mercury, arsenic, lead, chlorobenzene, and vinyl chloride. Vinyl chloride was not considered significant to the volatilization to indoor air pathway at the time because of its infrequent and low detection.

An October 17, 2018 MDEQ Interoffice Communication from Brian Jeffs to Aaron Berndt documented the August 29, 2018 installation of six soil vapor wells to a depth between 5 and 10 feet below ground level in the right-of-way of Pinecrest Drive between West Eight Mile Road and Fielding Street. Vapor samples were analyzed by the MDEQ Laboratory for VOCs. Detections were identified in all samples, with concentrations of PCE identified in all but one of the vapor wells. PCE concentrations ranged from 1.7 to 26 ppb. TCE was detected in two of the vapor wells at concentrations of 100 and 400 ppb. The highest concentrations were downgradient of the monitoring wells at the Site identified with TCE (MW-9 and MW-10).

A May 21, 2019 EGLE Interoffice Communication from Shane Morrison to Ronda Blayer documented Site-Specific Volatilization to Indoor Air Criteria (VIAC) for the Hayes Lemmerz Site. Site specific criteria were developed for residences constructed with a slab-on-grade (restricted) and for residences constructed with a basement (unrestricted). Criteria assumed a groundwater depth of eight feet below grade and a USDA soil type of sand.

On May 29, 2019, PME conducted a Phase I ESA for the 6 acre parcel of the Site on behalf of Detroit Axle and Axle of Dearborn. The Phase I ESA identified previous recommended environmental conditions (RECs) associated with the former use of the Site.

On June 12, 2019, PME submitted a BEA for the 6 acre parcel of the Site on behalf of Detroit Axle and Axle of Dearborn. The BEA was based upon the findings of PME's May 2019 Phase I ESA and prior assessments conducted by RJN and PME and associated analytical results.

A June 14, 2019 EGLE letter from Allan B. Taylor to Mr. Dennis Griffin of Pinecrest Holdings LLC indicated that EGLE conducted indoor air and sub-slab soil-gas testing at several residences along Pinecrest Avenue in March 2019. No concentrations indicative of vapor intrusion were identified in indoor air or in soil gas beneath the homes above levels of concern. However, groundwater testing in two additional temporary monitoring wells (TMW-01 and TMW-02) along the Pinecrest right-of-way (ROW) between Fielding and Northway Streets, north of the 2018 testing, detected a concentration of vinyl chloride in one temporary monitoring well (TMW-02) above the screening level, indicating that additional evaluation is warranted.

4.2 Environmental Investigations Conducted by ATC (2019 to present)

ATC was contracted by Axle Holdings 1, LLC in 2019 to perform environmental investigation of the Site. Specifically, the Site was split into a 6 acre portion and a 28 acre portion. Refer to **Figure 1 – Site Details Map**, in Appendix A for a depiction of the boundaries for the two portions of the Site. The Site was split into a 6 acre portion for the future expansion and construction of the western adjacent Detroit Axle facility, while the remaining 28 acre portion was for future use to be determined. The 6 acre portion of the Site is under Land Contract between Pinecrest Holdings, LLC and Axle Holdings 1, LLC; the 28 acre portion of the Site is under Land Contract between Pinecrest Holdings, LLC and Axle Holdings 2, LLC.

On July 12, 2019, ATC advanced twenty-two (22) soil borings to 5 feet bgs utilizing direct push technology. The soil borings were placed within a grid pattern within the 6-acre portion of the Site. Soil samples were continually screened utilizing a photoionization detector (PID) and soil samples were collected from the 4 to 5 foot bgs interval and submitted to the laboratory and placed on hold until further analysis was requested. ATC requested fifteen (15) soil samples be analyzed for the presence of VOCs utilizing USEPA Method 8260B, and Mercury utilizing US EPA Method 7471A. Additionally, within the soil boring annulus, ATC installed twenty-two (22) soil vapor points at a depth of 4 to 5 feet bgs. Soil vapor sampling was conducted on July 15, 2019, by ATC to evaluate the current conditions at the Site for the Volatilization to Indoor Air Pathway. ATC collected twenty-two (22) soil vapor samples (A1- A4, B1-B4, C1-C4, D1-D4, E1-E4, F3 and F4). The soil vapor samples were sumbitted for laboratory analysis of VOCs utilizing USEPA analytical method TO-15. Following the collection of soil gas samples for VOC analysis, ATC screened the soil vapor points for the presence of mercury using a Lumex Mercury Vapor Analyzer on July 15 and July 24, 2019. Each soil vapor point was purged using a lung pump sampler and tedlar bag for no more than 5 minutes not exceeding 200 ml/minute. The tedlar bag was then connected to the Lumex and ATC recorded the maximum and average mercury vapor reading.

On March 16, 2020, ATC provided oversight for a ground penentrating radar (GPR) and electromagnetic induction (EMI) survey across the Site. The purpose of the GPR and EMI survey was to help identify any anomalies within the subsurface of the Site. EMI was utilized across the entire Site (with the exception of a portion of the paved parking lot area located on the easternmost

portion of the Site). The EMI system generates an electromagnetic field around the user, records interactions between the electromagnetic field and the soil, and displays the results after post-processing. EMI is most sensitive to large metallic objects such as underground storage tanks or reinforced concrete. Resultant imagery processing indicated the presence of multiple deep and shallow voids present within the subsurface, particularly within the southernmost portion of the Site (along southern portion of former building A), westernmost portion and north-central portions of the Site. Refer to **Figures 14, 15 and 16** in Appendix A for EMI Results.

On March 23, 24 and 30, 2020, ATC installed eighteen (18) monitoring wells along the northern, eastern, southern and western (between the current Detroit Axle building and the Site) Site boundaries. Monitoring wells MW-101 through MW-118 were installed using a hand auger and direct push technology to depths ranging from 10 to 20 feet below ground surface. The monitoring wells were installed for the purpose of assessing soil and groundwater concentrations along the Site boundaries. During drilling operations, continuous soil samples were collected and logged by an ATC field geologist. Each soil sample was field screened for total VOCs with a photo-ionization detector (PID), and recorded on field soil boring logs. The construction of the monitoring wells consisted of a two-inch-diameter, flush threaded, polyvinyl chloride (PVC) casing and a five foot-long section of two-inch-diameter, #10 slot PVC well screen. The annular space around the screen in each borehole was filled with medium-grained silica sand to approximately two feet above the top of the screen; above the silica sand, a hydrated bentonite was used to seal the borehole to within one foot bgs. Soil samples collected were analyzed for the presence of VOCs, SVOCs, alcohols and RCRA 8 metals. Resultant analytical data indicated the presence of mercury in excess of Volatilization to Indoor Air Pathway screening levels within the 2 to 4 foot interval at sample locations MW-102 (along the southern Site boundary), and MW-114 and MW-115 (along the northernmost Site boundary. Additionally, phenanthrene was indicated in excess of Volitilization to Indoor Air Pathway screening levels within the 3 to 4 foot interval at MW-114. Methanol was detected in MW-113 (along the northermost Site boundary) from the 2 to 3 foot depth interval in excess of Non-Residential Drinking Water Protection criteria. Various metals including arsenic, barium, cadmium, chromium, lead and silver were detected at exceedances of Drinking Water Protection and/or Groundwater Surface Water Interface criteria.

On April 8 and 9, 2020, ATC conducted low-flow groundwater sampling at newly installed monitoring wells MW-101 through MW-118. During the sampling event, the groundwater samples were collected using low flow, minimal drawdown sampling techniques. During the low-flow sampling activities, several indicator parameters, including temperature, specific conductivity, dissolved oxygen, pH, oxidation reduction potential, and turbidity, were monitored and recorded every three to five minutes. The water level was also monitored periodically to ensure that excessive water level drawdown did not occur. At each monitoring well, groundwater sample collection proceeded once all indicator parameters had stabilized for three consecutive readings. The groundwater samples were collected into laboratory-provided sample containers, placed into a cooler containing ice, and logged onto a project-specific chain-of-custody form. Groundwater samples were analyzed for the presence of VOCs, SVOCs, alcohols and metals. Resultant analytical data indicated the presence of TCE in samples collected from MW-107, MW-111 (both located along the easternmost Site boundary) and MW-114 (located along the northernmost Site boundary), exceeding

Volatilization to Indoor Air Pathway screening levels. Additionally, vinyl chloride was detected in MW-114 in excess of Volatilization to Indoor Air Pathway screening levels.

On April 14, 15 and 16, 2020, ATC collected low-flow groundwater samples from MW-101 through MW-115 for the presence of pre- and polyfluoralkyl (PFAS) compounds. Samples were collected utilizing EGLE Groundwater PFAS Sampling Guidance, dated October 2018. Resultant analytical data indicated the presence of PFOA exceeding only EGLE Proposed Drinking Water Standard in wells MW-103, MW-106, MW-107, MW-109 and MW-112. Additionally, concentrations of PFOS were detected in excess of water solubility and Groundwater Surface Water Interface criteria in wells MW-103 and MW-112. None of the wells sampled exhibited concentrations in excess of Residential or Non-Residential Drinking Water Critera for PFAS compounds. The PFAS lab analysis consisted of 24 PFAS compounds from a laboratory that was in the process of obtaining certification for PFAS analysis. While at the time of sampling this was acceptable, moving forward ATC will order analysis of all 28 PFAS compounds that the MPART requires from a fully certified PFAS accredited laboratory.

On April 21, 2020, ATC installed three (3) additional monitoring wells along the eastern Site boundary. Monitoring wells MW-119 through MW-121 we installed using a hand auger and direct push technology to depths ranging from 10 to 15 feet below ground surface. The monitoring wells were installed for the purpose of further assessment of the eastern Site boundary. Soil samples were collected and analyzed for the presence of VOCs and RCRA 8 Metals. Resultant analytical data from soil samples collected indicated the presence of methanol in excess of Residential Drinking Water Protection criteria at MW-120, within the 4 to 5 foot depth interval and metals arsenic and selenium at MW-119 in excess of Non-Residential Drinking Water Protection and/or Groundwater Surface Water Interface critiera at the 2 to 3 foot depth interval.

On April 23, 2020, ATC collected low-flow groundwater samples from MW-119 through MW-121 for the presence of PFAS compounds. Samples were collected utilizing EGLE Groundwater PFAS Sampling Guidance, dated October 2018. Resultant analytical data indicated the presence of PFOA in excess of EGLE Proposed Drinking Water Standard in well MW-121.

On June 15 and 16, 2020, ATC installed ten (10) monitoring wells within the confines of the 6-acre portion of the Site, located along the southern-central portion of the Site. Monitoring wells MW-122 through MW-131 installed using hollow stem auger technology to a depth of 15 feet below ground surface. The monitoring wells were installed for the purpose of assessing soil and groundwater concentrations within the interior of the 6-acre portion of the Site, within designated areas of concern (refer to **Figure 13** – Areas of Concern Map in Appendix A and details in following Section 6.0). Soil samples collected were analyzed for the presence of VOCs, SVOCs, Full List – Michigan Part 201 metals and PCBs. Resultant analytical data indicated the presence of mercury, napthalene, phenanthrene and/or fluorene in excess of Volatilization to Indoor Air Pathway screening levels at MW-122 (4-5’), MW-125 (4-5’), MW-127 (6-7’), MW-128 (4-5’) and MW-129 (3-4’). 2-methylnapthalene was also detected in excess of Volatilization to Indoor Air Pathway at MW-127 (10-11’), which was installed near the former heating oil UST.

On June 23 and 24, 2020, ATC collected low-flow groundwater samples from monitoring wells MW-12, MW-116 through MW-118 and MW-122 through MW-131. Samples were analyzed for the presence of VOCs, SVOCs and Full List – Michigan Part 201 Metals. In addition, select wells were sampled for 1,4-dioxane, cyanide, PCBs and tetraethyl lead. Sampling for PFAs was conducted at MW-116 through MW-118, MW-122, MW-127 through MW-129 and MW-131. PFAS samples were collected per EGLE PFAS sampling guidance and collected during the first day of the sampling event in order to limit the potential for cross-contamination. Resultant analytical data indicated the presence of TCE in wells MW-126 and MW-129 as well as PFOA and PFOS in wells MW-122, MW-127 through MW-129 and MW-131, with the highest concentrations detected at monitoring well MW-129.

On August 12, 2020, ATC installed two (2) additional monitoring wells within the 6-acre portion of the Site, in order to further assess soil and groundwater concentrations along the eastern boundary of the 6-acre parcel. Monitoring wells MW-131 and MW-132 were installed using hollow stem auger technology to a depth of 16 feet below ground surface. Soil samples collected were analyzed for the presence of VOCs, SVOCs, Full List – Michigan Part 201 Metals and PCBs (MW-132 only). Resultant analytical data indicated the presence of mercury in excess of Volatilization to Indoor Air Pathway screening levels at MW-132 (5.5-6.5') and MW-133 (3-4') and (10-11') intervals. SVOCs include fluoranthene, phenanthrene and napthelene were also detected within samples collected in excess of Residential and/or Non-Residential Volatilization to Indoor Air Pathway screening levels.

On August 13, 2020, ATC collected low-flow groundwater samples from newly installed monitoring wells MW-131 and MW-132. Samples were analyzed for the presence of VOCs, SVOC, Full List – Michigan Part 201 Metals, cynaide and 1,4-dioxane. Alcohols and PCBs were also analyzed from groundwater samples collected from MW-132. Resulant analytical data indicates the presence of ethylbenzene, napthalene, methanol, phenanthrene and/or select metals in excess of Residential and/or Non-Residential criteria. Additionally, on August 14, 2020, ATC collected low-flow groundwater samples from MW-132 and MW-133 for the presence of PFAS compounds. Resultant analytical data indicated the presence of PFOA and PFOS in excess of the Proposed Drinking Water Standard and water solubility (PFOS only).

General Site Lithology/Hydrogeology

General site lithology derived from the historical and current subsurface investigations at the Site indicate up to five feet of discontinuous fill containing brick, concrete, and glass debris overlying approximately 20 to 23 feet of loose native sand above clay that extends to bedrock. On the northern portion of the Site, the native sand is interbedded with clay, silty clay, and sandy clay. Groundwater generally is first encountered between 8 to 11 feet bgs and flows in a southeasterly direction. Representative cross-sections can be found in **Figures 19-21**, and provide a visual description of general site lithology. These cross sections will become the basis of the conceptual site plan as additional information is identified during ongoing investigations. Further work will include adding tunnels and utilities onto the cross sections and adding a cross section along the eastern margin of the Site.

5.0 NATURE AND EXTENT OF CONTAMINATION

The end point goal that is required of the RCRA Facility Investigation (RFI) is to have the nature and extent of contamination completely defined, both horizontally and vertically, for each contaminant and for each Part 201 Pathway, including any contamination that is migrating off-site.

5.1 Soil Characterization

5.1.1 Volatile Organic Compounds (VOCs)

Soil analytical results indicated the presence of the following VOCs in excess of Residential and/or Non-Residential criteria: benzene, toluene, ethylbenzene, xylenes, methyl-tert-butyl-ether (MTBE), 1,2,4- and 1,3,5-trimethylbenzenes (TMBs), napthalene, chlorobenzene, n-butylbenzene, sec-butylbenzene, 1,2-, 1,3,- and 1,4-dichlorobenzene, isopropylbenzene, n-propylbenzene, tetrachloroethylene (PCE), and trichloroethylene (TCE). Specifically, these concentrations were detected within the central southern portion, northwestern margin, northern boundary and north central portions of the Site. Adsorbed VOC mass is mainly contained to within the 5 to 12 foot depth range within the central southern and northwesternmost portions (inclusive of areas of concern (AOCs) 7, 8, 10 and 16) of the Site and within the upper 4 to 9 foot depth range in the northern boundary and north central portions of the Site (inclusive of AOCs 5, 6 and 15). Specific areas of concern pertaining to soil VOCs are further discussed in Section 6.0. Refer to **Figures 2 and 3** in Appendix A for specific data and locations of soil VOCs and **Table 1A** in Appendix B for a soil VOC analytical data table.

Highest Concentrations of Soil VOCs				
Soil - VOCs	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Benzene	(ug/kg)	PSB-112	6/21/2016	300
Toluene	(ug/kg)	SB-7	10/4/2012	16,000
Ethylbenzene	(ug/kg)	SB-5	10/4/2012	32,000
Xylenes	(ug/kg)	PSB-103	6/22/2016	35,600
Ethyl-tert-butyl-ether (MTBE)	(ug/kg)	BTWN Tanks	4/11/1996	1,000
1,2,4-Trimethylbenzene	(ug/kg)	SB-5	10/4/2012	220,000
1,3,5-Trimethylbenzene	(ug/kg)	SB-5	10/4/2012	56,000
Napthalene	(ug/kg)	PSB-103	6/22/2016	68,100
Chlorobenzene	(ug/kg)	SB-7	10/4/2012	950
n-Butylbenzene	(ug/kg)	SB-5	10/4/2012	14,000
sec-Butylbenzene	(ug/kg)	SB-5	10/4/2012	9,200
1,2-Dichlorobenzene	(ug/kg)	SB-7	10/4/2012	7,500
1,3-Dichlorobenzene	(ug/kg)	SB-7	10/4/2012	1,400
1,4-Dichlorobenzene	(ug/kg)	SB-7	10/4/2012	2,700
Isopropylbenzene	(ug/kg)	SB-5	10/4/2012	18,000
n-Propylbenzene	(ug/kg)	SB-5	10/4/2012	72,000
Tetrachloroethylene (PCE)	(ug/kg)	PSB-171	6/27/2016	200
Trichloroethylene (TCE)	(ug/kg)	PSB-168	6/27/2016	2,280

5.1.2 Semivolatile Organic Compounds (SVOCs)

Soil analytical results indicated the presence of the following SVOCs in excess of Residential and/or Non-Residential critiera: acenapthene, acenapthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, 2-methylnapthalene, napthalene, phenanthrene and pyrene. Specifically, these concentrations were detected within the central southern portion, northwestern margin, northern boundary and north central portions of the Site. Adsorbed VOC mass is mainly contained to within the 7 to 12 foot depth range within the central southern and northwesternmost portions of the Site (inclusive of AOCs 7, 8, 10 and 16) and within the upper 4 to 9 foot depth range in the northern boundary (inclusive of AOC 15) and north central portions of the Site (inclusive of AOCs 5 and 6) . Specific areas pertaining to soil SVOCs are further discussed in Section 6.0. Refer to **Figures 2 and 3** in Appendix A for specific data and locations of soil SVOCs and **Table 1B** in Appendix B for a soil SVOC analytical data table.

Highest Concentrations of Soil SVOCs				
SVOCs	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Acenapthene	ug/kg	SB-7	10/4/2012	52,000
Acenapthylene	ug/kg	SB-25	10/8/2012	67,000
Anthracene	ug/kg	SB-25	10/8/2012	80,000
Benzo(a)anthracene	ug/kg	SB-27	3/1/2016	87,500
Benzo(a)pyrene	ug/kg	SB-27	3/1/2016	130,400
Benzo(b)fluoranthene	ug/kg	MW-133	8/12/2020	27,200
Benzo(k)fluoranthene	ug/kg	MW-133	8/12/2020	10,600
Benzo(g,h,i)perylene	ug/kg	MW-133	8/12/2020	13,300
Chrysene	ug/kg	MW-133	8/12/2020	21,800
Dibenzo(a,h)anthracene	ug/kg	SB-27	3/1/2016	10,000
Fluoranthene	ug/kg	SB-27	3/1/2016	204,700
Fluorene	ug/kg	SB-25	10/8/2012	100,000
2-Methylnapthalene	ug/kg	SB-25	10/8/2012	160,000
Napthalene	ug/kg	PSB-103	6/22/2016	68,100
Phenanthrene	ug/kg	SB-25	10/8/2012	410,000
Pyrene	ug/kg	MW-133	8/12/2020	46,900

5.1.3 Metals

Soil analytical results indicated the presence of the following metals in excess of Residential and/or Non-Residential critiera: aluminum, arsenic, barium, boron, cadmium, chromium, cobalt, iron, lead, magnesium, manganese, mercury, molybendum, selenium, silver and zinc. The distribution of metals concentrations is more widely dispursed across the site, as opposed to adsorbed concentrations of VOCs and SVOCs. Depth to metals concentrations varies, with the

majority of the mass lying within the shallow soil at approximately 2 to 6 feet bsg. Specific areas pertaining to soil metals concentrations are further discussed in Section 6.0. Refer to **Figures 2 and 3** in Appendix A for specific data and locations of soil metals and **Table 1C** in Appendix B for a soil metals analytical data table.

Highest Concentrations of Soil Metals				
Soil - Metals	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Aluminum	ug/kg	MW-133	8/12/2020	6,450,000
Arsenic	ug/kg	PSB-172	6/27/2016	35,200
Barium	ug/kg	MW-115	3/24/2020	1,950,000
Boron	ug/kg	MW-133	8/12/2020	12,100
Cadmium	ug/kg	MW-115	6/27/2020	77,000
Chromium	ug/kg	MW-115	6/27/2020	179,000
Cobalt	ug/kg	MW-125	6/16/2020	2,270
Iron	ug/kg	MW-126	6/16/2020	58,100,000
Lead	ug/kg	MW-115	6/24/2020	895,000
Magnesium	ug/kg	MW-133	8/12/2020	10,400,000
Manganese	ug/kg	MW-126	6/15/2020	440,000
Mercury	ug/kg	MW-132	8/12/2020	1,090
Molybendum	ug/kg	MW-126	6/15/2020	3,830
Selenium	ug/kg	MW-119	4/21/2020	2,540
Silver	ug/kg	PSB-171	6/27/2016	11,400
Zinc	ug/kg	PSB-104	6/22/2016	1,520,000

5.2 Groundwater Characterization

5.2.1 Volatile Organic Compounds (VOCs)

Groundwater analytical results indicated the presence of the following VOCs in excess of Residential and/or Non-Residential crtieria: benzene, chlorobenzene, cis-1,2-dichloroethene, ethylbenzene, napthalene, methanol, trichloroethylene (TCE), tetrachloroethylene (PCE), tetrahydrofuran and vinyl chloride. Groundwater concentrations are mainly located within the south-central portion of the Site (inclusive of AOCs 7 and 8) and along the eastern and northern boundaries (inclusive of AOCs 15, 19 and 20). Specific areas pertaining to groundwater VOC concentrations are further discussed in Section 6.0. Refer to **Figure 6** in Appendix A for specific data and locations of groundwater VOCs and **Table 2A** in Appendix B for a groundwater VOC analytical data table.

Highest Concentrations of Groundwater VOCs				
Groundwater - VOCs	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Benzene	ug/L	MW-114	4/9/2020	1.9
Chlorobenzene	ug/L	TMW-3	3/1/2016	49
cis-1,2-Dichloroethene	ug/L	TMW-8	12/8/2015	36
Ethylbenzene	ug/L	MW-132	8/13/2020	3.7
Napthalene	ug/L	TMW-32	3/1/2016	110
Methanol	ug/L	MW-132	8/13/2020	8,740
Trichloroethylene (TCE)	ug/L	MW-10	10/9/2012	22
Tetrachloroethylene (PCE)	ug/L	TMW-16	12/7/2015	35
Tetrahydrofuran	ug/L	W-5	12/17/1985	375-400
Vinyl Chloride	ug/L	TMW-02	3/27/2019	24

5.2.2 Semivolatile Organic Compounds (SVOCs)

Groundwater analytical results indicated the presence of the following SVOCs in excess of Residential and/or Non-Residential criteria: carbazole, fluoranthene, napthalene and phenanthrene. Groundwater concentraions are mainly located within the south-central portion of the Site (inclusive of AOCs 7 and 8) and along the eastern and northern boundaries (inclusive of AOCs 15, 19 and 20). Specific areas pertaining to groundwater SVOC concentrations are further discussed in Section 6.0. Refer to **Figure 7** in Appendix A for specific data and locations of groundwater VOCs and **Table 2B** in Appendix B for a groundwater SVOC analytical data table.

Highest Concentrations of Groundwater SVOCs				
Groundwater - SVOCs	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Carbazole	ug/L	MW-132	8/13/2020	11.5
Fluoranthene	ug/L	MW-127	6/24/2020	2
Napthalene	ug/L	TMW-32	3/1/2016	110
Phenanthrene	ug/L	MW-132	8/13/2020	5.6

5.2.3 Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)

Groundwater analytical results indicated the presence of PFOA and PFOS and perfluorononanoic acid (PFNA) in excess of Residential and Non-Residential criteria. Groundwater concentrations are mainly located within the south-central portion of the Site (inclusive of AOCs 7, 8 and 10), as well as along the eastern and southeastern margins (inclusive of AOCs 9, 19 and 20). Specific areas pertaining to PFOA/PFOS concentrations are further discussed in Section 6.0. Refer to **Figure 9** in Appendix A for specific data and locations of groundwater PFAS and **Table 2E** in Appendix B for a groundwater PFAS analytical data table.

Highest Concentrations of PFOA, PFOS, PFNA				
Groundwater - PFAS	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
PFOA	ng/L	MW-129	6/24/2020	80
PFOS	ng/L	MW-129	6/24/2020	96
PFNA	ng/L	MW-129	6/24/2020	9.8

5.2.4 Metals

Groundwater anaytical results indicated the presence of the following metals in excess of Residential and/or Non-Residential criteria: aluminum, arsenic, boron, iron, lead, manganese, mercury, sodium and vanadium. Groundwater concentrations are mainly located within the south-central portion of the Site (inclusive of AOCs 7, 8 and 10). Specific areas pertaining to metals concentrations in groundwater are further discussed in Section 6.0. Refer to **Figure 8** in Appendix A for specific data and locations of groundwater metals and **Table 2C** in Appendix B for a groundwater metals analytical data table.

Highest Concentrations of Groundwater Metals				
Groundwater - Metals	**Unit**	**Boring/Monitoring Well Location**	**Date**	**Concentration**
Aluminum	ug/L	MW-123	6/23/2020	9,930
Arsenic	ug/L	TMW-3	3/1/2016	18
Boron	ug/L	MW-133	8/13/2020	1,210
Iron	ug/L	MW-123	6/23/2020	10,800
Lead	ug/L	MW-132	8/13/2020	23
Manganese	ug/L	MW-12	6/23/2020	945
Mercury	ug/L	MW-123	6/23/2020	0.27
Sodium	ug/L	MW-12	6/23/2020	276,000
Vanadium	ug/L	MW-123	6/23/2020	34

5.3 Soil Vapor Contamination

5.3.1 Volatile Organic Compounds

Soil vapor analytical results indicated the presence of TCE within the south-central portion of the Site and along the eastern property boundary and across Pinecrest Drive, to the east of the Site. TCE concentrations were detected in excess of Volatilization to Indoor Air Pathway screening levels and are further discussed in Section 6.0. However, it is important to note that EGLE conducted indoor air and sub-slab soil-gas testing at several residences along Pinecrest Avenue in March 2019. No concentrations indicative of vapor intrusion were identified in indoor air or in soil gas beneath the homes above levels of concern. Furthermore, concentrations of PCE were detected in temporary soil gas vapor point E4, located within the area of ATC's defined area of

concern (AOC) 7, within the southern portion of the Site. Refer to **Figure 12** in Appendix A for specific data and locations of soil gas vapor and **Table 3** in Appendix B for a soil gas analytical data table.

Highest Concentrations of Soil Vapor VOCs				
Soil Vapor - VOCs	**Unit**	**Sample ID**	**Date**	**Concentration**
Trichloroethene (TCE)	ug/M3	C3	7/15/2019	192
Tertachloroethene (PCE)	ug/M3	B3	7/15/2019	1,470

5.4 Human Exposure Pathways

5.4.1 Dermal

Due to the proposed redevelopment of the Site there is a potential for exposure to construction workers during Site activities. This dermal contact exposure pathway is complete; however the exposure will be minimal and can be controlled with engineering measures during construction. Furthermore, the Site is fenced-in, vacant land with no access available to the general public. The fence surrounding the entire portion of the Site will mitigate the potential for dermal exposure.

5.4.2 Ingestion

The Site and surrounding area is connected to municipal water supply. There are no water wells present onsite historically or present within two-miles of the Site. Therefore, the ingestion exposure pathway is not complete.

5.4.3 Inhalation

Soil and groundwater on the Site is impacted with VOCs and mercury that exceed the recommended interim action screening levels for Volatilization to Indoor Air. There are currently no structures present onsite; however, planned developments will create a completed exposure pathway and further mitigation will be necessary. The Particulate Soil Inhalation Criteria and the Soil Volatilization to Ambient Air Criteria also apply at the Site. Additionally, it is required to delineate all Part 201 Pathways and exceedances (restricted or remediated), regardless of whether the pathways are currently complete. Moving forward, comparison tables will be created to aid in the investigation.

5.5 Groundwater and Surface Water Exposure Pathways

Concentrations of various constituents exceed Groundwater Surface Water Interface criteria for both soil and groundwater on the Site. However, the City of Ferndale is a combined storm and sanitary sewer system, therefore any water entering the storm sewers is treated at a wastewater treatment facility prior to being discharged. The Municipal Separate Storm Sewer System (MS4) program applies to the combined sewer system at the facility if contaminated groundwater is entering the sewers. ATC will

continue to evaluate the depth of the storm/sewer system as it comes into contact with groundwater and sources in soil.

5.6 Land Use

The City of Ferndale Master Plan updated January 2017 indicates the Site is characterized by Mixed Use for future developments. Mixed use land developments encourage a complementary mixture of small-scale uses included residential, local business and offices that are compatible in a neighborhood setting. The Site is noted in the City of Ferndale Master Plan as a key development Site in which the City plans is encouraging a mixed use development that offers residential, commercial, office, healthcare and recreational space. Based on the current conditions at the Site this land use would create a completed exposure pathway, however the potential for exposure will be mitigated by the use of engineering and/or institutional controls.

5.7 Sensitive Populations

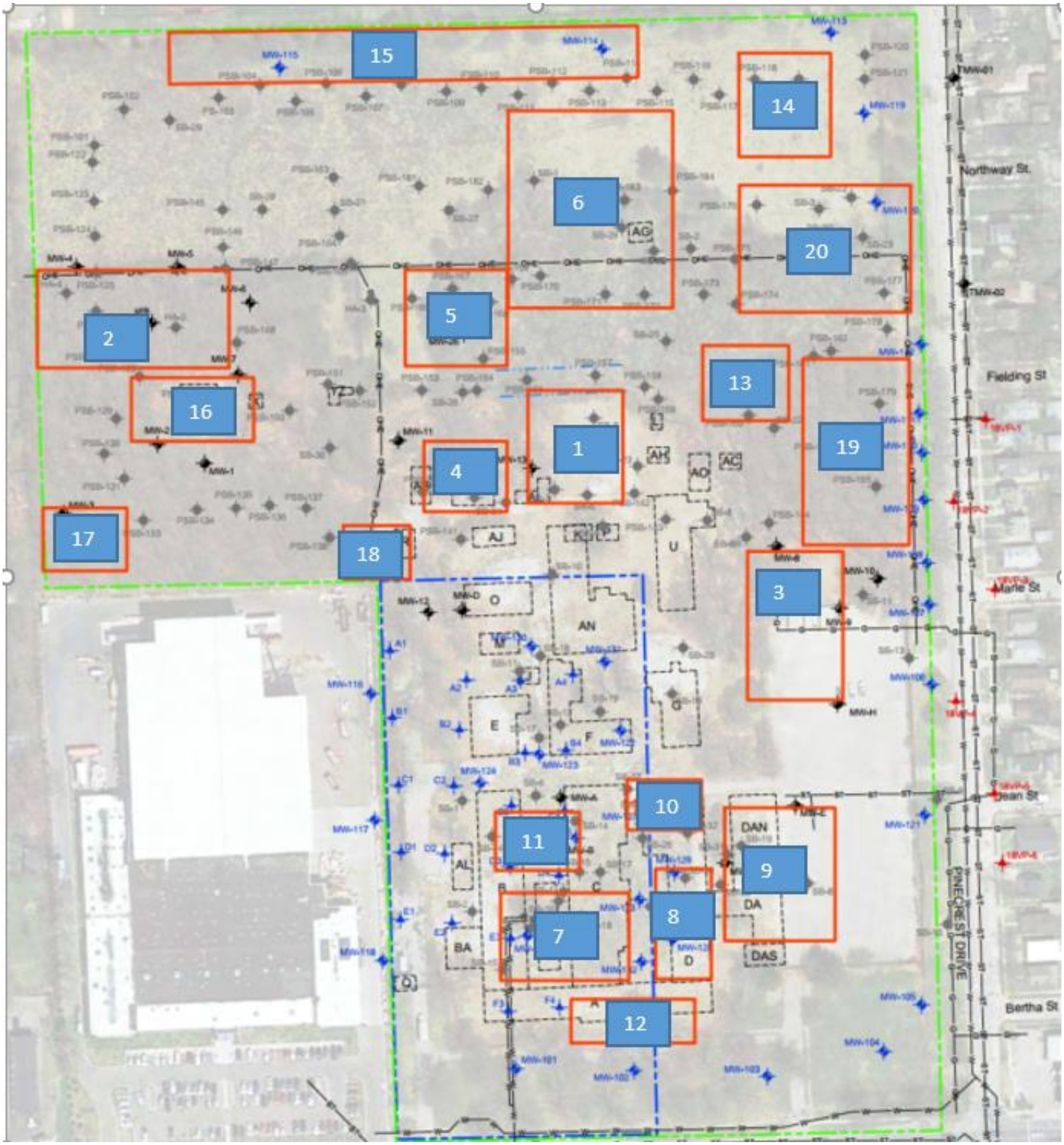
The Site is fenced-in, vacant land with no access available to the general public. The fence surrounding the entire portion of the Site will mitigate the potential for exposure to sensitive populations.

6.0 AREAS OF CONCERN (AOCS) AND CONCEPTUAL WORK PLANS

ATC has divided the Site into twenty (20) areas of concern (AOC), based upon past use, identified waste management units, geophysical anomalies, EMI survey data and/or soil, groundwater and/or soil vapor concentrations within those specific areas. The purpose of the AOCs is to better define specific areas that have been identified with the highest concentrations of concern in media and/or subsurface anomalies/EMI indications which may be further investigated. Refer to **Figure 13 –** Areas of Concern Map in Appendix A, a small preview of which has been provided below for reference.

Each AOC is described below along with the conceptual investigation for each AOC for purposes of future discussions with EGLE. Each AOC will have an RFI Work Plan submitted subsequent to this report. Section 8.0 focuses on the work plan for the first priority for investigation.

As part of the investigation of each AOC, which will be conducted with our understanding of EGLE prioritization, ATC will develop a site-wide element of the investigation. This site wide investigation will include the installation of deep monitoring wells, investigate site wide hydrogeological conditions, identification of drainage patterns, onsite current and former utilities, prior tunnels located onsite, which will inform the CSM including known releases, the nature and extent of contamination, the potential presence of non-aqueous phase liquids, the fate and transport of contaminants, and potential receptors. This will provide site-wide clarity and provide decision making criteria to investigate each AOC as additional information is obtained. In addition, new AOCs may be identified and added to the list of AOCs currently known.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Fielding St
Marie St
Jean St
Bertha St
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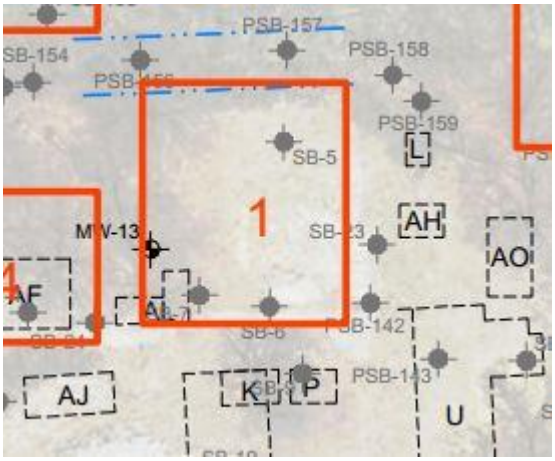
6.1 AOC 1 – SWMU 1

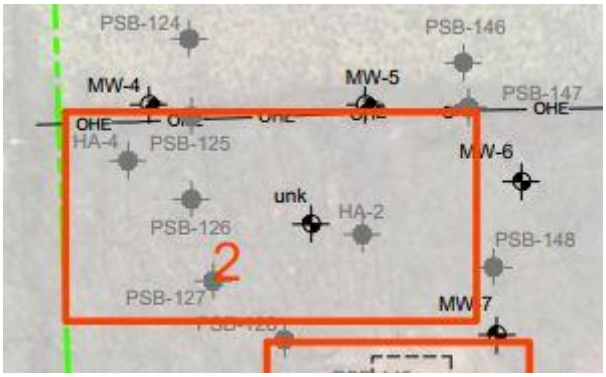


The area designated as solid waste management unit (SWMU) SWMU-1 (as originally defined in a Preliminary Assessment/Visual Site Inspection Report, prepared by PRC Environmental in 1994) is a former drum storage area and is located within the north-central portion of the Site, in a sparsely wooded area. The area formerly consisted of an approximately 12,000 square foot exterior concrete pad. Historical subsurface investigation within this SWMU has not been extensive, with only two soil borings/temporary monitoring wells installed within the boundary of the former drum storage area. Specifically, soil boring/temporary monitoring wells SB/TMW-5 and SB/TMW-6 installed in December 2015, indicated soil and groundwater concentrations below Residential and Non-Residential criteria for all constituents analyzed.

Conceptual Work Plan AOC 1:

Conceptual work includes the installation of a few groundwater monitoring wells within the area of SWMU-1 in order to collect additional soil and groundwater samples. Monitoring wells should be placed within the northwestern, central and southeastern portions of the former drum storage area in order to evaluate soil and groundwater conditions in a cross-gradient direction. Analysis will include, but not limited to, VOCs, SVOCs, metals, PFAS compounds, and polychlorinated biphenyls (PCBs). A specific RFI Work Plan will be developed for this AOC and submitted subsequent to this report.

6.2 AOC 2 – SWMU 2



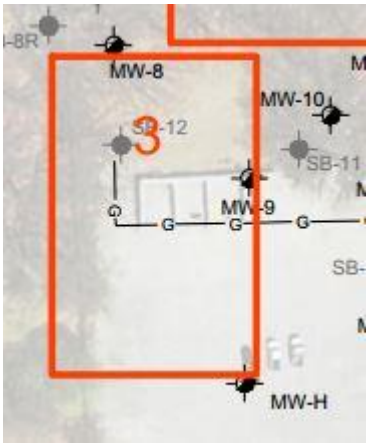
The area designated as solid waste management unit (SWMU) SWMU-2 (as originally defined in a Preliminary Assessment/Visual Site Inspection Report, prepared by PRC Environmental in 1994) is located within the northwestern portion of the Site, along the northwestern property boundary, in a vacant wooded area. This location was a former burial area for various laboratory wastes and residues utilized by Ethyl Corporation from approximately 1962 until 1983. Historical subsurface investigation within this SWMU has not been extensive, with only four soil borings installed within the boundary of the former disposal pit area. Specifically, only two of the soil borings, HA-2 and HA-4, installed in October 2012, exhibited select PNA and metals concentrations in soil. However, concentrations were below Residential and Non-Residential criteria. Groundwater has not been investigated within the SWMU area, however groundwater collected from historical monitoring wells MW-4 and MW-5 (located along the northern exterior border of the SWMU area) as well as historical monitoring well MW-2 (located south of the SWMU area), exhibited dissolved concentrations of tetrahydrofuran at a groundwater depth of approximately 20 to 25 feet below surface grade (bsg) in 1985. Dissolved concentrations of tetrahydrofuran exceed both Residential and Non-Residential Drinking Water criteria.

Conceptual Work Plan AOC 2:

Conceptual work includes vertically profiling groundwater conditions within the area of SWMU-2. Specifically, install a nested pair of monitoring wells located at the down-gradient edge of the AOC: one deep monitoring well in order to determine the vertical extent of dissolved tetrahydrofuran and one shallow monitoring well to determine the shallow extent (if any) of tetrahydrofuran. Collect soil and groundwater samples upon installation of the wells to determine if SWMU-2 is the source area for the tetrahydrofuran plume observed within this area.

A RFI Work Plan will be developed prior to investigation of this AOC that includes specifics pertaining to the installation of nested wells and test pits to further delineate the former pit disposal area. The RFI work plan will also contain a contingency plan regarding how to remove, manage, and dispose of intact containers, should any be found.

6.3 AOC 3 – SWMU 3

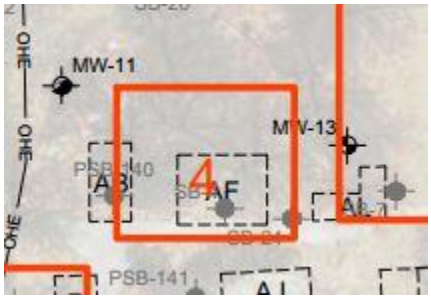


The area designated as solid waste management unit (SWMU) SWMU-3 (as originally defined in a Preliminary Assessment/Visual Site Inspection Report, prepared by PRC Environmental in 1994) s located within the eastern portion of the Site, within the northwest corner of the paved parking lot area. This location was a former burial area for various laboratory wastes and residues utilized by Ethyl Corporation from approximately 1939 until 1955. Subsurface investigation within this area has not been extensive. However, TCE concentrations have been historically detected in monitoring well MW-10.

Conceptual Work Plan AOC 3:

Conceptual work includes the installation of two to three permanent monitoring wells within the area of SWMU-3 in order to collect soil and groundwater samples. Monitoring wells will be vertically screened to the top of the clay unit and placed within the northwestern, central and southeastern portions of the area in order to evaluate soil and groundwater conditions in a cross-gradient direction.

The intent of the initial RFI Work Plan discussed in Section 8.0 is to begin investigation of AOC 3. Following that investigation, an RFI Work Plan will be developed and submitted separate to this report that proposes the work necessary to further determine the condition of the AOC, details the installation of monitoring wells, details analysis to be conducted, and develops a plan to remove, manage, and dispose of any intact containers, should they be found. 6.4 AOC 4 – SWMU 4



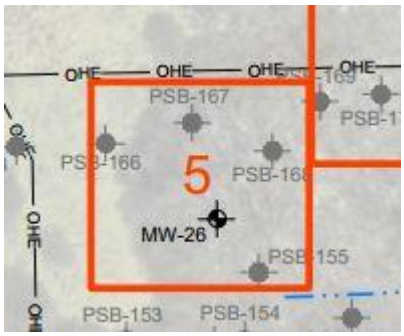
The area designated as solid waste management unit (SWMU) SWMU-4 (as originally defined in a Preliminary Assessment/Visual Site Inspection Report, prepared by PRC Environmental in 1994) is located in the north-central portion of the Site, within a heavily wooded area. This area was formerly utilized as a container and tank storage area, which consisted of an approximately 1,500 square foot concrete pad with a curb, which was covered with a roof and secured with a chain linked fence. This area became active in 1987 for the staging area of waste prior to disposal. Historical subsurface investigation within this SWMU has not been extensive, with only one soil boring installed within the boundary of the former container and tank storage area. Specifically, soil boring/temporary monitoring well SB/TMW-4 installed in December 2015, exhibited select metals in soil and groundwater samples, however concentrations were below both Residential and Non-Residential criteria.

Conceptual Work Plan AOC 4:

Conceptual work includes the installation of two permanent monitoring wells within the area of SWMU-4 in order to collect soil and groundwater samples. Monitoring wells will be placed within the northwestern and southeastern portions of the area in order to evaluate soil and groundwater conditions in a cross-gradient direction and will be analyzed for VOCs, SVOCs and metals.

A RFI work plan will be developed and submitted suibsequent to this report to further detail the installation of monitoring wells along with the advancement of a boring in the center of any potential sump, vault, or secondary containment past the depth of the bottom of the structure.

6.5 AOC 5 – Former Disposal Pit Area



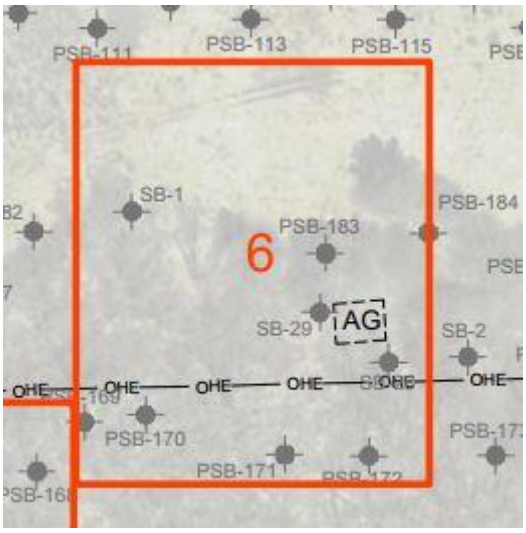
This location was a former burial area for various laboratory wastes and residues utilized by Ethyl Corporation from approximately 1948 until 1962. Specifically, reactive sodium compounds were reacted with water and the resultant residue was buried within this area. Historical subsurface investigations within this area in March and June 2016 have shown trichloroethylene (TCE) to be present in soil boring PSB-168 and soil boring/temporary monitoring well SB/TMW-26. TCE was present in soil at a depth of approximately 2 to 3 feet bsg at soil boring PSB-168 and in groundwater at a depth of approximately 10.22 feet bsg at temporary monitoring well TMW-26. At both locations, TCE concentrations were in excess of both Residential and Non-Residential Volatilization to Indoor Air Pathway screening levels. Additionally, 1,1,2-trichloroethane was detected in groundwater at TMW-26 at levels exceeding Residential and Non-Residential Drinking Water criteria. Mercury concentrations in soil were detected in excess of Volatilization to Indoor Air Pathway screening levels at PSB-168 at 2 to 3 feet bsg.

Conceptual Work Plan AOC 5:

Conceptual work includes the installation of three monitoring wells within the former disposal pit area. Specifically, install monitoring wells that are vertically screened to the base of the sand unit and located within the southwestern, northern and eastern/southeastern portions of the former disposal pit area. Monitoring wells will determine if TCE concentrations are migrating from another portion of the Site or if the former disposal pit area is a source of TCE. In addition to TCE, monitoring wells will be sampled and analyzed for all parameters with tentatively identified compounds (TICs).

A RFI Work Plan will be developed and submitted subsequent to this report to further describe any soil borings that will beadvanced and proposed test pits. The RFI Work Plan will also specify how the wells to be drilled and the decision criteria used to determine the depths of soil borings to be taken.

6.6 AOC 6 – EMI Interference – GPR Anomaly Area/Concrete Pad Burn Pit



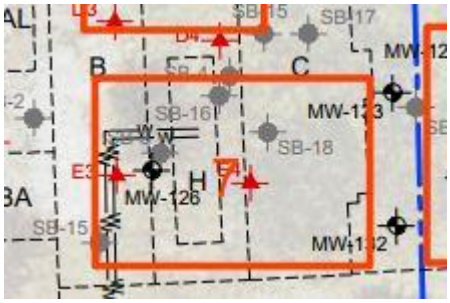
Electromagnetic induction (EMI) conducted across the Site indicated the presence of deep and shallow voids within the subsurface of this area, which is located within the northern-central portion of the Site. The presence of deep and shallow voids indicate the potential for buried material, disturbed subsurface soils and/or orphan underground tanks. Furthermore, ground penetrating radar (GPR) surveys conducted within this area indicated anomalies within the subsurface, which may also indicate the presence of orphan underground tanks. According to historical documents, a burn pit, consisting of a concrete pad, was historically located within this area as well as a depression pond and notable ground disturbance/soil stockpiles. Historical subsurface investigations conducted in June 2016 within this area indicate the presence of tetrachloroethylene (PCE) and TCE in soil at soil borings PSB-170 and PSB-171. Specifically, TCE concentrations in soil were detected at PSB-170 and PSB-171 at a depth of 2 to 3 feet bsg in excess of Volatilization to Indoor Air Pathway screening levels. Additionally, PCE concentrations in excess of Volatilization to Indoor Air Pathway screening levels were detected at PSB-171 at a depth of 2 to 3 feet bsg. Adsorbed mercury concentrations in excess of Volatilization to Indoor Air Pathway screening levels were also detected at PSB-170 at a depth of 2 to 3 feet bsg.

Conceptual Work Plan AOC 6:

Conceptual work includes the completion of test pits within the areas identified with deep and shallow voids, as well as GPR anomalies. The completion of test pits will determine the absence/presence of orphan underground tanks and/or buried material. Soil samples will be collected from the interior of test pits, should impacted materials be encountered. Installation of three to four permanent monitoring wells will also be installed and vertically screened to the base of the sand unit; they will be located within the area to define the extent of TCE, PCE and mercury within soil and groundwater, but will be analyzed for all parameters with TICs.

When this AOC will be investigated a RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, analysis parameters, information pertaining to the need for PFAS analysis, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.7 AOC 7 – PCE/TCE



PCE and TCE concentrations present in groundwater and soil gas are located within the southern portion of the Site, within the area of former designated buildings H and C. Specifically, PCE concentrations in excess of Volatilization to Indoor Air Pathway screening levels were detected in groundwater collected from monitoring well MW-126 in June 2020 and in temporary monitoring well TMW-16 collected in December 2015. TCE concentrations in excess of Volatilization to Indoor Air Pathway screening levels were detected in groundwater collected from monitoring well MW-126 in June 2020 and in temporary monitoring well TMW-18 collected in December 2015. Soil gas samples collected from a temporary soil vapor point E4 installed within this area in July 2019, exhibited PCE soil vapor concentrations in excess of Volatilization to Indoor Air Pathway screening levels.

Conceptual Work Plan AOC 7:

Conceptual work includes the installation of permanent monitoring wells that will be vertically screened to the base of the sand unit and located along the northwestern and western border of the area to determine if TCE/PCE concentrations are migrating from an upgradient flow direction. The analysis of the work area will include all parameters with TICs.
A RFI Work Plan will be developed and submitted subsequent to this report that provides details on monitoring wells to be installed and the investigation of soil vapors in the area. Additionally, one soil vapor point will be installed to the east of the temporary soil gas point E4 to determine if soil vapor is migrating downgradient from this area. Engineering controls in the form of vapor mitigation controls underneath future constructed buildings are a potential future remedy within this AOC.

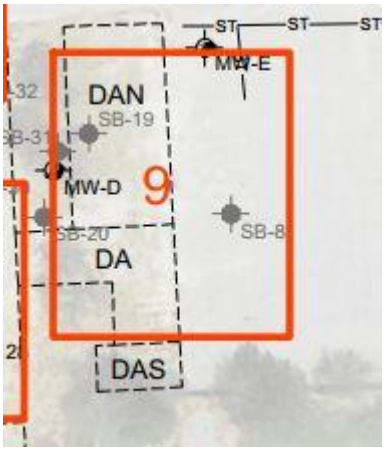
6.8 AOC 8 – PFOA/PFOS

Dissolved concentrations of perfluorooctanoic acid (PFOA) and/or perfluorooctanesulfonic acid (PFOS) were detected in groundwater samples collected from monitoring wells MW-127, MW-128, MW-129, MW-132 and MW-133 in June and August 2020. These monitoring wells are all located within the area of former building D and screened at a depth between 8 to 15 feet bsg. Specifically, PFOA and PFOS concentrations were detected exceeding Residential and Non-Residential Drinking Water Criteria and the PFAS Drinking Water Standard at MW-129. The remainder of the above referenced wells had PFOS concentrations detected exceeding Water Solubility and Groundwater Surface Water Interface criteria. Provided the elevated levels of PFOA and PFOS detected in monitoring well MW-129, relative to the remainder of the monitoring wells sampled in the area, additional delineation is warranted to determine the source/extent of the PFOA/PFOS.

Conceptual Work Plan AOC 8:

Conceptual work includes the installation of two to three additional permanent monitoring wells along the eastern/southeastern border of this area to determine if PFOA/PFOS concentrations are migrating in a downgradient direction. A RFI Work Plan will be developed and submitted subsequent to this report that provides an approach to delineating PFAS with concentrations greater than MPART criteria site-wide. The investigation will begin in the areas with the highest known concentrations and proceed in each direction.

6.9 AOC 9 – Neutralization Basin/Former UST Area



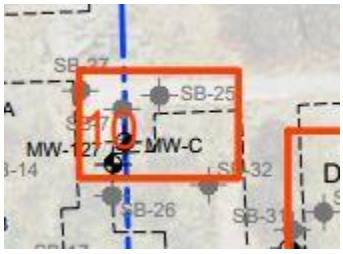
The area of a former neutralization basin and former underground storage tank (UST) area is located along the southeastern portion of the Site. Historical subsurface investigations within this area has not been extensive, with only five soil borings/temporary monitoring wells installed within the boundary of the former neutralization basin and UST area. Specifically, soil boring/temporary monitoring wells SB/TMW-19, SB/TMW-20 and SB/TMW-31 installed between December 2015 and March 2016 indicated soil and groundwater concentrations below Residential and Non-Residential criteria for all constituents analyzed.

Conceptual Work Plan AOC 9:

Conceptual work includes the installation of three to four permanent monitoring wells along the northern, eastern, southeastern and western boundaries of this area in order to evaluate soil and groundwater conditions in a cross-gradient direction. Additionally, two to three soil borings will be advanced within the central portion of this area, within the approximate former location of the neutralization basin and area of former USTs. Analysis will include, but not limited to, VOCs, SVOCs and metals.

The intent of the initial RFI Work Plan discussed in Section 8.0 is to begin investigation of AOC 9. Following that investigation a RFI Work Plan that may include the advancement of soil borings past the depth of the bottom of the sump, vault, and/or secondary containment. The work plan will detail soil samples to be collected from the depth immediately below the structure and the boring will continue a minimum of 5 feet below the bottom of the structure with samples collected based on a visual evidence of a release or elevated PID readings. A final sample will be collected at the final depth of the boring.

6.10 AOC 10 – Former Heating Oil UST/EMI Interference – GPR Anomaly



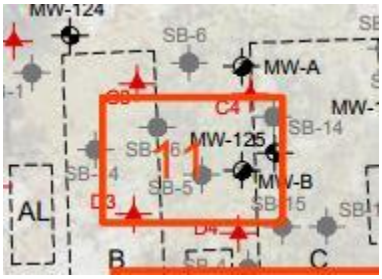
Electromagnetic induction conducted indicated the presence of deep and shallow voids within the subsurface of this area, which is located within the southern-central portion of the Site. Furthermore, a GPR survey conducted within this area indicated an anomaly within the subsurface. According to historical documentation, a former heating oil UST was located within this area. Subsurface investigations conducted within this area indicated the presence of heating oil constituents within the subsurface. Specifically, monitoring well MW-127 installed in June 2020 indicated adsorbed concentrations of fluorene, 2-methylnapthalene and phenanthrene in soil exceeding Residential and Non-Residential Volatilization to Indoor Air and/or Groundwater Surface Water Interface Protection criteria at the 10 to 11 feet bsg interval. Additionally, dissolved concentrations of naphthalene were detected in groundwater samples collected in June 2020, in excess of Volatilization to Indoor Air Pathway screening levels.

Conceptual Work Plan AOC 10:

Conceptual work includes the completion of test pits within the areas identified with deep and shallow voids, as well as the GPR anomaly. The completion of test pits will determine the absence/presence of orphan underground tanks and/or buried material. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Installation of an additional one to two permanent monitoring wells that are vertically screened to the base of the sand unit will also be completed within the area to define the extent of heating oil constituents and soil and groundwater. Analysis will include all parameters with TICs.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, analysis parameters, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.11 AOC 11 – Former UST Area/EMI Interference



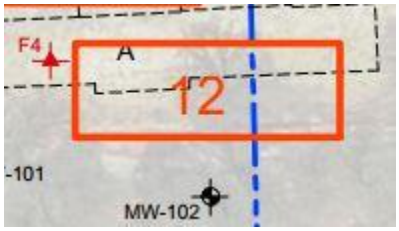
Electromagnetic induction conducted indicated the presence of deep and shallow voids within the subsurface of this area, which is located within the southern-central portion of the Site. According to historical documentation, USTs were formerly located within this area. Soil verification samples collected during UST excavation activities in 1996 indicated the presence of gasoline related constituents (xylenes, methyl-tert-butyl-ether (MTBE), ethylbenzene, 2-methylnapthalene, naphthalene, and trimethylbenzenes (TMBs)) in excess of Residential and Non-Residential Drinking Water and Groundwater Surface Water Interface criteria between 6.5 to 12 feet bsg. Additionally, soil gas samples collected from a temporary soil vapor point C3 installed within this area in July 2019, exhibited TCE soil vapor concentrations in excess of Volatilization to Indoor Air Pathway screening levels.

Conceptual Work Plan AOC 11:

Conceptual work includes the completion of test pits within the areas identified with deep and shallow voids. The completion of test pits will determine the absence/presence of any remaining USTs within this area. Two to three permanent monitoring wells that are vertically screened to the base of the sand unit will be installed along the northwestern, western, and southeastern borders of the area to determine if adsorbed concentrations extend beyond the former UST area. Analysis will include all parameters with TICs.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, analysis parameters, soil borings, the soil vapor investigation, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.12 AOC 12 – EMI Interference – GPR Anomaly



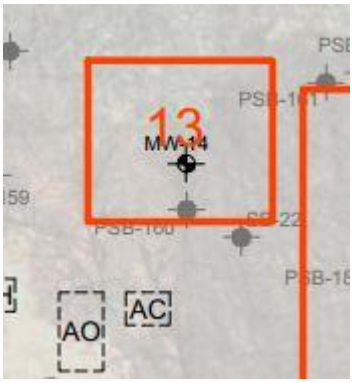
Electromagnetic induction conducted indicated the presence of a large deep void within the subsurface of this area, which is located within the southern portion of the Site. Furthermore, a GPR survey conducted within this area indicated an anomaly within the subsurface. Subsurface investigation within this area has not been extensive. Soil samples collected from adjacent monitoring well, MW-132 installed in August 2020 indicate adsorbed concentrations of phenanthrene exceeding Volatilization to Indoor Air and Groundwater Surface Water Interface criteria at a depth of 5.5 to 6.5 feet bsg. Additionally, naphthalene was detected in groundwater samples collected from MW-132 and exceed Volatilization to Indoor Air and Groundwater Surface Water Interface criteria.

Conceptual Work Plan AOC 12:

Conceptual work includes the completion of test pits within the large area identified as a deep void as well as within the area of the GPR anomaly. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Based upon observed subsurface conditions encountered during the test pits, one to two additional permanent monitoring wells will be installed that are vertically screened to the base of the sand unit and located along the eastern and western boundaries of the area to determine soil and groundwater conditions.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, soil borings, analysis parameters, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.13 AOC 13 – EMI Interference



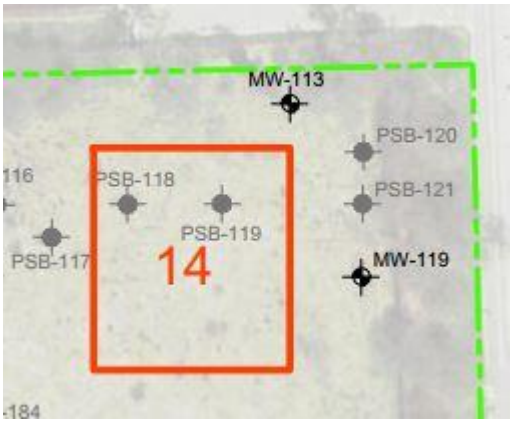
Electromagnetic induction conducted indicated the presence of approximately four deep voids within the subsurface of this area, which is located within the northeastern portion of the Site. Subsurface investigation within this area has not been extensive. Specifically, only two soil borings and one monitoring well has been historically advanced within this area. Soil boring SB-22 advanced in October 2012 indicated the presence of select metals in soil, however all concentrations were below Residential and Non-Residential criteria.

Conceptual Work Plan AOC 13:

Conceptual work includes the completion of test pits within the areas identified as deep voids. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Once the nature of the anomaly is identified, it may be necessary to conduct soil sampling immediately below any pit, tank, and/or sump. Based upon observed subsurface conditions encountered during the test pits, one to two additional permanent monitoring wells will be installed that are vertically screened to the base of the sand unit, and located along the eastern and western boundaries of the area to determine soil and groundwater conditions.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, soil samples that may be needed, analysis parameters, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.14 AOC 14 – EMI Interference



Electromagnetic induction conducted indicated the presence of a large area of deep and shallow voids within the subsurface of this area, which is located within the northeastern-most portion of the Site. This large subsurface void area may be attributed to disturbed soil/non-native material fill and/or the presence of buried material. Historical soil boring PSB-117 advanced along the western margin of this area in March 2016, indicated the presence of benzo(a)anthracene, naphthalene and phenanthrene in soil at concentrations exceeding Residential Volatilization to Indoor Air and/or Groundwater Surface Water Interface Protection criteria at a depth of 3 to 4 feet bsg.

Conceptual Work Plan AOC 14:

Conceptual work includes the completion of three to four test pits within the area identified as deep and shallow voids. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Once the nature of the anomaly is identified, it may be necessary to conduct soil sampling immediately below any pit, tank, and/or sump. Additionally, approximately three permanent monitoring wells will be installed that are vertically screened to the base of the sand unit, and located along the northern, western and southeastern margins, as well as one to two soil borings within the central portion of the area to evaluate soil and groundwater concentrations for the presence of VOCs, SVOCs and metals.

The intent of the initial RFI Work Plan discussed in Section 8.0 is to begin investigation of AOC 14. Following that investigation a RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, soil borings, analysis parameters, information pertaining to the need for PFAS analysis, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.15 AOC 15 – Former Disposal Pits/Depression Pond

Historical aerial photographs (particularly from the 1930s to the 1960s) identified areas of disturbance on the sparsely developed northern portion of the property. Indications of disturbed soil including a depression pond, soil stockpiles and potential disposal pits have been documented within this area. Although this portion of the property was largely undeveloped, its use for disposal purposes is evident. Subsurface investigations have indicated the presence of vinyl chloride in groundwater within this area. Specifically, vinyl chloride concentrations in groundwater collected from monitoring well MW-114 installed in March 2020 exceed Residential Volatilization to Indoor Air Pathway screening levels. Soil samples collected from MW-114 also exhibit concentrations of phenanthrene above Residential Volatilization to Indoor Air and Groundwater Surface Water Interface criteria. Historical soil samples for soil borings PSB-103, PSB-104, PSB-11, PSB-112, PSB-114 and PSB-115 advanced in June 2016 exceed various VOCs including, but not limited to, benzene, ethylbenzene, naphthalene, xylenes, and TMBs in excess of Residential and/or Non-Residential Volatilization to Indoor Air Pathway screening levels at depths ranging from 3 feet bsg along the eastern margin of the area and 13 feet bsg along the central and western margins of the area.

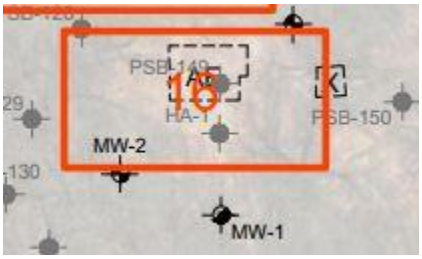
Conceptual Work Plan AOC 15:

Conceptual work includes the completion of test pits within the areas identified as deep voids. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Once the nature of the anomaly is identified, it may be necessary to conduct soil sampling immediately below any pit, tank, and/or sump. Additionally, the installation of approximately four monitoring wells that are vertically screened to the base of the sand unit, and located along the northern, eastern, southern and western boundaries of this area, as well as three to four soil borings within the central portion of the area in order to adequately assess current soil and groundwater conditions. Two to three soil gas vapor points will be installed within the central portions of the area to assess soil vapor conditions. The investigative efforts described are focused on determining the extent of material contributing to groundwater contamination with the goal of designing a source removal effort.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, analysis parameters, the investigative methods to be used in determining the extent of material contributing to groundwater contamination, and a

contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.16 AOC 16 – Former Heating Oil UST



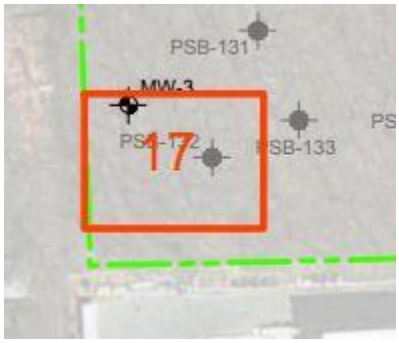
Historical documentation indicated the presence of a former heating oil UST within the southern portion of the northwestern corner of the Site, however electromagnetic induction conducted did not indicate the presence of deep or shallow voids within this area. Subsurface investigation has been limited and potential impact from the former heating oil UST has not been investigated.

Conceptual Work Plan AOC 16:

Conceptual work includes the advancement of one to two soil borings, with conversion of at least one soil boring into a permanent monitoring well, within the location of the former heating oil UST. If the presence of heating oil constituents are detected in soil and/or groundwater, additional delineation wells may be warranted along the groundwater flow direction to determine if concentrations are migrating.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the investigation.

6.17 AOC 17 – EMI Interference



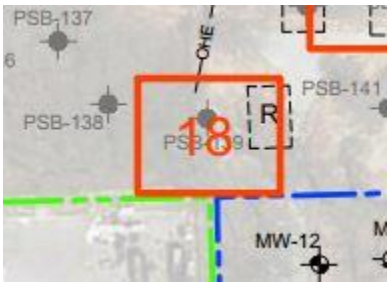
Electromagnetic induction conducted indicated the presence of one deep void within the subsurface of this area, which is located within the southern portion of the northwestern corner of the Site. The presence of a deep void indicates the potential for buried material, disturbed subsurface soils and/or orphan underground tanks.

Conceptual Work Plan AOC 17:

Conceptual work includes the completion of test pits within the area identified as a deep void. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Once the nature of the anomaly is identified, it may be necessary to conduct soil sampling immediately below any pit, tank, and/or sump. Based upon observed subsurface conditions encountered during the test pits, one to two soil borings, may be completed as permanent monitoring wells that are vertically screening to the base of the sand unit, and will be installed within the area to determine soil and groundwater conditions with respect to VOCs, SVOCs and metals.

A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, analysis parameters, information pertaining to the need for PFAS analysis, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.18 AOC 18 – EMI Interference – GPR Anomaly



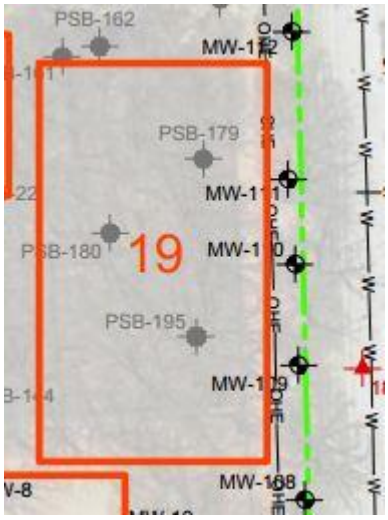
Electromagnetic induction conducted indicated the presence of approximately one large deep void within the subsurface of this area, which is located within the central northwestern portion of the Site. Historical documentation indicates the presence of a former UST pit within this area of concern, however subsurface investigation within this area has been very limited with only one soil boring completed. Specifically, historical soil boring PSB-139 was advanced in June 2016 and did not indicate concentrations exceeding Residential or Non-Residential criteria for constituents analyzed from the 6.5 to 7.5 feet bsg depth interval. Dissolved concentrations of metals have been detected in monitoring well MW-12, located to the southeast of the AOC.

Conceptual Work Plan AOC 18:

Conceptual work includes the completion of test pits within the area identified as a deep void. Soil samples will be collected from the interior of each test pit, midway up the sidewall, and at the bottom of the excavation, should impacted materials be encountered. Once the nature of the anomaly is identified, it may be necessary to conduct soil sampling immediately below any pit, tank, and/or sump. Based upon observed subsurface conditions encountered during the test pits,

one to two soil borings may be completed as permanent monitoring wells that are vertically screened to the base of the sand layer, and will be installed within the area to determine soil and groundwater conditions. A RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed test pits (including the number, location, and depth to proposed pits), the proposed monitoring wells that will be drilled, soil samples, analysis parameters, and a contingency plan regarding the removal, management, and disposal of intact containers should they be found.

6.19 AOC 19 – TCE



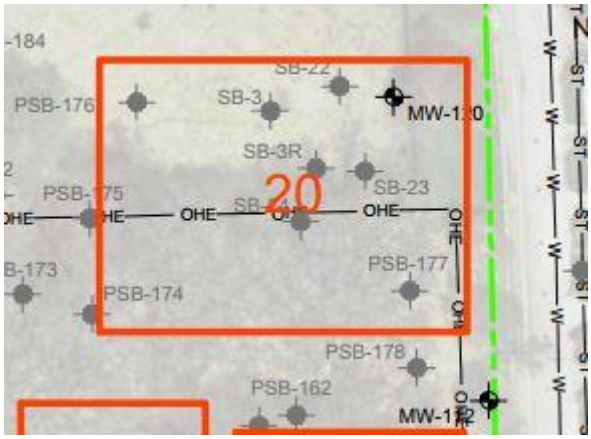
Dissolved concentrations of TCE are present in groundwater along the eastern margin of the Site. Specifically, TCE was detected in groundwater samples collected from monitoring wells MW-9, MW-10, MW-107 and MW-111, which are situated along the easternmost margin of the Site, along the western right-of-way (ROW) of Pinecrest Drive. Groundwater samples collected from these wells from October 2012 (MW-9 and MW-10) and April 2020 (MW-107 and MW-111) exceed Residential and/or Non-Residential Volatilization to Indoor Air Pathway screening levels. Additionally, soil vapor gas points installed within the eastern and western ROW of Pinecrest Drive by EGLE in August 2018 indicated soil vapor concentrations of TCE in excess of Volatilization to Indoor Air Pathway screening levels in soil gas points installed within the eastern ROW of Pinecrest Drive. However, soil vapor points installed within adjacent residential dwellings to the eastern ROW of Pinecrest Drive by EGLE did not indicate the presence of TCE in excess of Volatilization to Indoor Air Pathway screening levels.

Conceptual Work Plan AOC 19:

Conceptual work includes the installation of approximately eleven (11) soil gas vapor points along the eastern boundary of the Site in order to evaluate potential TCE soil gas concentrations. Refer to Section 8.0 – Interim Measures Work Plan for further discussion.

The intent of the initial RFI Work Plan discussed in Section 8.0 is to begin investigation of AOC 19. Following that investigation a RFI Work Plan will be developed and submitted subsequent to this report that provides more detail on the proposed monitoring wells that will be drilled, analysis parameters, and the additional work needed to identify the source of TCE vapors, if any. All parameters above the VIAP criteria will be included in additional investigation.

6.20 AOC 20 – TCE/SVOC/VOCs



Subsurface investigations conducted in this area indicate the presence of SVOCs and VOCs in soil and groundwater. Specifically, historical soil boring/temporary monitoring well SB/TMW-3R advanced in March 2016, indicated the presence of several SVOCs in soil including fluoranthene and phenanthrene above Residential Drinking Water Protection and/or Groundwater Surface Water Interface Protection criteria at a depth of 3 to 4 feet bsg. Groundwater samples collected in March 2016 from historical soil boring/temporary monitoring well SB/TMW-3 installed within this area indicated the presence of chlorobenzene in excess of Residential Volatilization to Indoor Air and Groundwater Surface Water Interface criteria.

Conceptual Work Plan AOC 20:

Conceptual work includes investigation of soil gas and groundwater within this area to define the source of TCE, define any migration of contaminated water off-site, and to determine if volatiles such as TCE and chlorobenzene are present and/or migrating into the adjacent western ROW of Pinecrest Drive. Specifically, soil gas points will be installed to assist in narrowing the location of the source, as further discussed in Section 8.0 – Interim Measures Work Plan.

The intent of the initial RFI Work Plan discussed in Section 8.0 is to begin investigation of AOC 20. Following that investigation a RFI Work Plan will be developed and submitted subsequent to this report to propose necessary work needed to detail the source of vapors, if any, identify off-site migration, if any, and installation of monitoring wells.

7.0 IMPLEMENTATION OF INTERIM MEASURES

7.1 Proposed Interim Measure

The Client intends to construct a commercial building on the southern portion of the Site within two to ten years. In addition to the commercial building, access roadway, new storm sewer, sanitary sewer, and municipal water connections will be installed. The Site, in its entirety, is surrounded by a chain link fence which prevents entrance to the Site by the general public. In order to mitigate the potential threat to human health and the environment the following interim/stabilization measures are being recommended.

Institutional Controls

Based on the current zoning, Site conditions and proposed future land use, an institutional control may be utilized and be recorded and run in perpetuity with the deed to restrict land use to nonresidential use. The use of the groundwater will be prohibited at the Site. Special handling of contaminated soils will be required during redevelopment.

Engineering Controls

Based upon the presence of soil vapor, engineering controls will be instituted at the time of construction to mitigate the risk for vapor migration into future onsite buildings.

Additional Subsurface Investigation

Further subsurface investigation is necessary to identify the extent of soil, groundwater, and soil gas impacts. Additional subsurface investigation conceptual items pertaining directly to the identified AOCs are presented in Section 6.0.

It should be noted that these interim measures are not a substitute for fully characterizing the nature and extent of contamination on and off-site. They are not to be considered as final corrective measures if reasonably achievable source removal or control measures would obviate the need for interim measures in the long term

ATC proposes to install up to 19 soil gas points along the eastern Site boundary in order to assess the potential for migration of VOCs, including TCE, off-site. Soil vapor locations will be placed approximately every 50 feet along the eastern site boundary where there are no groundwater wells in accordance with EGLE's May 2013 Guidance Document for the Vapor Intrusion Pathway. The vapor points will be installed approximately 5 feet below grade Soil gas points cannot be installed 10-15 feet below grade (as requested by EGLE) due to the depth to groundwater being approximately 8-10 feet below ground surface.
ATC will also conduct groundwater monitoring along the eastern border of the Site to assess the potential for off-site migration of contaminated groundwater. The groundwater monitoring will be conducted using 13 of the existing wells: MW-104 through MW-113 and MW-119 through MW-121.

8.0 INTERIM MEASURES - WORK PLAN

As noted in Section 6.0, the Site has been divided into 20 areas of concern (AOC), based upon geophysical anomalies, EMI survey data and/or soil, groundwater and/or soil gas concentrations within those specific areas. ATC will construct a Work Plan, customized to each individual AOC over the coming years. However, based upon the presence of TCE in soil gas along the eastern boundary of the Site, EGLE has requested a work plan to assess the data gaps along the eastern property boundary. Based on the 2019 and 2020 assessment performed by ATC and summarized in this report (**Figure 6**), groundwater has been assessed along the eastern margin of the Site. Soil gas sampling proposed will assess areas of groundwater concentrations that exceed screening levels or in areas likely to show off-site migration.

8.1 Proposed Work Plan – Eastern Property Boundary

The following proposed work plans are for the Eastern Property Boundary of the Site. Specific AOCs that will be included are AOCs 3, 9, 14, 19, and 20.

TCE concentrations have been identified in soil gas vapor points installed within the eastern right-of-way (ROW) of Pinecrest Drive by EGLE in August 2018. Specifically, TCE soil gas concentrations were detected in exceedance of Volatilization to Indoor Air Pathway screening levels at soil gas points 18VP-1 and 18VP-3. However, sub slab soil gas points installed by EGLE in 2018 within adjacent residential dwellings did not exhibit TCE concentrations in excess of Volatilization to Indoor Air Pathway screening levels. To that effect, an Interim Measures Work Plan has been devised to assess the concentrations of constituents of concern (COCs) within the eastern boundary of the Site, which may be migrating along the east-southeastern down gradient direction.

COCs along the eastern margin of the Site, which may pose an off-site migration concern, pertain mainly to VOCs including chlorobenzene, mercury, TCE and vinyl chloride. Specifically, TCE has been detected in dissolved groundwater concentrations in eastern boundary monitoring wells MW-10, MW-111 and MW-107 (inclusive of AOC 19) in exceedance of Residential and/or Non-Residential Volatilization to Indoor Air Pathway screening levels. Additionally, dissolved concentrations of chlorobenzene have been detected in soil boring/temporary monitoring well SB/TMW-3, which is along the northeastern Site boundary, west of monitoring well MW-120 (inclusive of AOC 20). Vinyl chloride was detected in temporary monitoring well/soil boring SB/TMW-02 which is located along the northeastern portion of the Site boundary at a concentration exceeding Volatilization to Indoor Air Pathway screening levels. Mercury was detected at adsorbed concentrations that exceed Volatilization to Indoor Air Pathway at soil boring SB-22, which is near the eastern boundary of the Site (inclusive of AOC 20), at a depth of 3 to 4 feet bgs.

ATC proposes to install eleven (11) soil gas points along the eastern Site boundary in order to assess the potential for migration of VOCs, including TCE, off-site (refer to **Figure 17** - Interim Measures Work Plan – Proposed Soil Gas Vapor Points Map in Appendix A for proposed soil gas point locations). Currently, no soil gas points exist along the eastern Site margin. As such, soil gas points were selected based upon existing known locations of VOC concentrations (especially TCE) in groundwater along the eastern Site boundary. Specifically, within the location of AOC 19 (located to the west of known TCE

exceedances in soil gas points 18VP-1 and 18-VP-3), dissolved concentrations of TCE in monitoring well monitoring wells MW-9 and MW-10 exceed Volatilization to Indoor Air Pathway screening levels. Additionally, areas to the north and south of AOC 19 (AOCs 20 and 3, respectively), will be investigated for the presence of soil gas due to the presence of chlorobenzene present in groundwater at historical soil boring/temporary monitoring well location SB/TMW-3 (inclusive of AOC 20) and the presence of TCE in groundwater located at monitoring well MW-107 (inclusive of AOC 3) at levels which exceed Volatilization to Indoor Air Pathway screening levels. Soil gas locations will be placed approximately every 50 feet along the eastern Site boundary. All soil gas vapor points will be installed in accordance with EGLE's May 2013 *Guidance Document for the Vapor Intrusion Pathway*. Consistent with previous EGLE soil gas points installed along the eastern and western right-of-way (ROW) of Pinecrest Drive, the probes will be installed approximately five feet below grade (based on the design of the prior points EGLE installed in the ROW so we can compare data). Based on the depth to groundwater (typically around ten (10) feet), deeper soil gas probes will not be able to be installed at greater depths than eight (8) feet below grade. The soil gas points will be first be advanced by direct push and/or hand auger clearance to a depth of at least 5 feet bgs. The soil gas vapor probe will be constructed with a 3/8-inch inner diameter brass barbed fitting assembly connected to a 4-inch long stainless steel screen. The brass fitting assembly will be surrounded by a silicone sleeve. The silicone sleeve will be slightly larger than the pilot hole to provide a seal between the stainless screen and top of the concrete. The soil gas points will be constructed of thermoplastic tubing with six-inch screens (0.10 inch slot size) surrounded by sand filter pack. The remaining well annulus will be sealed with bentonite to within one foot of ground surface and the soil gas monitor points will be fitted with petcock shut off valves and finished with steel flush-mounted well covers set in concrete pads in order to protect the vapor point from damage and corrosion.

Along with soil gas sampling, ATC will conduct groundwater sampling along the eastern border of the site. The sampling will take place in existing monitoring wells MW-104 through MW-113 and MW-119 through MW-121 and will evaluate potential off-site migration.

8.2 Sampling Methodology

Soil gas samples will be collected using techniques outlined in the EGLE document *Guidance Document for the Vapor Intrusion Pathway*. The samples will be collected using a constructed pathway between the soil vapor point and the Summa® canister. The pathway is created using plastic and Tygon® tubing, as well as plastic stopcocks allowing for the control of flow direction. In addition, a factory calibrated landfill gas meter is used to collect methane readings during soil gas sampling

Before the soil gas sampling is started, two separate quality assurance/quality control (QA/QC) tests will be conducted, the first being a helium shroud test. The helium shroud test uses a large plastic hood to cover the sample train and connections between the vapor pin and the Summa® canister. A tracer gas (high-grade helium) is then injected beneath the plastic hood; a grab sample of the air from the tubing located beneath the helium hood is then collected and checked for the presence of helium in the field using a helium detector, thus indicating whether or not a leak is present.

The second test used is known as a shut-in test. This test involves the extraction of air from the sample lines that creates a vacuum measured using a mercury (Hg) vacuum gauge to test the tightness of the

compression fittings on the sample train. Valves to the vapor pin and the Summa® canister are shut and air is extracted from the sampling lines, inducing a vacuum of approximately 10.0 inches of Hg. When all external valves are closed, the vacuum within the sample train should remain steady for at least one minute. The loss of vacuum pressure while performing the shut-in test indicates a leak and that the fittings need to be adjusted until the sample train can hold a steady vacuum pressure.

Once both QA/QC tests are successfully completed, soil gas located within the tubing is then purged and/or evacuated up to three times the tubing volume allowing for the collection of an undisturbed sample. The Summa® canisters are under negative pressure, so upon completion of the QA/QC tests and evacuation of soil gas within the tubing, the Summa® canisters are opened allowing for soil gas to be drawn in and collected. The soil gas samples will then be shipped to Pace Analytical (Pace) in Mount Juliet, Tennessee, for analysis of volatile organic compounds (VOCs) in accordance with United States Environmental Protection Agency (U.S. EPA) Compendium Method TO-15.

Mercury vapor will be screened using a Lumex Mercury Vapor Analyzer. Each soil vapor point will be purged using a lung pump sampler and tedlar bag for no more than 5 minutes not exceeding 200 ml/minute. The tedlar bag will then be connected to the Lumex and ATC will record the maximum and average mercury vapor reading.
ATC will conduct low-flow groundwater sampling at installed monitoring wells MW-104 through MW-113 and MW-119 through MW-121 depending on the needs of the investigation. Groundwater samples will be analyzed for the presence of VOCs, SVOCs, PFAS compounds, alcohols and metals, and tetraethyl lead.

During the sampling events, the groundwater samples will collected using low flow, minimal drawdown sampling techniques. A bladder pump will be equipped with new 3/8 inch diameter PFAS free tubing. During the low-flow sampling activities, several indicator parameters, including temperature, specific conductivity, dissolved oxygen, pH, oxidation reduction potential, and turbidity, will be monitored and recorded every three to five minutes. The water level will also be monitored periodically to ensure that excessive water level drawdown does not occur. At each monitoring well, groundwater sample collection will proceed once indicator parameters have stabilized for three consecutive readings. The groundwater samples will be collected into laboratory-provided sample containers, placed into a cooler containing ice, and logged onto a project-specific chain-of-custody form.

Any new monitoring wells that are installed will be installed to the base of contamination or to the top of the clay layer in accordance with a Standard Operating Procedure approved by EGLE.

8.3 Data Quality, Evaluation and Reporting

Data Quality

Data quality objectives are to obtain data that are sufficiently accurate and representative of site media that reliable assessment of exposure pathways and risks may be identified. Field data will be obtained in a consistent manner using standard protocols developed by the USEPA, EGLE, ASTM, or other appropriate developer of scientific methods. Laboratory data will be obtained in accordance with

standard protocols similarly developed, targeting lower analytical method detection limits less than the lowest applicable regulatory standards and levels of toxicological risk to the extent possible and data that are reproducible and verifiable, such as documented in EGLE's March 2016 *Application of Target Detection Limits and Designated Analytical Methods*. Where analytical results cannot be determined to the target levels, such as because of analytical interference, documentation of data limitations and effect on assessment conclusions will be evaluated. Data accuracy, reproducibility, and absence of cross-contamination will be evaluated using field and laboratory sample blanks, replicates, and standards.

Data Evaluation

Soil vapor concentrations will be compared to EGLE soil gas Volatilization to Indoor Air Pathway screening levels determined in micrograms per cubic meter ($\mu g/m^3$). Quality assurance samples in the form of duplicates will be collected and analyzed every tenth sample.

Reporting

An Interim Work Plan Investigation Report will be prepared and submitted to EGLE within 60 days of receipt of analytical data.

8.4 Public Involvement Plan

Upon EGLE review and approval of the Interim Measures Work Plan, ATC will provide neighbors and other interested and involved parties to review available existing site reports and investigative plans and provide opportunity for questions and comments. This Public Involvement Plan (PIP) was prepared in general accordance with RCRA *Public Involvement Manual* (EPA/530-R-93-006, September 1993).

Because of limitations on public meetings and other gatherings imposed by the Governor's Executive Order (EO) 2020-21 and its amendments intended to help mitigate the spread of the COVID-19 virus, public meetings and other activities involving direct contact between the involved parties, regulators, and the public are prohibited or undesirable for the foreseeable future. Accordingly, this PIP envisions public involvement as consisting of the following activities until treatments and/or vaccinations become available to control the COVID-19 virus:

- ATC will work with EGLE to establish an online portal for public access to relevant available documents for review and for submittal of comments and questions. The online portal will identify appropriate contacts for further communication with involved parties and regulators, if desired.
- ATC will prepare Fact Sheets summarizing current conditions and proposed investigations, pending the development of corrective actions. Fact Sheets will be submitted to EGLE for review prior to public distribution and online posting.

Although the rules regarding public meetings and other activities involving direct contact are relaxing, the approach for public involvement/outreach via a maintained website should procede. In-person

public meetings can be held in the future if necessary, and if allowed by current governmental restrictions.

According to the latest U.S. Census demographic profile of Ferndale, more than 96% of the population is English-speaking, with the next largest ethnic population being Spanish-speaking (2%). Accordingly, no provisions for translation are anticipated at this time.

Should public meetings become safe and feasible, copies of site documents also will be made available through the Ferndale Public Library.

9.0 REFERENCES

Applied EcoSystems, Inc. (AE), November 26, 2019, *Proposal & Eastern Area Investigation Work Plan, Hayes Lemmerz (Former Ethyl Corp.) Site, 1600 West Eight Mile Road, Ferndale, Michigan:* Prepared for Pinecrest Holdings, LLC.

Applied EcoSystems, Inc. (AE), November 27, 2019, *RCRA Corrective Action Description of Current* Conditions *Report; Hayes Lemmerz (Former Ethyl Corp.) Site, 1600 West Eight Mile Road, Ferndale, Michigan:* Prepared for Pinecrest Holdings, LLC.

Neyer, Tiseo & Hindo Ltd., December 26, 1985, *Preliminary Site Assessment Investigation, Ethyl Corporation, Ferndale, Michigan*: Prepared for Oakland County Michigan Economic Development Group.

Neyer, Tiseo & Hindo Ltd., January 3, 1986, *Preliminary Site Assessment Investigation, Ethyl Corporation, Ferndale, Michigan*: Prepared for Oakland County Michigan Economic Development Group.

PM Environmental, November 3, 2015, *Phase I Environmental Site Assessment of the Vacant Industrial Property Located at 1600 West 8 Mile Road, Ferndale, Michigan*: Prepared for CG Emerson Real Estate Group.

PM Environmental, June 17, 2016, *Baseline Environmental Assessment, 1600 West 8 Mile Road, Ferndale, Michigan*: Prepared for Pinecrest Holdings, LLC.

PM Environmental, June 16, 2016, *Phase I Environmental Site Assessment Update, 1600 West 8 Mile Road, Ferndale, Michigan*: Prepared for CG Emerson Real Estate Group.

PM Environmental, November 14, 2016, *Site Investigation Report, 1600 West 8 Mile Road, Ferndale, Michigan*: Prepared for Pinecrest Holdings, LLC.

PM Environmental, May 24, 2019, *Phase I Environmental Site Assessment; 1600 West Eight Mile Road and Identified as Parcel ID 24-25-33-451-005, Ferndale, Michigan*: Prepared for Axle of Dearborn.

PM Environmental, June 12, 2019, *Baseline Environmental Assessment; 1600 West Eight Mile Road and Identified as Parcel ID 24-25-33-451-005, Ferndale, Michigan:* Prepared for Axle of Dearborn.

RJN Environmental, November 27, 2012, *Phase I Environmental Site Assessment, Former Ethyl Corporation Laboratory, 1600 West Eight Mile Road, City of Ferndale, Oakland County, Michigan*: Prepared for Cedan Holdings VI, LLC.

RJN Environmental, December 5, 2012, *Baseline Environmental Assessment, 1600 West Eight Mile Road, City of Ferndale, Oakland County, Michigan*: Prepared for Cedan Holdings VI, LLC.

RJN Environmental, December 18, 2012, *Phase II Environmental Site Assessment, Former Ethyl Corporation Laboratories, 1600 West Eight Mile Road, City of Ferndale, Oakland County, Michigan*: Prepared for Cedan Holdings VI, LLC.

RJN Environmental, Inc., November 1, 2013, *Phase II Environmental Site Assessment, North Half Former Ethyl Corporation Laboratories, 1600 West Eight Mile Road, City of Ferndale, Oakland County, Michigan*: Prepared for Cedan Holdings VI, LLC.

City of Ferndale Zoning Map (ArcGIS) https://www.ferndalemi.gov/services/planning-zoning

City of Ferndale Master Plan, updated January 2017 https://www.ferndalemi.gov/resources/project-3

U.S.D.A. Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/

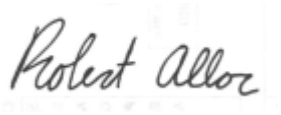
USFWS on-line Wetland Mapper: http://www.fws.gov/wetlands/data/Mapper.html

EGLE Water Well Viewer: https://www.mcgi.state.mi.us/waterwellviewer/

Wellogic Water Well Record Search:
https://www.egle.state.mi.us/wellogic/Login.aspx?ReturnUrl=%2fwellogic%2fdefault.aspx

10.0 SIGNATURES

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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.



Robert Allor Staff Geologist	September 21, 2021 Date

Andrew Stuart National Program Director	September 21, 2021 Date

APPENDIX A

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-SITE.DWG, FIG1

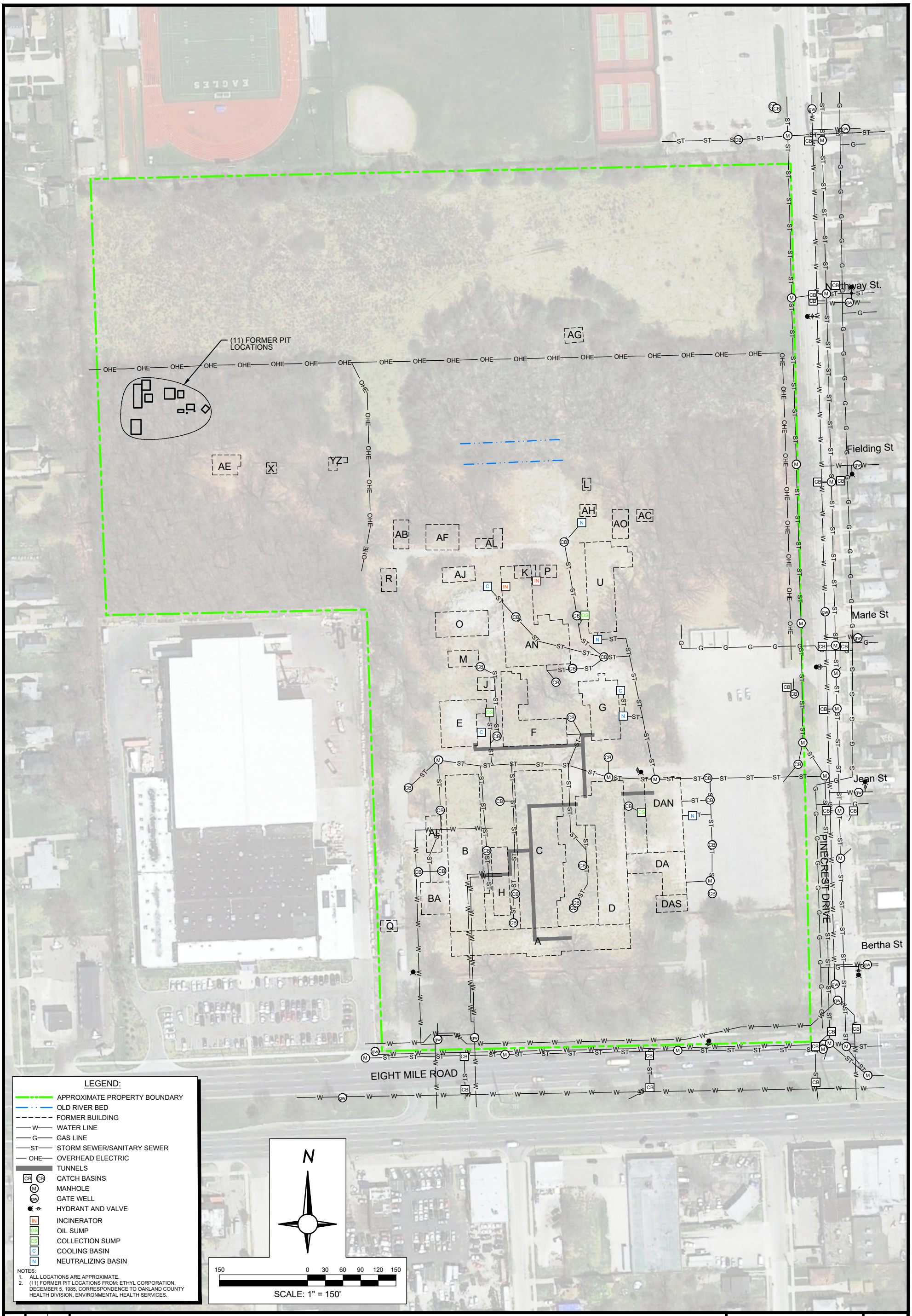


Figure: 1

Scale: AS SHOWN

Date: 09/2021

SITE MAP

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: NPDAX19001	Drn. By: PH
Drawing File: SEE UPPER LEFT	Ckd. By: RA
ATC	App'd By:
	Ckd. Date:

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

MW-115	
3/24/20	
2-3'	
Soil Metals	
As	6,680
7-8'	
As	24,600
Ba	1,950,000
Cd	77,000
Cr	179,000
Pb	895,000
Hg	252
Ag	1,390

MW-114	
3/24/20	
3-4'	
Soil Metals	
As	7,760
Ba	225,000
Cd	2,800
Pb	75,900
Hg	218
Ag	2,890
8-9'	
As	6,350
Pb	21,500
Soil SVOCs	
3-4'	
BaPyr	11,600
Fl	33,900
P	33,500

MW-113	
3/23/20	
2-3'	
Soil VOC	
Me	233,000

MW-119	
4/21/20	
2-3'	
Soil Metals	
As	6,380
Se	2,540

MW-120	
4/21/20	
4-5'	
Soil VOC	
Me	175,000

MW-131	
6/15/20	
2-3'	
Soil Metals	
Al	5,290,000
Co	2,120
Fe	5,240,000
Mn	66,400
Ag	203

MW-122	
6/15/20	
4-5'	
Soil Metals	
Al	4,330,000
Co	1,400
Fe	5,840,000
Pb	50,700
Mn	89,200
Hg	1,110
Ag	157
Zn	48,000

MW-127	
6/15/20	
6-7'	
Soil Metals	
Al	2,480,000
Co	1,190
Fe	2,510,000
Mn	29,500
10-11'	
Soil Metals	
Al	1,630,000
Co	1,150
Fe	2,440,000
Mn	61,300
Soil SVOCs	
F	16,500
2M	61,800
P	68,700

MW-130	
6/15/20	
4-5'	
Soil Metals	
Al	4,020,000
Co	1,260
Fe	3,160,000
Mn	25,900

MW-123	
6/15/20	
4-5'	
Soil Metals	
Al	2,870,000
Co	1,720
Fe	6,680,000
Mn	126,000

MW-125	
6/16/20	
4-5'	
Soil Metals	
Al	5,130,000
Co	2,270
Fe	5,840,000
Pb	33,800
Mn	122,000
Hg	940
Ag	1,840
Zn	50,800
Soil SVOCs	
P	2,250

MW-124	
6/15/20	
4-5'	
Soil Metals	
Al	3,620,000
Co	1,350
Fe	3,940,000
Mn	27,300

MW-126	
6/15/20	
4-5'	
Soil Metals	
Al	4,740,000
Cr	24,700
Co	1,290
Fe	58,100,000
Mn	440,000
Mo	3,830
7.5-8.5'	
Soil Metals	
Al	2,850,000
Co	1,710
Fe	4,180,000
Mn	79,400

MW-118	
3/30/20	
2-3'	
Soil Metals	
As	17,000

MW-133	
8/12/20	
3'-4'	
Soil Metals	
Al	6,450,000
As	4,800
Ba	104,000
B	12,100
Fe	7,850,000
Pb	48,100
Mg	10,400,000
Mn	218,000
Hg	798
Ag	789
Zn	79,600
10'-11'	
Soil Metals	
Al	3,720,000
Co	1,490
Fe	4,830,000
Pb	35,800
Mn	126,000
Hg	249
Zn	71,400
Soil SVOC's	
3'-4'	
BaPyr	20,400
Cbz	5,010
Dbz	2,430
Fl	53,000
Nap	1,960
P	38,300
Soil SVOC's	
10'-11'	
BaPyr	14,500
Fl	38,500
P	22,100

MW-102	
3/23/20	
2-3'	
Soil Metals	
Hg	70.6

MW-132	
8/12/20	
5.5'-6.5'	
Soil Metals	
Al	5,780,000
As	5,010
Ba	75,400
B	11,500
Fe	10,100,000
Pb	29,800
Mg	8,760,000
Mn	179,000
Hg	1,090
Mo	2,220
Zn	116,000
Soil SVOC's	
5.5'-6.5'	
P	2,130

MW-128	
6/15/20	
4-5'	
Soil Metals	
Al	4,160,000
Co	1,520
Fe	5,040,000
Mn	110,000
Mo	1,870
8-9'	
Soil Metals	
Al	2,900,000
Co	1,640
Fe	3,950,000
Mn	148,000
Soil SVOCs	
4-5'	
Nap	591
P	6,780

MW-129	
6/15/20	
3-4'	
Soil Metals	
Al	4,190,000
Co	1,610
Fe	6,060,000
Pb	47,200
Mn	92,200
Hg	666
Soil SVOCs	
3-4'	
P	1,870

LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

	Analyte exceeds statewide default background levels.
4,600	Analyte exceeds residential drinking water protection criteria.
4,600	Analyte exceeds nonresidential drinking water protection criteria.
4,600	Analyte exceeds groundwater surface water interface protection criteria.
37,000	Analyte exceeds direct contact criteria.
7,760	Analyte exceeds residential volatilization to indoor air pathway (VIAP) screening levels.
10.00	Analyte exceeds nonresidential volatilization to indoor air pathway (VIAP) screening levels.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.
Metals analyzed by EPA Method 6010B or 6020. Mercury analyzed by EPA Method 7470A.
Volatile organic compounds (VOCs) were analyzed by EPA Method 8260B.
Polynuclear aromatic hydrocarbons (PNAs) analyzed by EPA Method 8270 SIM.
EGLE Michigan Department of Environment, Great Lakes, and Energy.
VIAP Volatilization to Indoor Air Pathway
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018; VIAP screening levels, dated September 4, 2020

Figure: 2

Scale: AS SHOWN

Date: 03/2021

SOIL EXCEEDANCES MAP

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Soil Metals		Soil Metals		Soil SVOCS		Soil VOCs	
Al	Aluminum	Mg	Magnesium	BaPyr	Benzo(a) Pyrene	Me	Methanol
As	Arsenic	Mn	Manganese	Cbz	Carbazole		
Ba	Barium	Hg	Mercury	Dbz	Diebenzofuran		
B	Boron	Mo	Molybendum	Fl	Fluoranthene		
Cd	Cadium	Se	Selenium	F	Fluorene		
Cr	Chromium	Ag	Silver	2M.	2-Methylnaphthalene		
Co	Cobalt	Zn	Zinc	Nap	Naphthalene		
Fe	Iron			P	Phenanthrene		
Pb	Lead						

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-SOIL VOC HISTORICAL.DWG, FIG3

PSB-103	
6/22/2016	
12-13'	
E	9,300
N	51,000
124	19,300
135	3,800
X	35,600
n-B	3,800
s-B	2,300
lpB	18,000
n-P	4,900
123	9,700

PSB-104	
6/22/2016	
9-10'	
124	28,600
135	8,300
n-P	6,000
123	9,000

PSB-112	
6/21/2016	
8-9'	
B	300

PSB-111	
6/21/2016	
7-8'	
2M	6,000
N	27,000

PSB-113	
6/21/2016	
8-9'	
2M	18,000
N	99,000

PSB-114	
6/21/2016	
3-4'	
N	1,500

PSB-115	
6/21/2016	
3.5-4.5'	
N	900

PSB-101	
6/22/2016	
8-9'	
N	9,900

PSB-182	
6/22/2016	
3-4'	
TCE	530

PSB-170	
6/27/2016	
2-3'	
TCE	480

PSB-168	
6/27/2016	
2-3'	
TCE	2,280

PSB-152	
6/28/2016	
3-4'	
TCE	280

NUST	
5/17/1996	
9'	
X	14,000

BTWN TANKS	
4/11/1996	
9.5'	
MTBE	1,000

SUST	
5/17/1996	
6.5'	
E	670
X	14,000

PSB-171	
6/27/2016	
2-3'	
PCE	200
TCE	1,500

SB-25	
3/1/2016	
4-5'	
TCE	220

SB-5	
10/4/2012	
10-12'	
E	32,000
2-M	5,400
N	29,000
124	220,000
135	110,000
X	79,000
n-B	14,000
s-B	9,200
lpB	18,000
n-P	72,000
123	56,000

SB-7	
10/4/2012	
10-12'	
T	16,000
124	7,200
Clb	950
E	600
124	7,200
135	2,600
123	3,300
X	4,800
1,2	7,500
1,3	1,400
1,4	2,700

SB-25	
10/8/2012	
10-12'	
E	880
124	6,500
135	1,800
2M	160,000
N	38,000
X	5,200
1,2	7,500
1,3	1,400
1,4	2,700

LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

Bold	Exceeds DW
Italic	Exceeds GSI
Red	Exceeds VIAC
B -	Benzene (ppb)
n-B-	n-Butylbenzene (ppb)
s-B-	Sec-Butylbenzene (ppb)
Clb -	Chlorobenzene (ppb)
1,2-	1,2-Dichlorobenzene (ppb)
1,3-	1,3-Dichlorobenzene (ppb)
1,4-	1,4-Dichlorobenzene (ppb)
E -	Ethylbenzene (ppb)
lpB-	Isopropylbenzene (ppb)
2M-	2-Methylnaphthalene (ppb)
MTBE-	Methyl Tertiary Butyl Ether (ppb)
N-	Naphthalene (ppb)
n-P-	n-Propylbenzene (ppb)
PCE-	Tetrachloroethylene (ppb)
T-	Toluene (ppb)
TCE-	Trichloroethylene (ppb)
123-	1,2,3-Trimethylbenzene (ppb)
124-	1,2,4-Trimethylbenzene (ppb)
135-	1,3,5-Trimethylbenzene (ppb)
X -	Xylene (ppb)
Me -	Methanol (ppb)

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

Northway St.

Marle St

Jean St

Bertha St

EIGHT MILE ROAD

PINECREST DRIVE

Figure: 3

Scale: AS SHOWN

Date: 03/2021

SOIL VOC EXCEEDANCES - HISTORICAL

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

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PSB-101	
6/22/2016	
8-9'	
N	9,800

PSB-103	
6/22/2016	
12-13'	
N	68,100
Ph	*6,300*

PSB-111	
6/21/2016	
7-8'	
BaP	15,500
N	10,100
Ph	*24,300*

PSB-113	
6/21/2016	
8-9'	
BaP	6,300
N	19,800
Ph	*48,100*
2M	4,900

PSB-114	
6/21/2016	
3-4'	
BaP	11,800
N	900
Ph	*29,700*

PSB-115	
6/21/2016	
3.5'-4.5'	
BaP	11,800
N	2,500
Ph	*20,200*

PSB-117	
6/21/2016	
3-4'	
BaP	13,800
N	800
Ph	*33,800*

SB-3R	
3/1/2016	
3-4'	
F	*6,100*
Ph	*6,300*

SB-27	
3/1/2016	
4-5'	
Ace	*24,000*
Ant	**56,200**
BaA	87,500
BaP	130,400
DbA	10,000
Fl	204,700
F	*34,700*
N	18,400
Ph	*203,200*

SB-18/A-3	
12/7/2015	
7-8'	
N	800
F	*12,640*
Ph	*7,120*

SB-11/A-9	
12/8/2015	
1-2'	
Ph	*2,250*

SB-27	
10/8/2012	
10-12'	
N	4,400
Ph	*14,000*

SB-17	
12/7/2015	
1-2'	
Fl	*25,270*
Ph	*12,600*

SB-25	
10/8/2012	
10-12'	
Ace	*67,000*
Ant	**80,000**
F	*100,000*
N	100,000
Ph	***410,000***

SB-7	
10/4/2012	
10-12'	
Ace	*52,000*
Ant	**64,000**
F	*81,000*
N	64,000
Ph	*380,000*

LEGEND:

- MW-101 — MONITORING WELL BY ATC — Well Identification
- MW-1 — MONITORING WELL BY OTHERS — Well Identification
- MW-C — TEMPORARY/FORMER WELL BY OTHERS — Well Identification
- A1 — SOIL-GAS MONITORING WELL BY ATC — Sample Identification
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS — Sample Identification
- B-1 — SOIL BORING — Boring Identification
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

Bold Exceeds DW
Italic Exceeds GSI
Red Exceeds VIAC
Exceeds DC

Ace - Acenapthene (ppb)
Acy - Acenaphthylene (ppb)
Ant - Antracene (ppb)
BaA - Benzo (a) Anthracene (ppb)
BaP - Benzo (a) Pyrene(ppb)
BbF - Benzo (b) Fluoranthene (ppb)
BkF - Benzo (k) Fluoranthene (ppb)
ghi - Benzo (g,h,I) Perylene (ppb)
Chy - Chrysene (ppb)
DbA Dibenzo (a,h) Anthracene (ppb)
Fl - Fluoranthene(ppb)
F - Fluorene (ppb)
2M - 2-Methylnaphthalene (ppb)
N - Naphthalene (ppb)
Ph - Phenanthrene (ppb)
Py - Pyrene (ppb)

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

EIGHT MILE ROAD

Fielding St

Marle St

St.

Figure: 4

Scale: AS SHOWN

Date: 03/2021

SOIL SVOC EXCEEDANCES - HISTORICAL

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT–CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095–SOIL METALS HISTORICAL.DWG, FIG5

PSB-104	
6/22/2016	
9-10'	
Ar	***5,920***
Ba	**1,870,000**
Cd	**18,300**
Cr	***40,900***
Hg	*448*
Se	*2,020*
Ag	*1,530*

SB-27	
3/1/2016	
4-5'	
Ar	***6,580***
Hg	*662*

PSB-109	
6/21/2016	
12-13'	
Hg	*132*

PSB-112	
6/21/2016	
8-9'	
Hg	*155*

PSB-113	
6/21/2016	
8-9'	
Hg	*243*

PSB-114	
6/21/2016	
3-4'	
Ar	*5,810*

PSB-103	
6/22/2016	
12-13'	
Cd	**10,200**
Cr	***69,800***

SB-29	
3/1/2016	
1-2'	
Ar	***6,980***

PSB-163	
6/22/2016	
13-14'	
Hg	*162*

PSB-169	
6/27/2016	
2-3'	
Se	*790*

PSB-148	
6/28/2016	
2-3'	
Hg	*783*

PSB-168	
6/27/2016	
2-3'	
Ar	***9,850***
Hg	*172*
Se	*480*

PSB-170	
6/27/2016	
2-3'	
Ar	***24,100***
Hg	*486*
Se	*840*

PSB-171	
6/27/2016	
2-3'	
Ar	***18,600***
Pb	**771,000**
Se	*480*
Ag	***11,400***

SB-18/A-3	
12/7/2015	
7-8'	
Hg	*628*

B2	
7/12/2019	
4-5'	
Hg	*28*

SB-11/A-9	
12/8/2015	
1-2'	
Hg	*645*

SB-17	
12/8/2015	
1-2'	
Hg	*291*

D2	
7/12/2019	
4-5'	
Hg	*25*

E2	
7/12/2019	
4-5'	
Hg	*22.1*

SB-14	
12/7/2015	
1-2'	
Hg	*414*

F4	
7/12/2019	
4-5'	
Hg	*402*

SB-3	
10/4/2012	
10 -12'	
Ar	***11,000***

E4	
7/12/2019	
4-5'	
Hg	*356*

SB-16	
12/7/2015	
1-2'	
Hg	*762*

C3	
7/12/2019	
4-5'	
Hg	*584*

C4	
7/12/2019	
4-5'	
Hg	*481*

PSB-172	
6/27/2016	
1-2'	
Ar	***35,200***
Se	*650*
Ag	*2,510*

SB-25	
3/1/2016	
4-5'	
Ar	***20,800***

PSB-178	
6/27/2016	
3-4'	
Ar	***6,550***

PSB-117	
6/21/2016	
2-3'	
Hg	*142*

PSB-115	
6/21/2016	
3.5-4.5'	
Hg	*250*

SB-22	
3/1/2016	
3-4'	
Hg	*621*

LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

NOTES:
Ar - Aresenic (ppb)
Ba - Barium (ppb)
Cd - Cadmium (ppb)
Cr - Chromium (ppb)
Pb - Lead (ppb)
Hg - Mercury (ppb)
Se - Selenium (ppb)
Ag - Silver (ppb)

Bold Exceeds DW
Italic Exceeds GSI
Red Exceeds VIAC

N

150 0 30 60 90 120 150
SCALE: 1" = 150'

Figure: 5
Scale: AS SHOWN
Date: 03/2021

SOIL METAL EXCEEDANCES - HISTORICAL

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095
Drawing File: SEE UPPER LEFT
Drn. By: PH
Ckd. By: RS
App'd By:
Ckd. Date:

ATC

MW-115	
4/9/2020	
7.5'-12.5'	
Benzene	1.5
Naphthalene	6.9

MW-114	
4/9/2020	
8'-13'	
Benzene	1.9
cis-1,2-Dichloroethene	6.4
Trichloroethene	1.4
Vinyl chloride	12.9

MW-111	
4/9/2020	
4'-9'	
Trichloroethene	2.7

MW-107	
4/8/2020	
7'-12'	
Trichloroethene	18.5

MW-129	
6/24/2020	
8'-13'	
Trichloroethene	1.5

MW-127	
6/24/2020	
8'-13'	
Naphthalene	8.0

MW-126	
6/23/2020	
8.5'-13.5'	
Tetrachloroethene	6.0
Trichloroethene	1.1

MW-128	
6/24/2020	
8'-13'	
Tetrachloroethene	7.8

MW-133	
8/13/2020	
10'-15'	
Naphthalene	8.9

MW-132	
8/13/2020	
10'-15'	
Ethylbenzene	3.7
Naphthalene	29.2
Methanol	8,740

LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

NOTES:

4,600	Analyte exceeds residential drinking water protection criteria.
4,600	Analyte exceeds groundwater surface water interface protection criteria.
4.6	Analyte exceeds residential volatilization to indoor air pathway (VIAP) screening levels.

Analyses were conducted at Pace Analytical (Pace) in Indianapolis, Indiana.
Volatile Organic Compounds (VOC) analyzed by EPA Method 8260B.

EGLE Michigan Department of Environment, Great Lakes, and Energy.
VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018; VIAP screening levels dated September 4, 2020

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

Figure: 6

Scale: AS SHOWN

Date: 03/2021

GROUNDWATER VOC EXCEEDANCES

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

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MW-115	
4/9/2020	
7.5'-12.5'	
Phenanthrene	2.8

MW-127	
6/24/2020	
8'-13'	
Fluoranthene	2.0
Phenanthrene	3.7

MW-133	
8/13/2020	
10'-15'	
Carbazole	10.9
Phenanthrene	4.2

MW-132	
8/13/2020	
10'-15'	
Carbazole	11.5
Naphthalene	16.2
Phenanthrene	5.6

LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

NOTES:

2.0 Analyte exceeds groundwater surface water interface protection criteria.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana
polynuclear aromatic hydrocarbons (pnas) were analyzed by epa method 8270 sim 40e.

EGLE Michigan Department of Environment, Great Lakes, and Energy.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018; VIAP screening levels dated September 4, 2020

N

150 0 30 60 90 120 150

SCALE: 1" = 150'

Figure: 7

Scale: AS SHOWN

Date: 03/2021

GROUNDWATER SVOC EXCEEDANCES

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

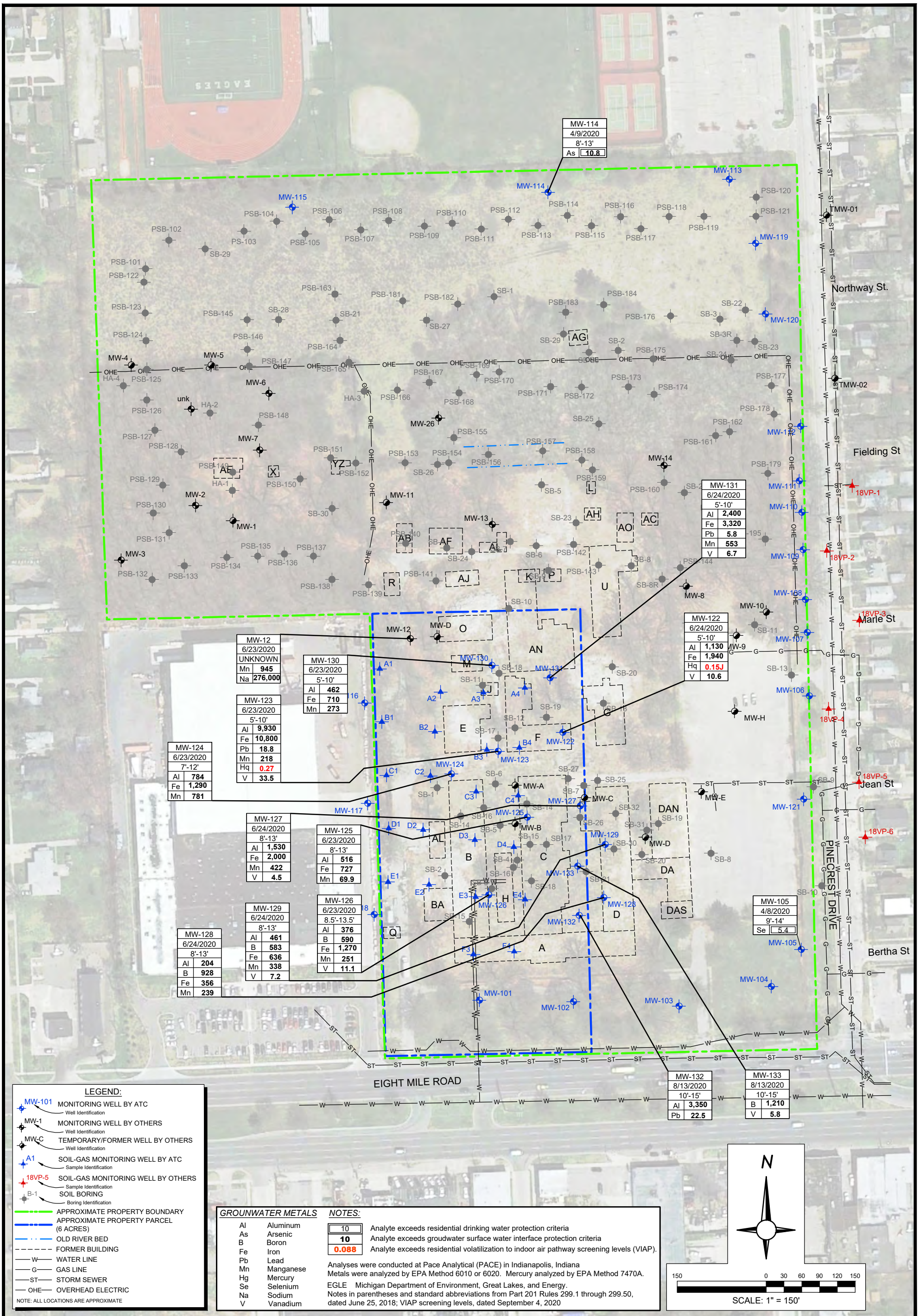
Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-GW METALS.DWG, FIG8



LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

GROUNWATER METALS

Al	Aluminum
As	Arsenic
B	Boron
Fe	Iron
Pb	Lead
Mn	Manganese
Hg	Mercury
Se	Selenium
Na	Sodium
V	Vanadium

NOTES:

10	Analyte exceeds residential drinking water protection criteria
10	Analyte exceeds groudwater surface water interface protection criteria
0.088	Analyte exceeds residential volatilization to indoor air pathway screening levels (VIAP).

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana
Metals were analyzed by EPA Method 6010 or 6020. Mercury analyzed by EPA Method 7470A.

EGLE Michigan Department of Environment, Great Lakes, and Energy.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018; VIAP screening levels, dated September 4, 2020

Figure: 8
Scale: AS SHOWN
Date: 03/2021

GROUNDWATER METAL EXCEEDANCES

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095
Drawing File: SEE UPPER LEFT
Drn. By: PH
Ckd. By: RS
App'd By:
Ckd. Date:

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-GW PFAS.DWG, FIG9

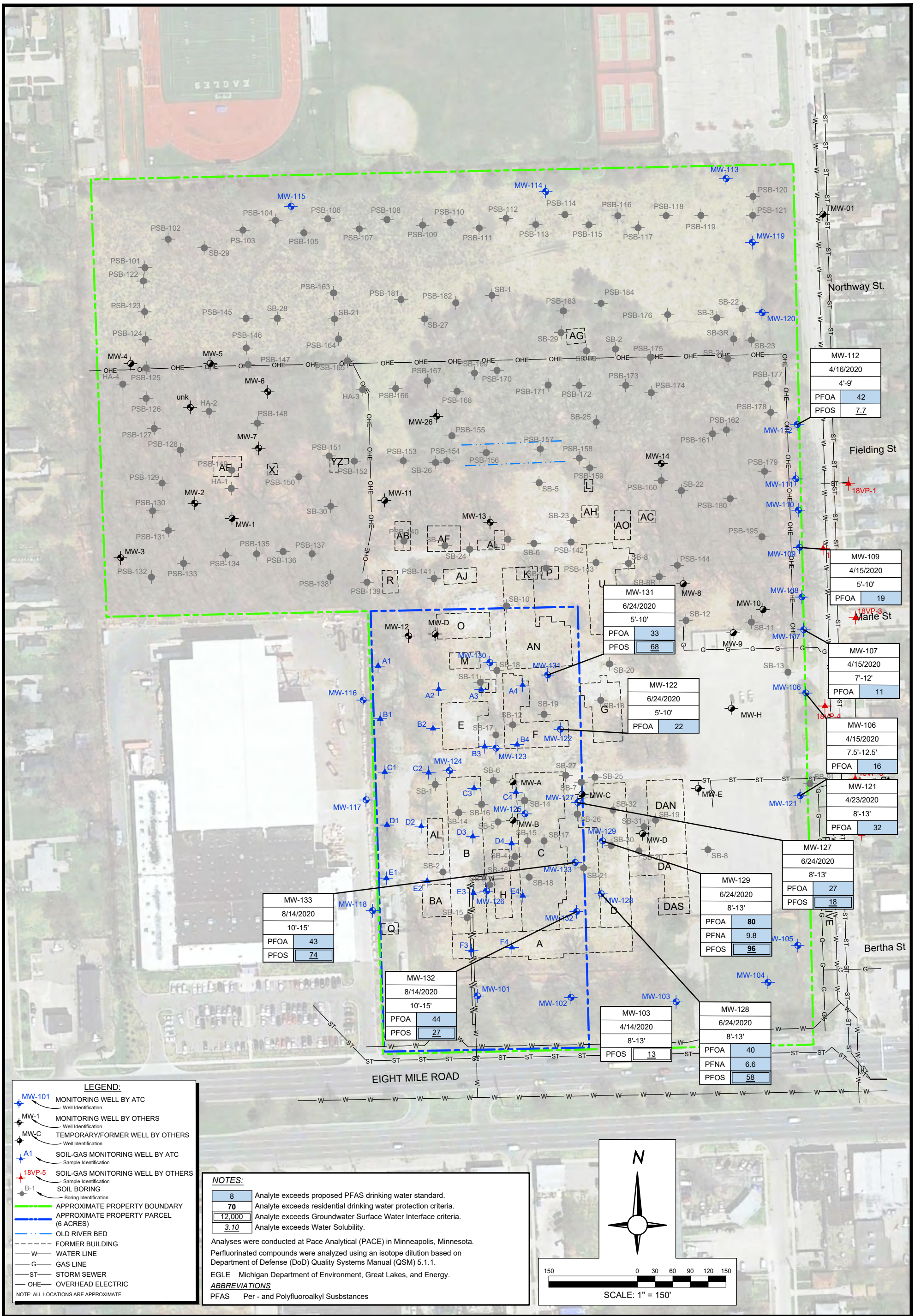


Figure: 9

Scale: AS SHOWN

Date: 03/2021

GROUNDWATER PFAS EXCEEDANCES

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

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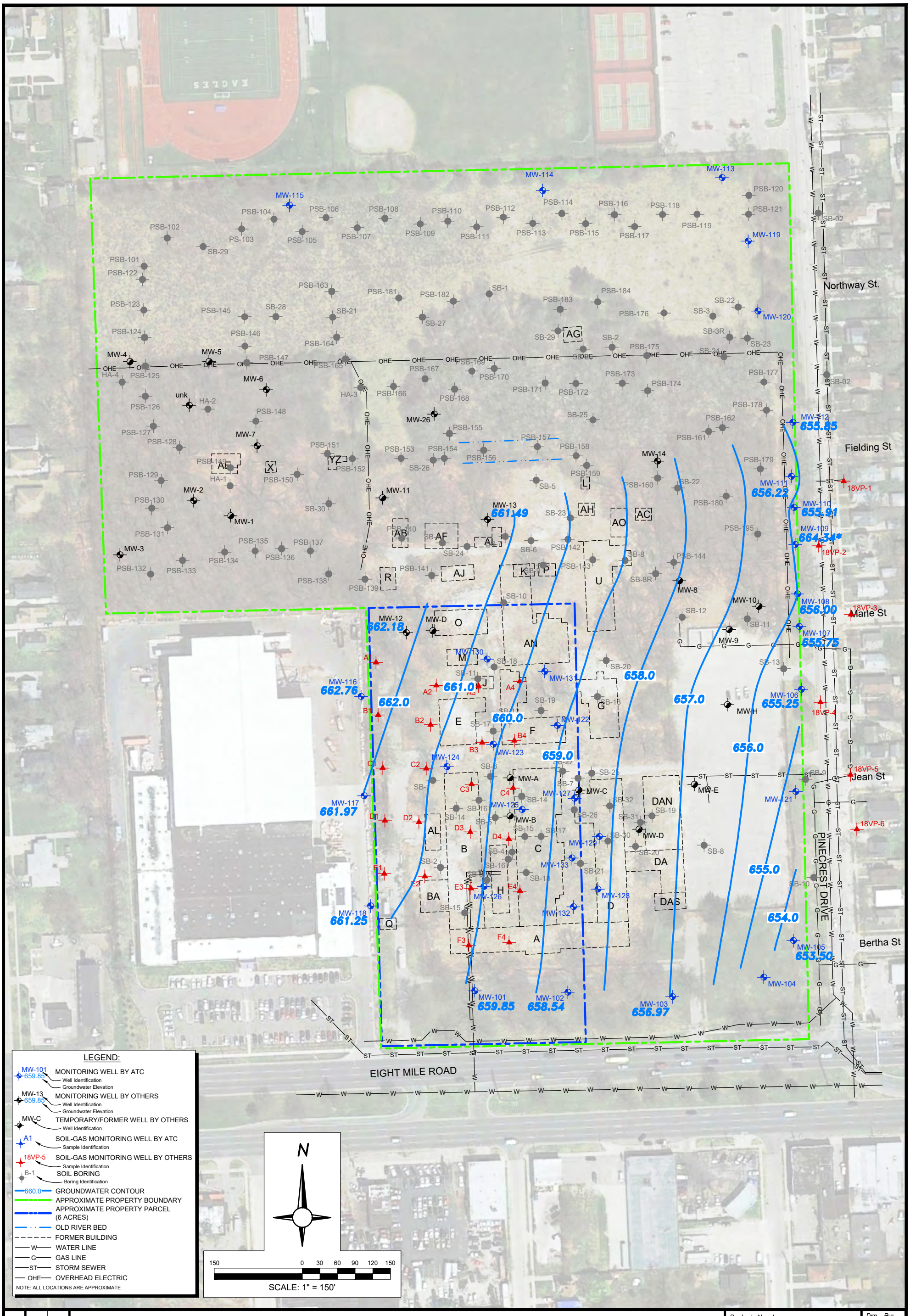

Figure: 10

Scale: AS SHOWN

Date: 03/2021

GROUNDWATER FLOW MAP APRIL 2020

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

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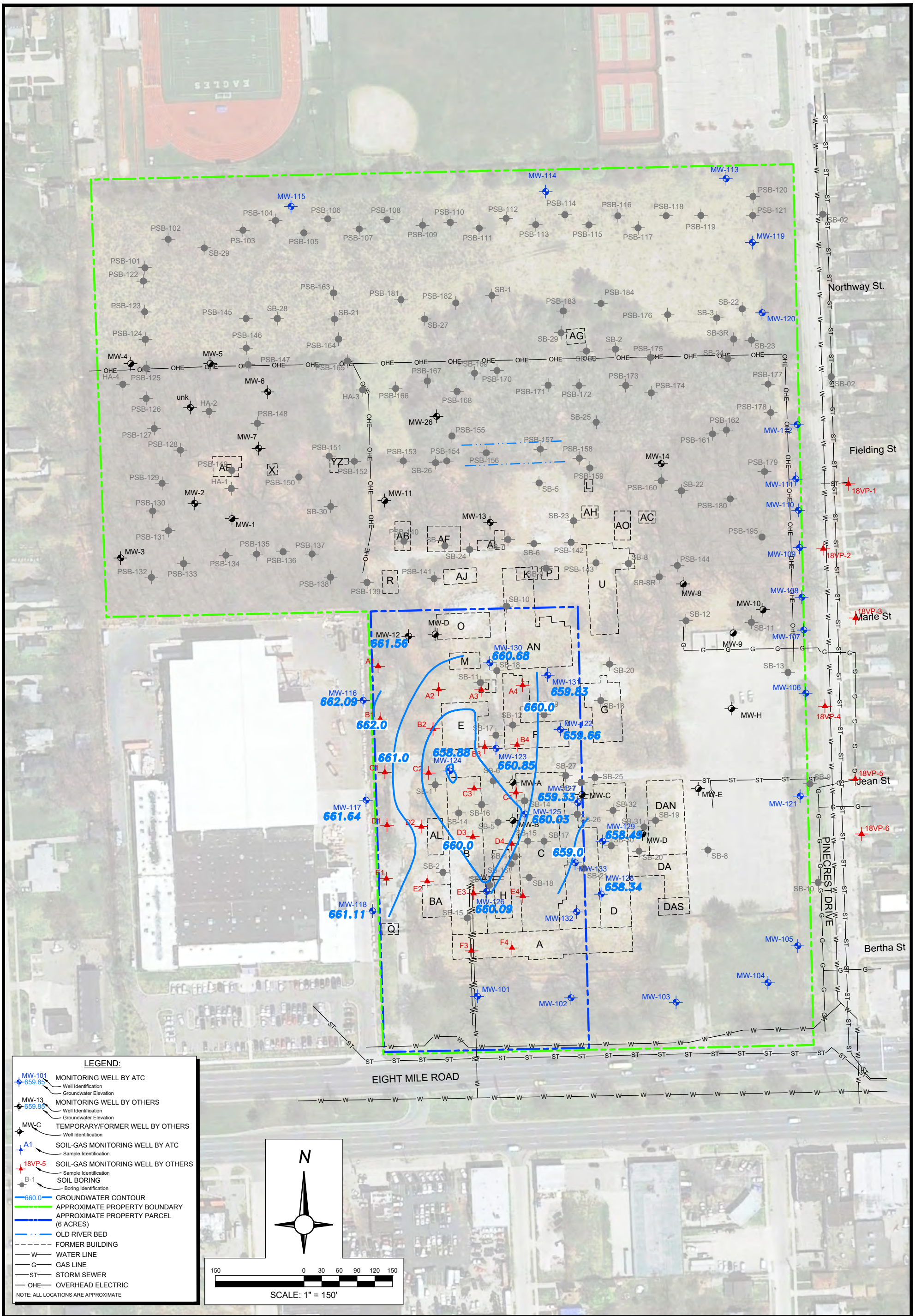

Figure: 11

Scale: AS SHOWN

Date: 03/2021

GROUNDWATER FLOW MAP JUNE 2020

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

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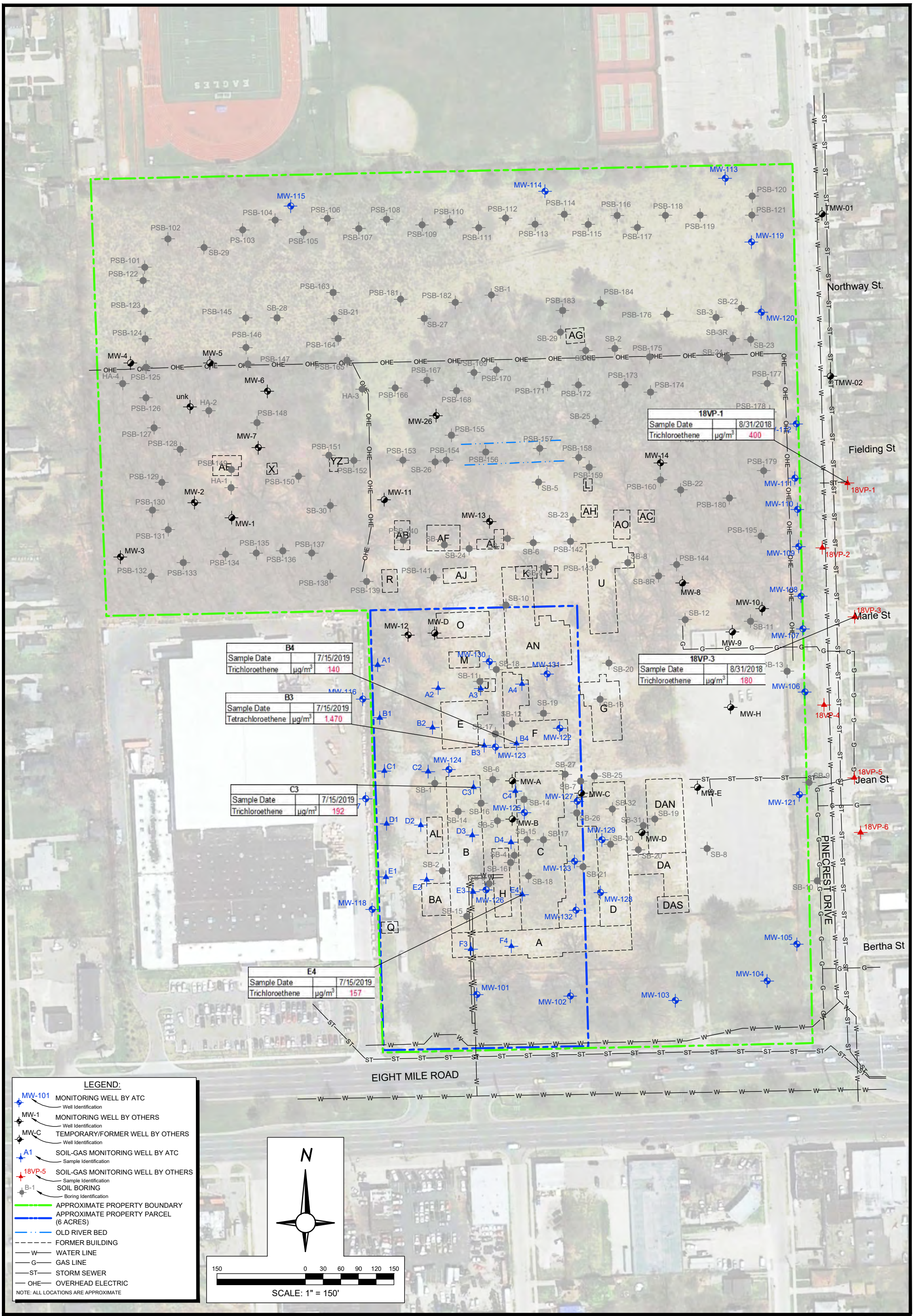


Figure: 12

Scale: AS SHOWN

Date: 03/2021

SOIL GAS EXCEEDANCES

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-AOC.DWG, FIG13

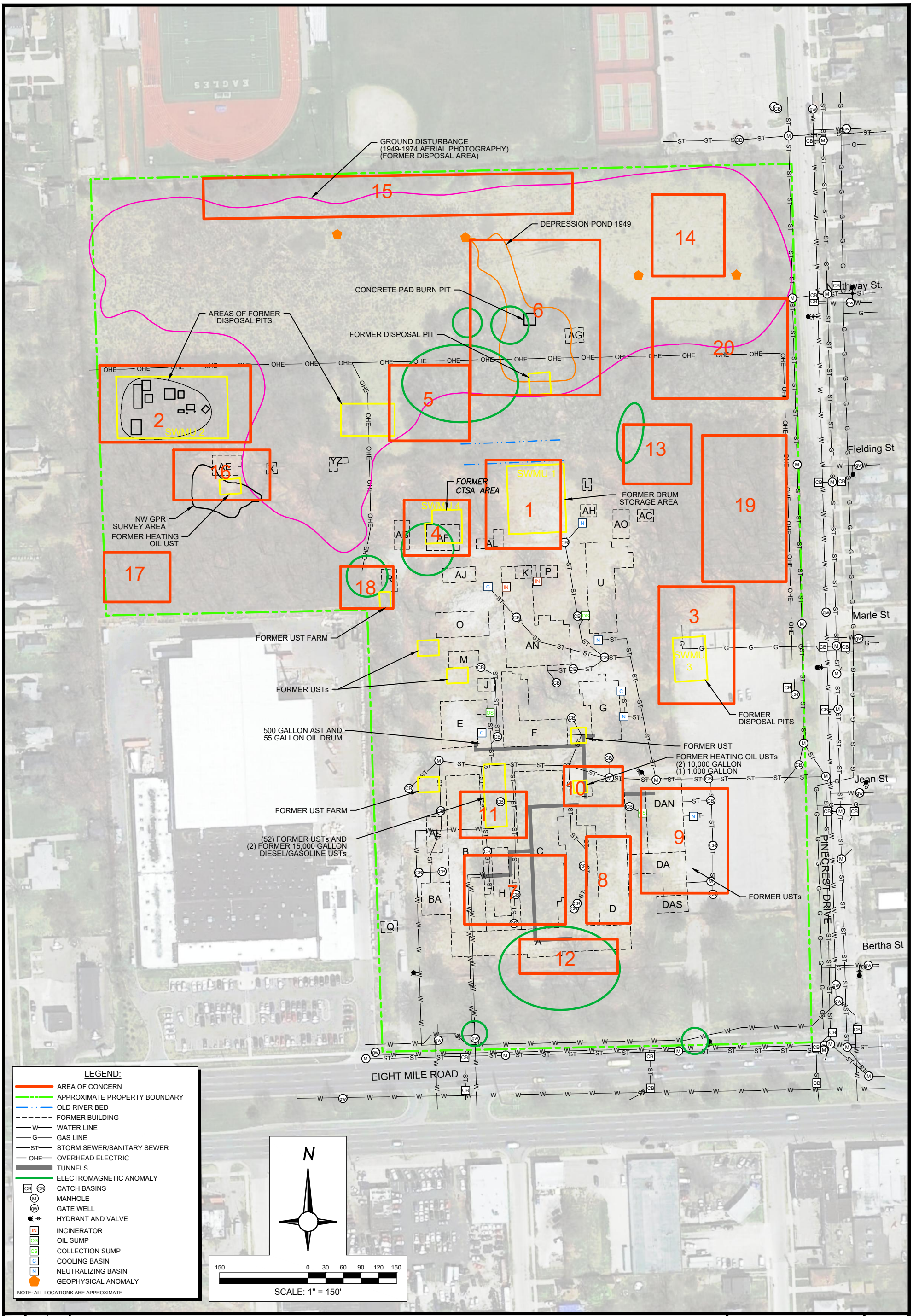


Figure: 13

Scale: AS SHOWN

Date: 09/2021

AREAS OF CONCERN

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: NPDAX19001

Drawing File: SEE UPPER LEFT

Drn. By: PH

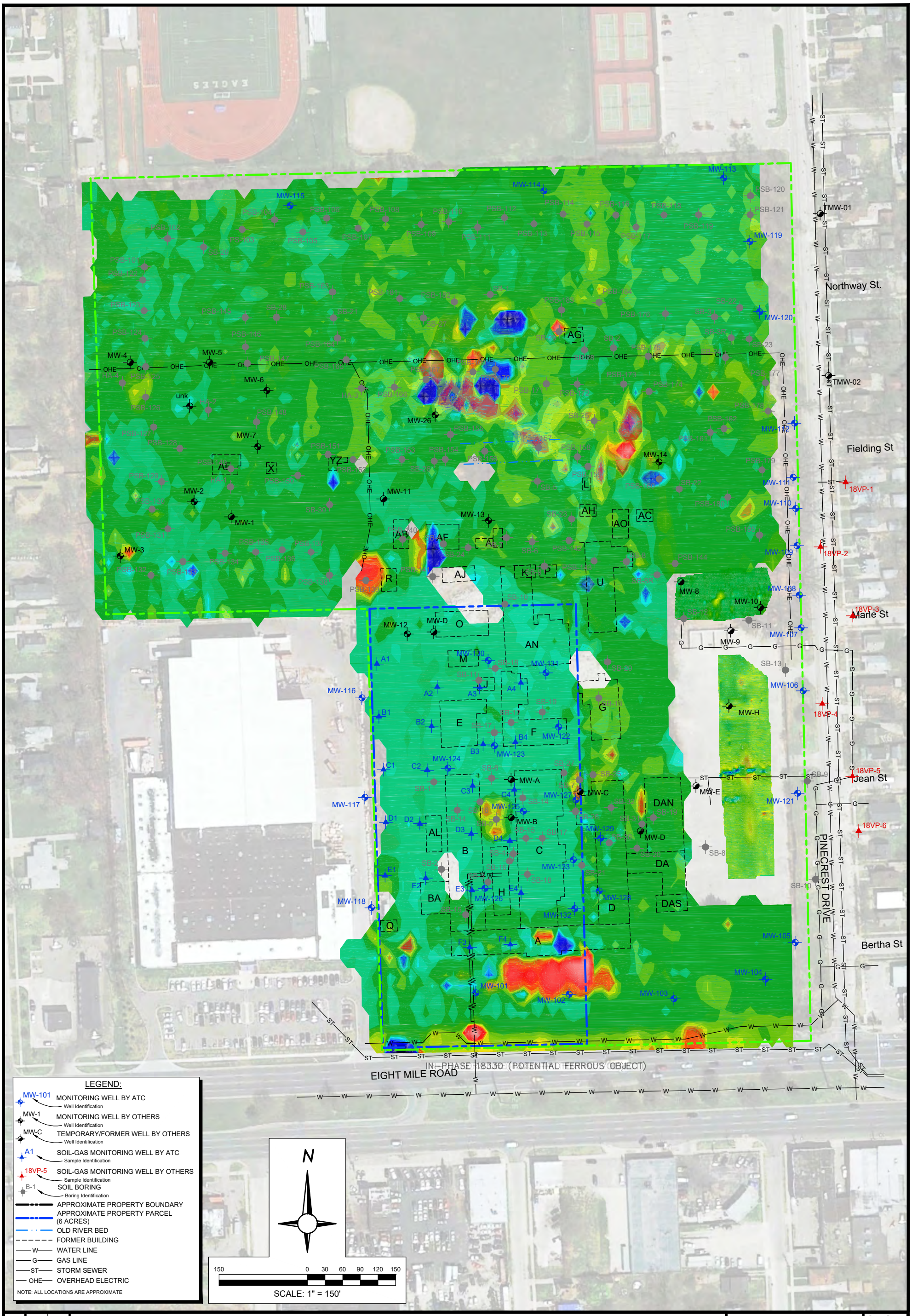
Ckd. By: RA

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-EMI.DWG, FIG14



LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

Figure: 14

Scale: AS SHOWN

Date: 03/2021

ELECTROMAGNETIC INDUCTION RESULTS

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS20195	Drn. By: PH
Drawing File: SEE UPPER LEFT	Ckd. By: RS
ATC	App'd By:
	Ckd. Date:

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-EMI.DWG, FIG15

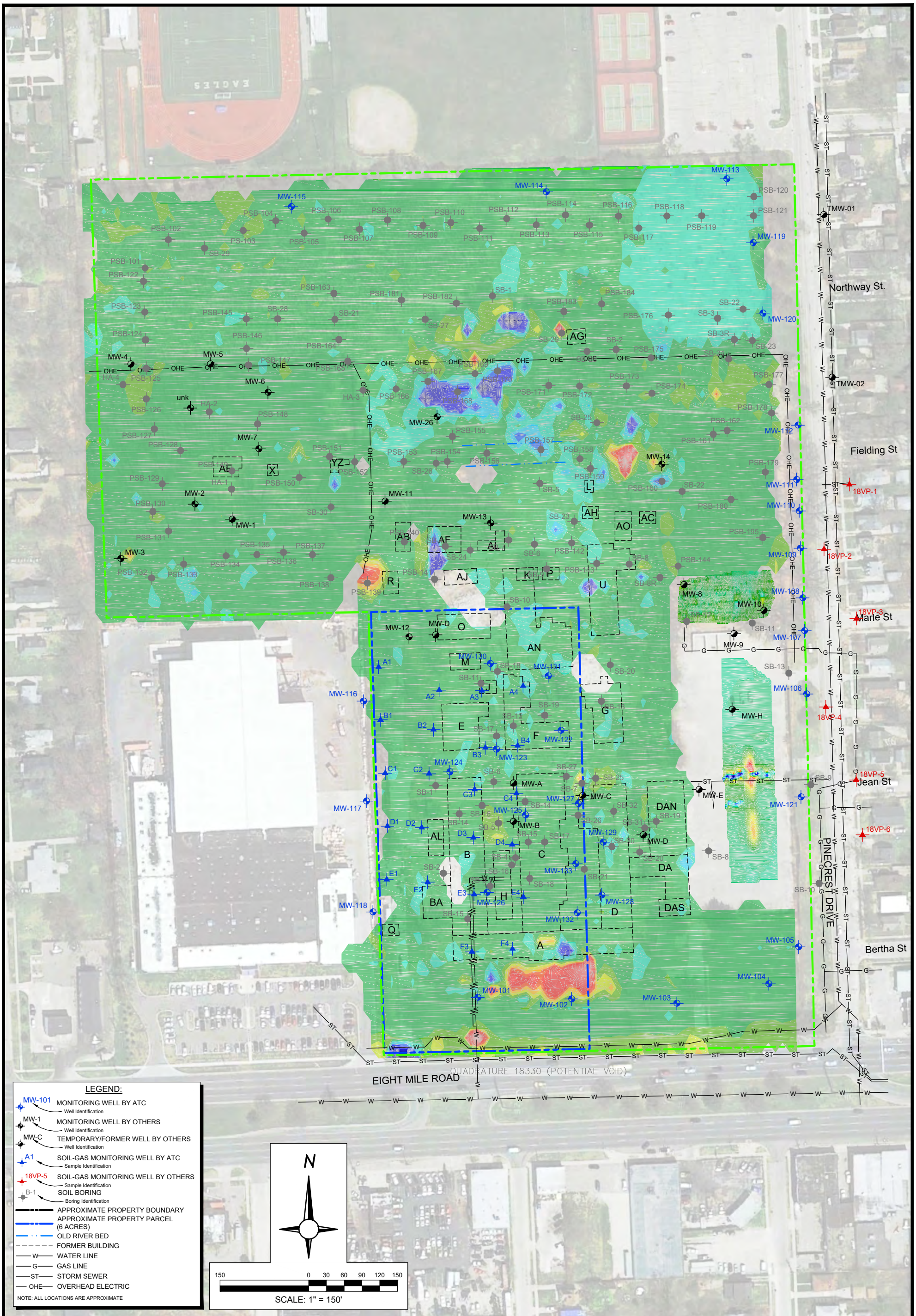


Figure: 15

Scale: AS SHOWN

Date: 03/2021

ELECTROMAGNETIC SURVEY - VOIDS SHALLOW(Quad18330)

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS20195

Drawing File: SEE UPPER LEFT

Drn. By: PH

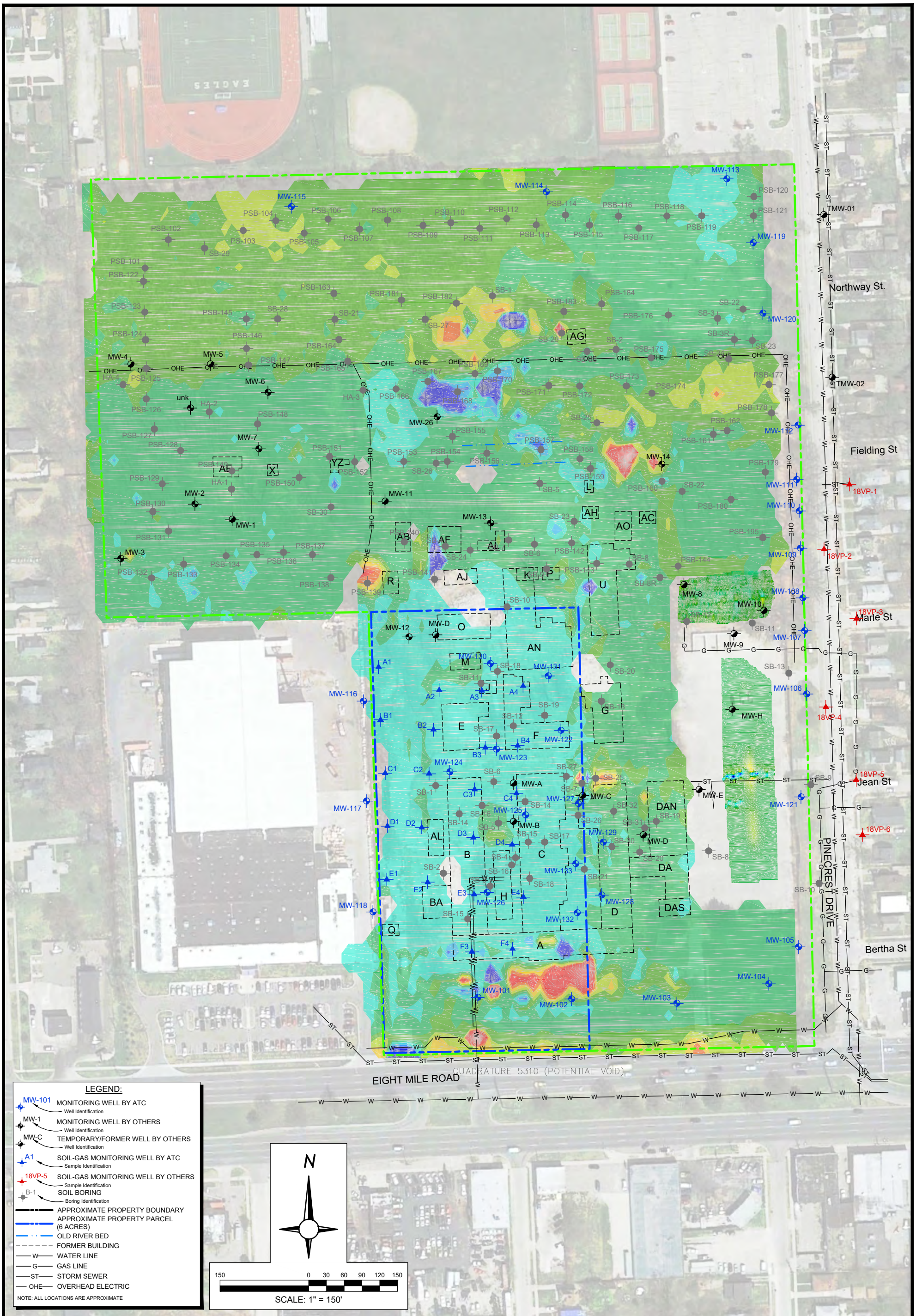
Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-EMI.DWG, FIG16



LEGEND:

- MW-101 — MONITORING WELL BY ATC (Well Identification)
- MW-1 — MONITORING WELL BY OTHERS (Well Identification)
- MW-C — TEMPORARY/FORMER WELL BY OTHERS (Well Identification)
- A1 — SOIL-GAS MONITORING WELL BY ATC (Sample Identification)
- 18VP-5 — SOIL-GAS MONITORING WELL BY OTHERS (Sample Identification)
- B-1 — SOIL BORING (Boring Identification)
- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE PROPERTY PARCEL (6 ACRES)
- OLD RIVER BED
- FORMER BUILDING
- W — WATER LINE
- G — GAS LINE
- ST — STORM SEWER
- OHE — OVERHEAD ELECTRIC

NOTE: ALL LOCATIONS ARE APPROXIMATE

Figure: 16

Scale: AS SHOWN

Date: 03/2021

ELECTROMAGNETIC SURVEY - VOIDS DEEPER(Quad5310)

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-PRO SOIL GAS VAPOR.DWG, FIG17

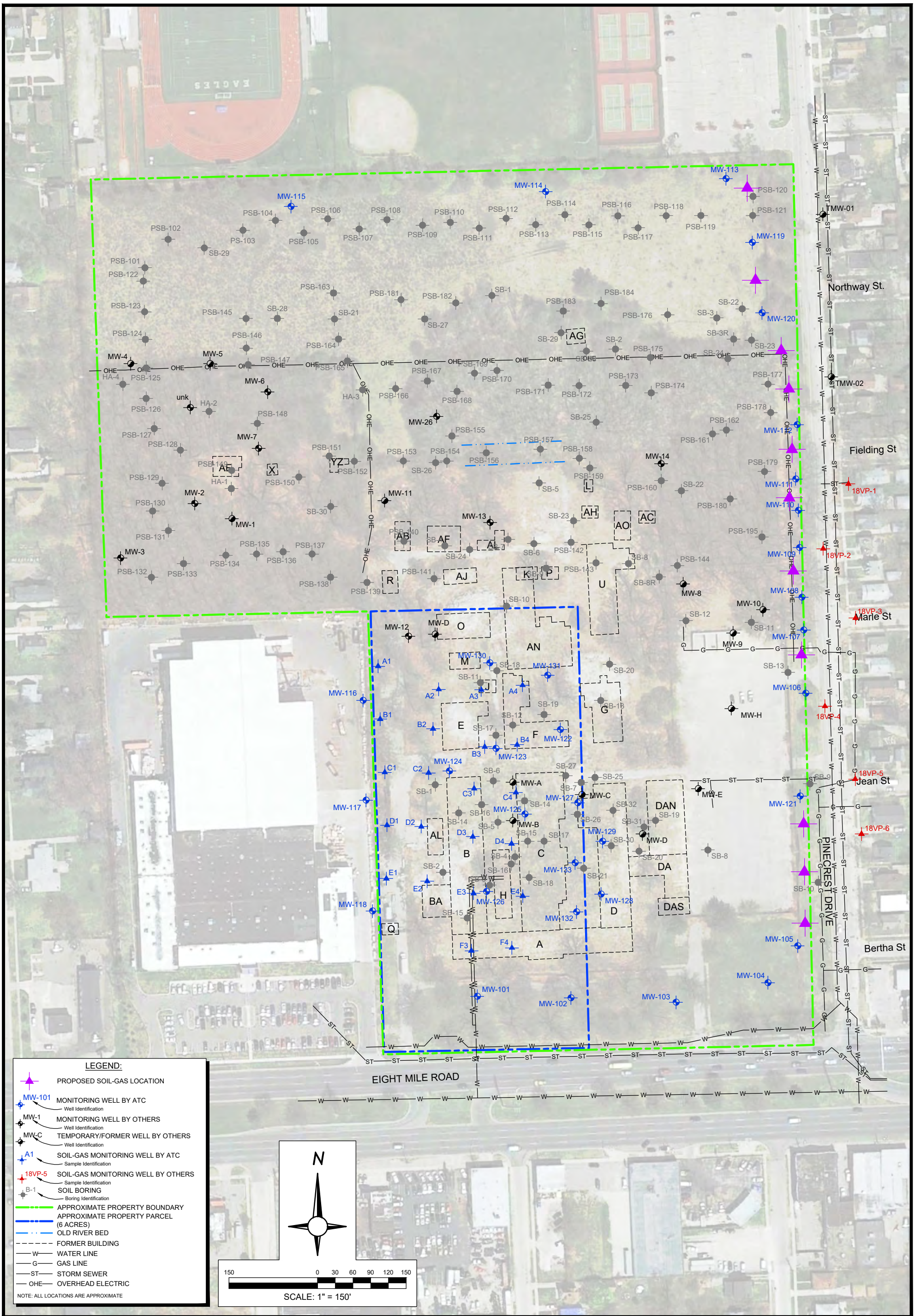


Figure: 17

Scale: AS SHOWN

Date: 03/2021

RFI WORK PLAN - PROPOSED SOIL GAS VAPOR POINTS

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095

Drawing File: SEE UPPER LEFT

Drn. By: PH

Ckd. By: RS

App'd By:

Ckd. Date:

ATC

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-CROSS SECTIONS.DWG, FIG18

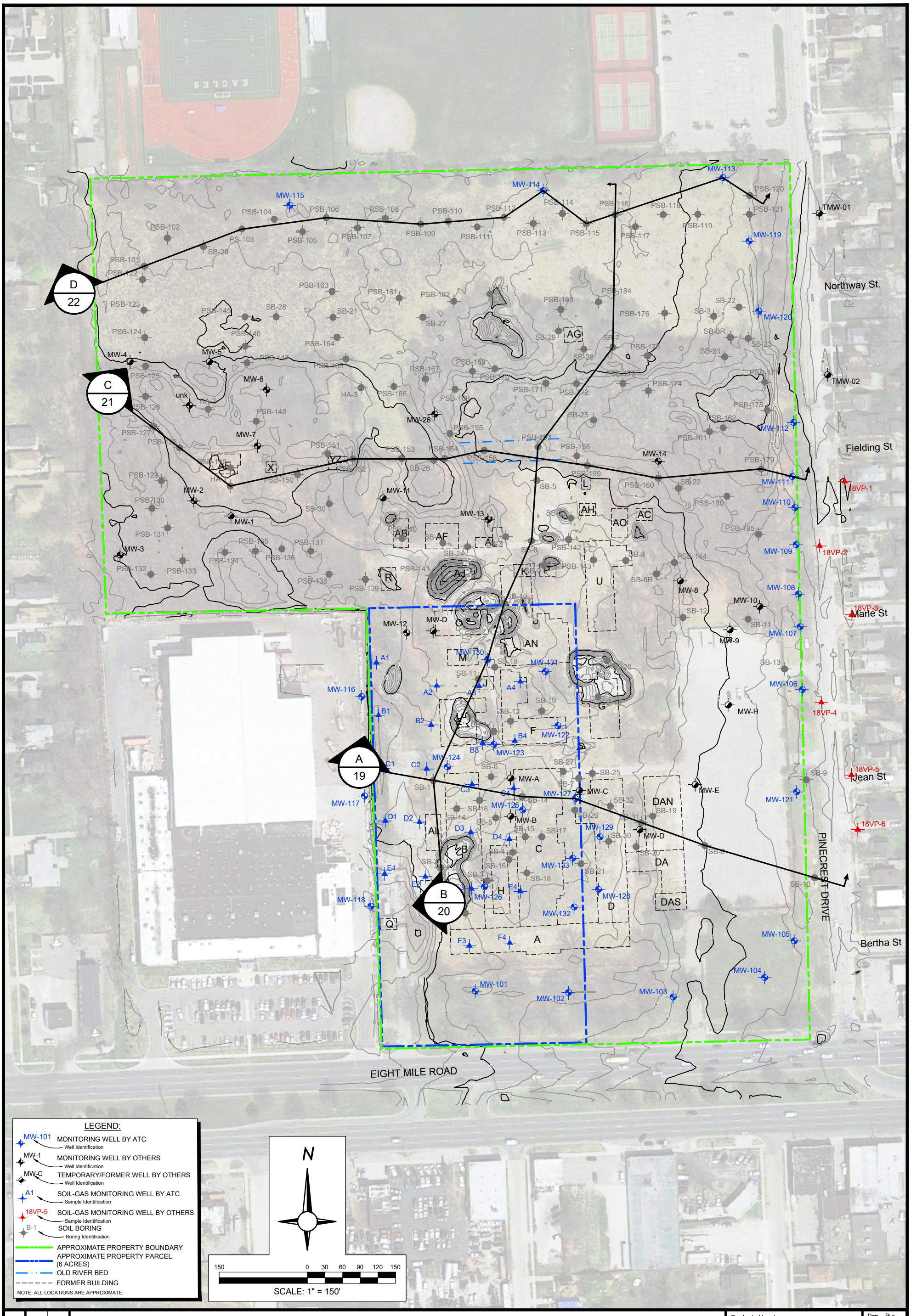


Figure: 18

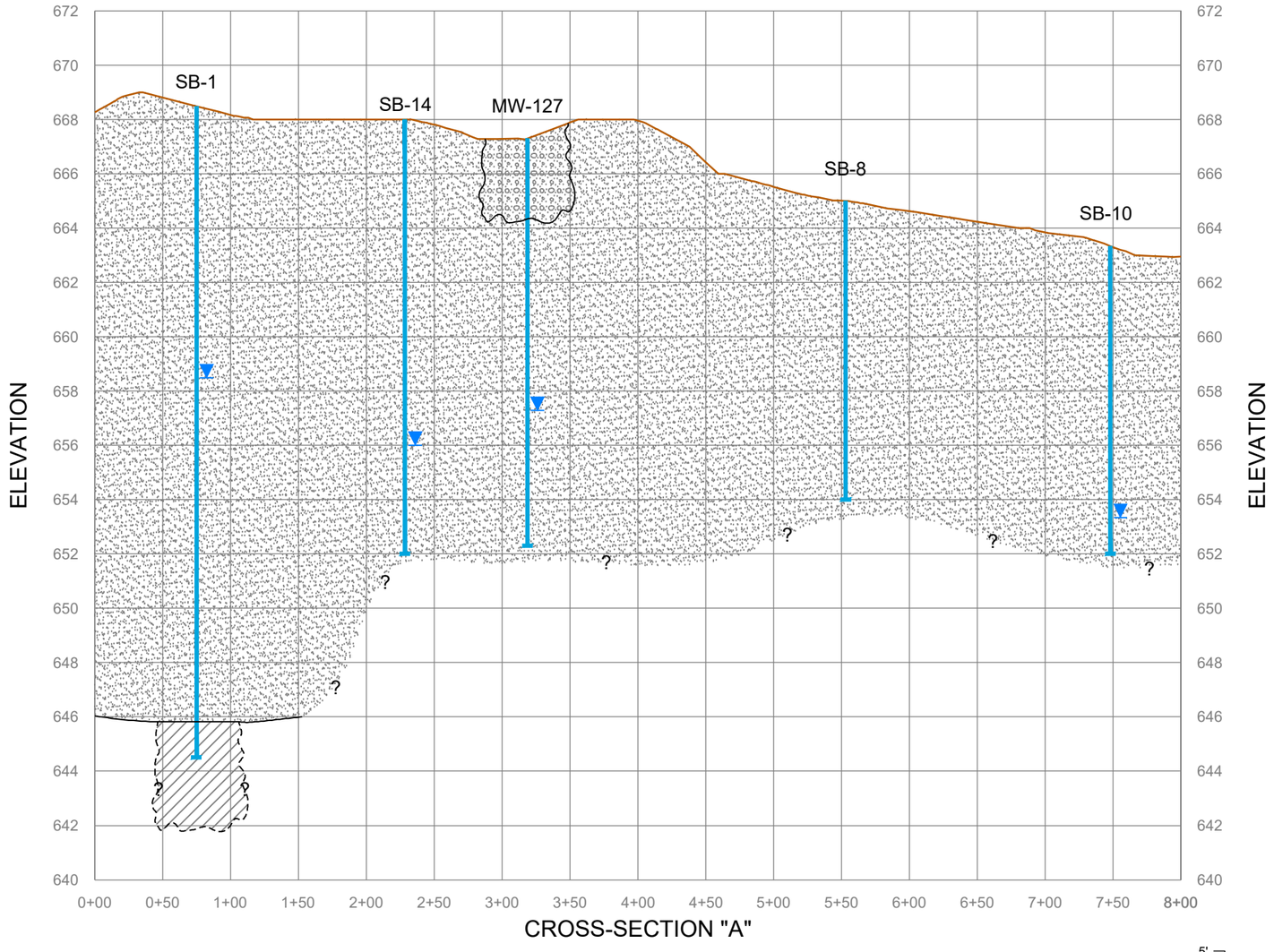
Scale: AS SHOWN

Date: 09/2021

CROSS SECTION LOCATION MAP

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: 188BS21095	Drn. By: PH
Drawing File: SEE UPPER LEFT	Ckd. By: RA
ATC	App'd By:
	Ckd. Date:



ELEVATION

5'
0
0
100'
SCALE

Horizontal Scale: 1" = 100'
Vertical Scale: 1" = 5'

LEGEND:

EXISTING TOPOGRAPHY

SAND

CLAY

FILL MATERIAL (GRAVELLY SAND WITH DEBRIS)

GROUNDWATER LEVEL

SB-1

End of Boring

NOTE:
ALL LOCATIONS ARE APPROXIMATE

Drn. By:	PH
Ckd. By:	RA
Appl'd By:	
Ckd. Date:	

Project Number: NPDAX19001

Drawing File: SEE UPPER LEFT

ATC

CROSS SECTION A

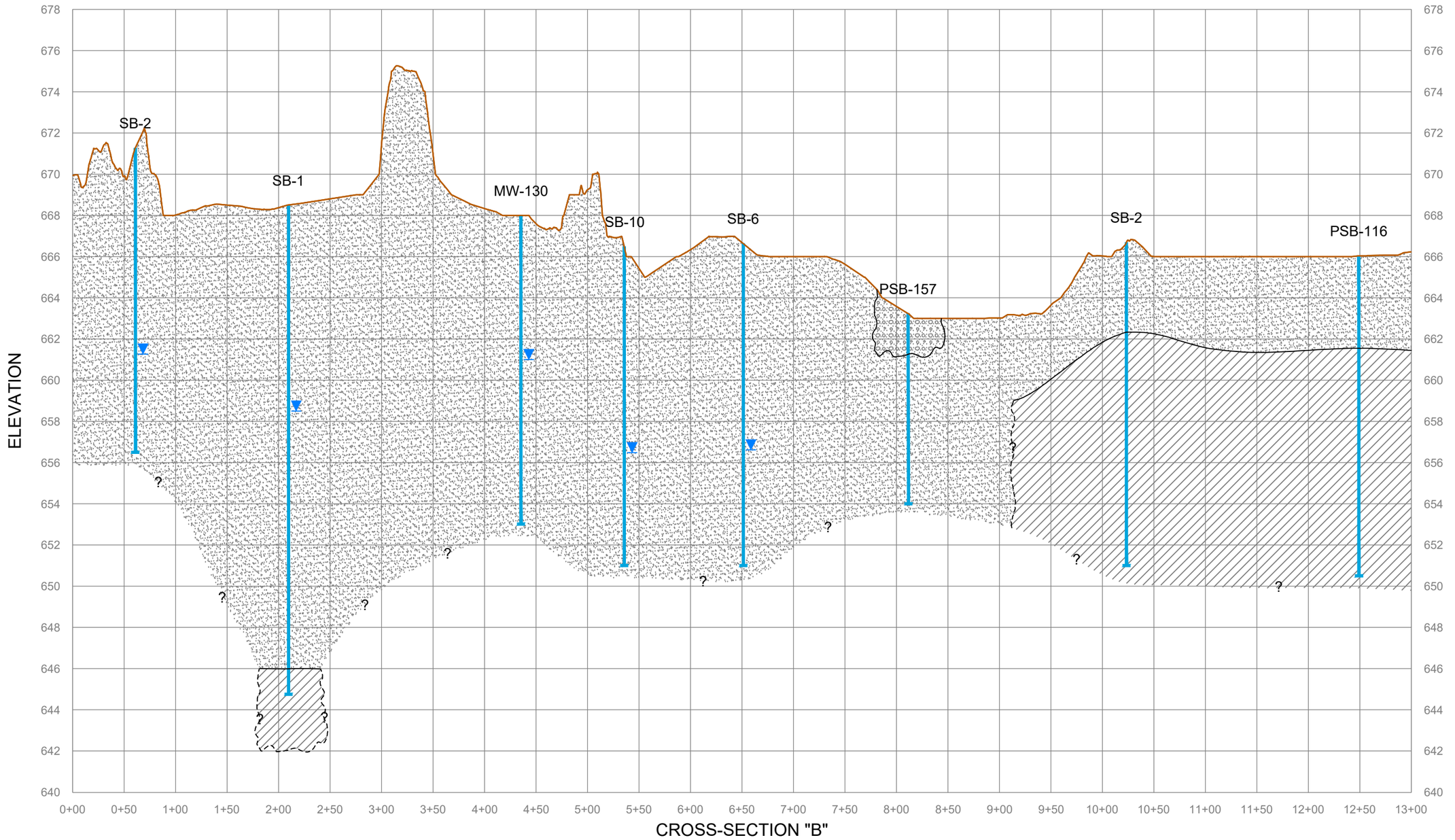
FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Date:

Scale: AS SHOWN

Figure: 19

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-CROSS SECTIONS.DWG, FIG19



CROSS-SECTION "B"

5'
0
0
100'
SCALE

Horizontal Scale: 1" = 100'
Vertical Scale: 1" = 5'

LEGEND:

EXISTING TOPOGRAPHY

GROUNDWATER LEVEL

SB-1

SAND

CLAY

FILL MATERIAL (GRAVELLY SAND WITH DEBRIS)

End of Boring

NOTE:
ALL LOCATIONS ARE APPROXIMATE

Drn. By:	PH
Ckd. By:	RA
Appr'd By:	
Ckd. Date:	

Project Number: NPDAX19001

Drawing File: SEE UPPER LEFT

ATC

CROSS SECTION B

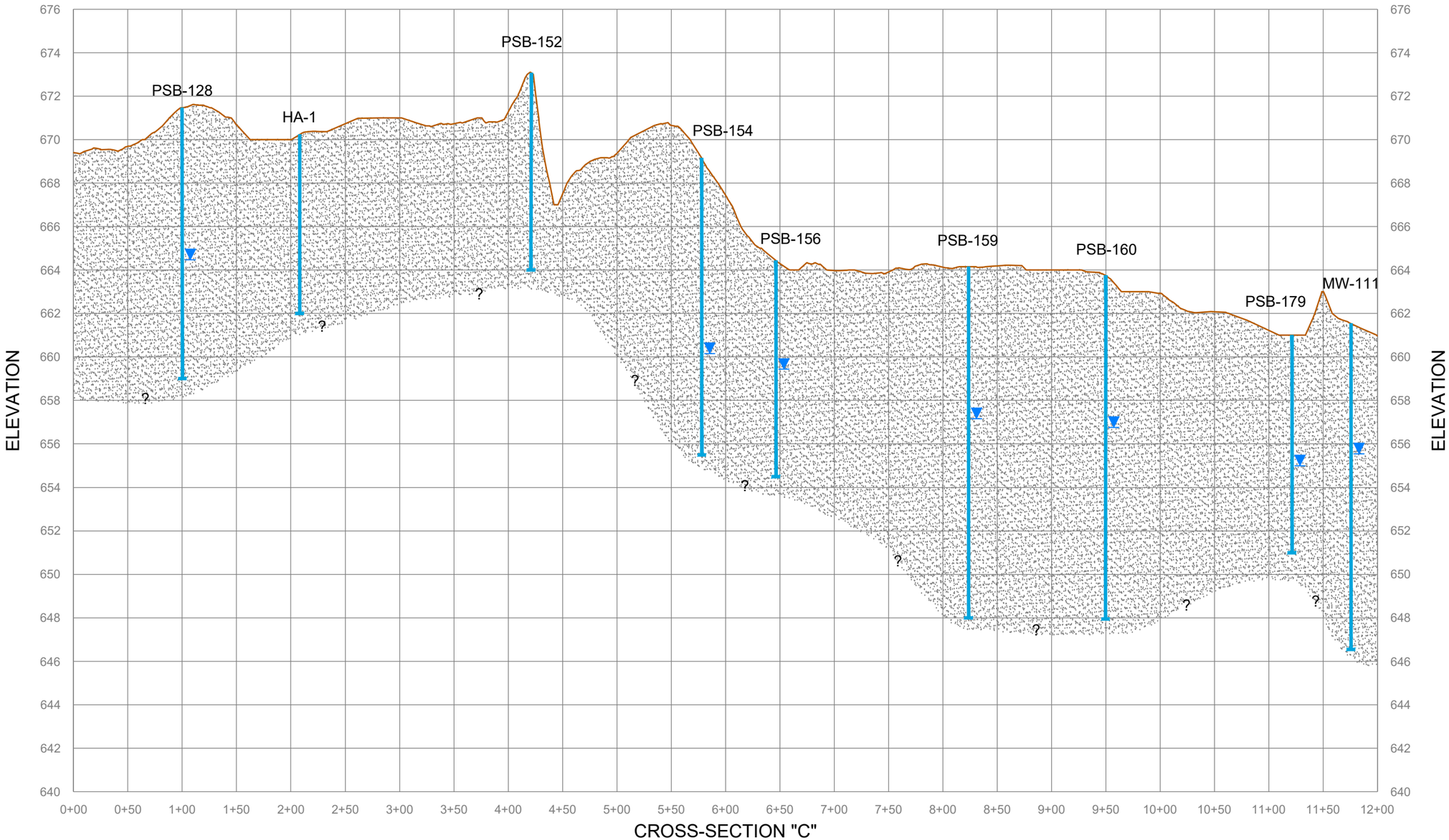
FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Date:

Scale: AS SHOWN

Figure: 20

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-CROSS SECTIONS.DWG, FIG20



5'
0
0 100'
SCALE

Horizontal Scale: 1" = 100'
Vertical Scale: 1" = 5'

LEGEND:

EXISTING TOPOGRAPHY

GROUNDWATER LEVEL

SB-1

SAND

CLAY

FILL MATERIAL (GRAVELLY SAND WITH DEBRIS)

End of Boring

NOTE:
ALL LOCATIONS ARE APPROXIMATE

Drn. By:	PH
Ckd. By:	RA
Appl'd By:	
Ckd. Date:	

Project Number: NPDAX19001

Drawing File: SEE UPPER LEFT

ATC

CROSS SECTION C

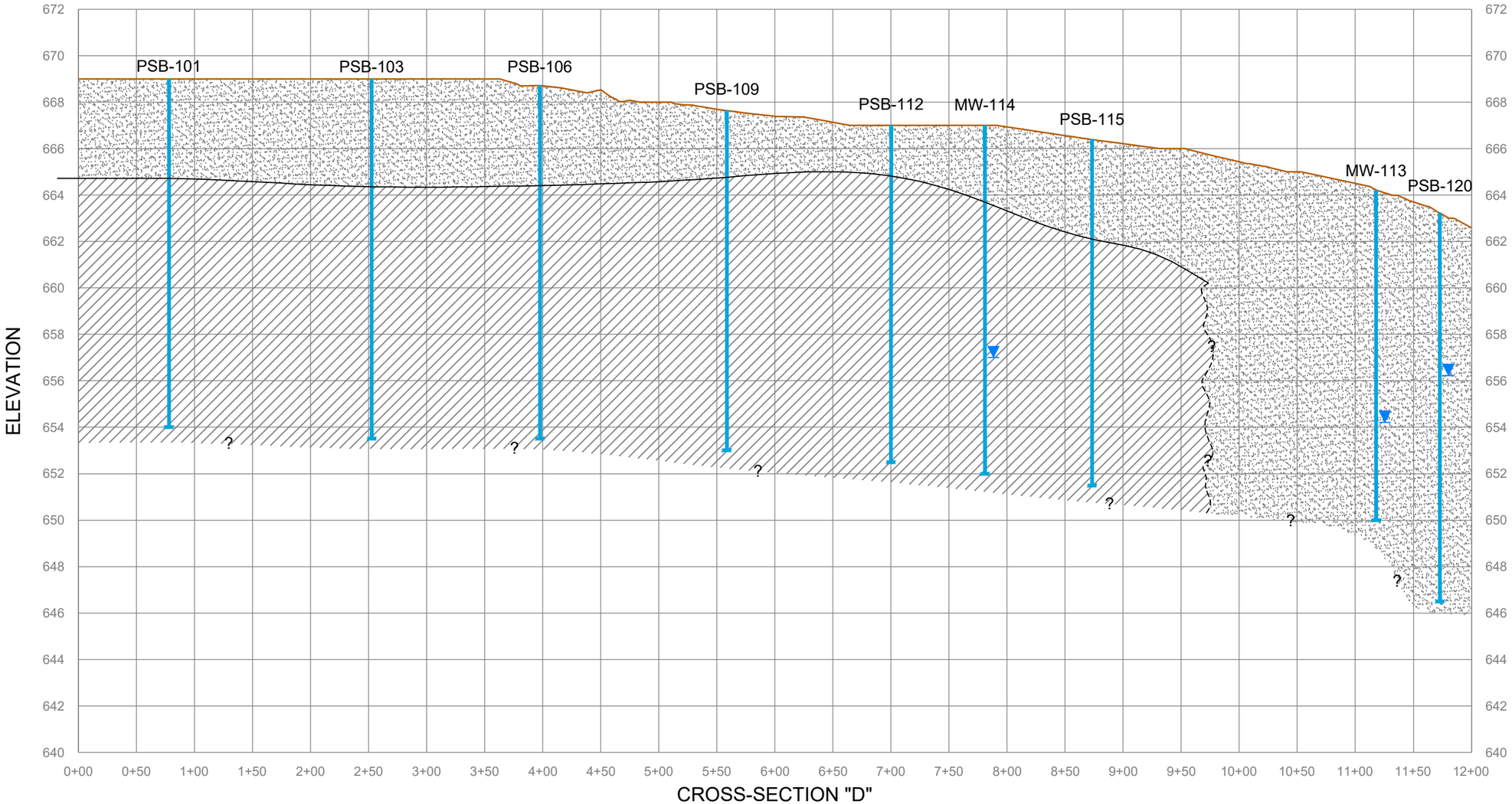
FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Date:

Scale: AS SHOWN

Figure: 21

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-CROSS SECTIONS.DWG, FIG21



CROSS-SECTION "D"

5'
0
0
100'
SCALE

Horizontal Scale: 1" = 100'
Vertical Scale: 1" = 5'

LEGEND:

EXISTING TOPOGRAPHY

SAND

CLAY

FILL MATERIAL (GRAVELLY SAND WITH DEBRIS)

GROUNDWATER LEVEL

SB-1

End of Boring

NOTE:
ALL LOCATIONS ARE APPROXIMATE

Dm. By: PH
Ckd. By: RA
App'd By:
Ckd. Date:

Project Number: NPDAX19001
Drawing File: SEE UPPER LEFT

ATC

CROSS SECTION D

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Date:
Scale: AS SHOWN
Figure: 22

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\188BS21095-CROSS SECTIONS.DWG, FIG22

H:\2021\OTHER OFFICES\MICHIGAN\CASH CLIENT-CENTRAL REGION\DETROIT AXLE SITE COMPLETION\NPDAX19001-HOSTORICAL TOPOS.DWG, FIG 23

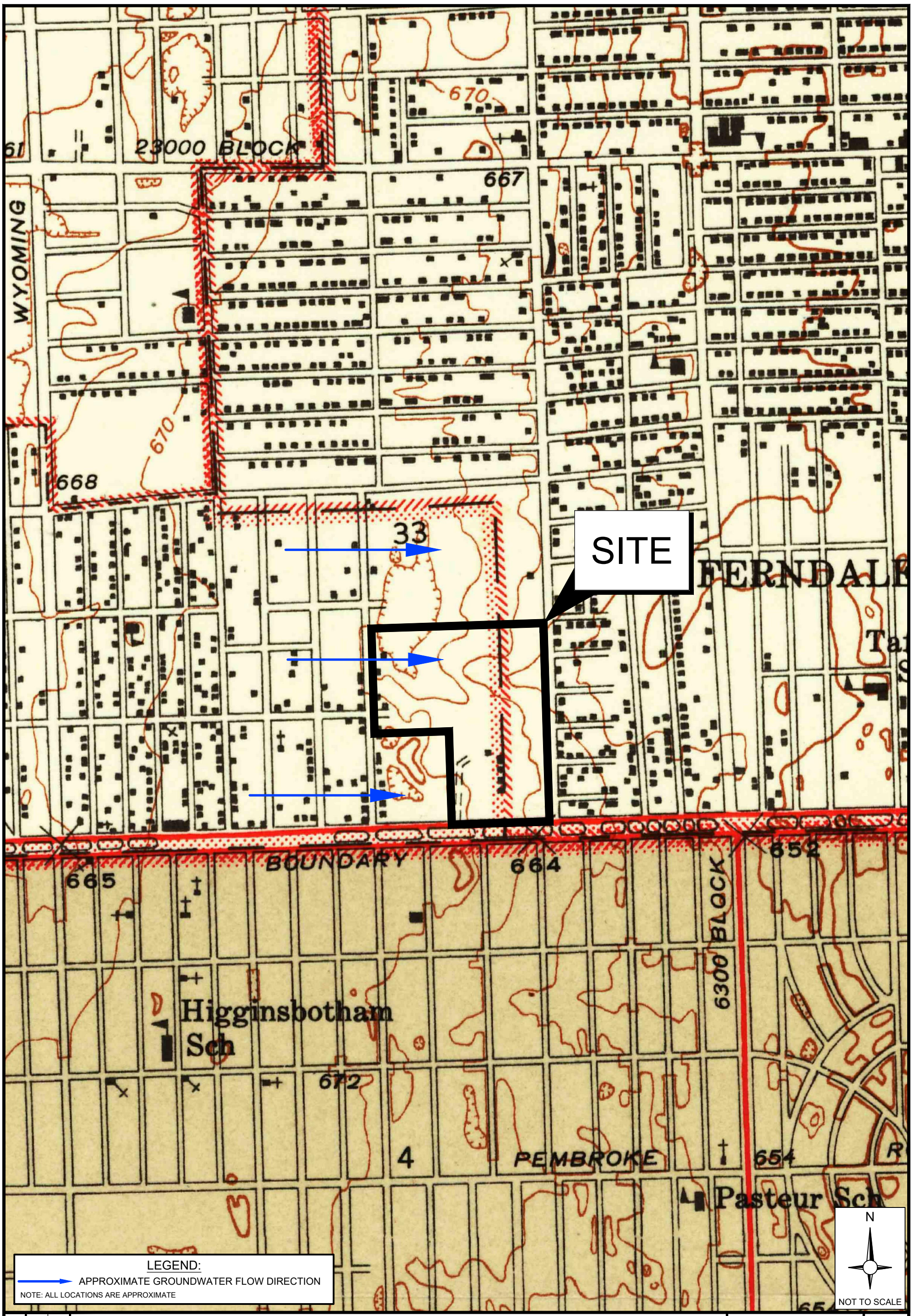


Figure: 23

Date: 09/17/2021

Scale: AS SHOWN

HISTORICAL 1939 TOPOGRAPHY

FORMER HAYES LEMMERZ SITE
WEST EIGHT MILE ROAD
FERNDALE, MICHIGAN

Project Number: NPDAX19001	Drn. By: PH
Drawing File: SEE LOWER LEFT	Ckd. By: RA
ATC	App'd By:
	Ckd. Date:

APPENDIX B

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

Table 1A- Summary of Soil Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Acetone	Acrylonitrile	tert-Amylmethyl ether	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone (MEK)	tert-Butyl Alcohol	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cyclohexane	1,2-Dibromo-3-chloropropane	Dibromochloromethane	1,2-Dibromoethane (EDB)	Dibromomethane
Cas Number			67-64-1	107-13-1	994-05-8	71-43-2	108-86-1	74-97-5	75-27-4	75-25-2	74-83-9	78-93-3	75-65-0	104-51-8	135-98-8	98-06-6	75-15-0	56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	108-94-1	13440-24-9	124-48-1	540-49-8	74-95-3
Residential Drinking Water Protection Criteria			**15,000**	**100; 52**	--	**100**	**550**	--	**1,600**	**1,600**	**200**	**2.60E+05**	**78,000**	**1,600**	**1,600**	**1,600**	**16,000**	**100**	**2,000**	**8,600**	**1,600**	**5,200**	**5.20E+06**	--	**1,600**	--	**1,600**
Nonresidential Drinking Water Protection Criteria			42,000	200	--	100	1,500	--	1,600	1,600	580	7.60E+05	2.20E+05	4,600	4,600	4,600	46,000	100	2,000	34,000	1,600	22,000	1.50E+07	--	1,600	--	4,600
Groundwater Surface Water Interface Protection Criteria			34,000	100; 40	--	4,000	--	--	ID	ID	100	5.40E+07	NA	ID	ID	ID	ID	760	500	22,000	7,000	ID	NA	--	ID	--	NA
Direct Contact Criteria			*4.30E+06*	*16,000*	*2.90E+07*	*180,000*	*540,000*	*110,000*	*110,000*	*820,000*	*320,000*	*120,000,000*	*3.9E+8 (C)*	*8.00E+06*	*8.00E+06*	*2.50E+06*	*7,200,000*	*96,000*	*1.4E+7 (C)*	*2,600,000*	*1,200,000*	*1,600,000*	*1,000,000,000*	--	*110,000*	--	*2,500,000*
Residential Volatilization to Indoor Air Pathway (VIAP)			**2.60E+05**	**1.2**	**34**	**1.7**	**160**	--	**0.61**	**45**	**0.90**	**31,000**	**3,200**	**550**	**3,800**	**0.64**	**52**	**0.31**	**82**	**330**	**0.26**	**6.9**	**320**	--	**0.40**	--	**3.5**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			3.10E+06	34	600	47	2,800	--	16	1,300	16	370,000	57,000	9,800	66,000	11	920	8.7	1,400	5,800	7.4	120	5,600	--	27	--	62
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in micrograms per kilogram (ug/kg)**																								
MW-104	(14-15')	3/23/2020	<1,900	<190	<474	<94.9	<190	<47.4	<190	<190	<379	<1,420	<4,740	<94.9	<94.9	<94.9	<474	<94.9	<94.9	<474	<94.9	<474	<949	<94.9	<190	<94.9	<474
MW-105	(12-13')	3/23/2020	<923	<92.3	<231	<46.1	<92.3	<23.1	<92.3	<92.3	<185	<692	<2,310	<46.1	<46.1	<46.1	<231	<46.1	<46.1	<231	<46.1	<231	<461	<46.1	<92.3	<46.1	<231
MW-106	(5-6')	3/25/2020	<1,040	<104	<260	<52.1	<104	<26.0	<104	<104	<208	<781	<2,600	<52.1	<52.1	<52.1	<260	<52.1	<52.1	<260	<52.1	<260	<521	<52.1	<104	<52.1	<260
MW-107	(6-7')	3/25/2020	<1,290	<129	<322	<64.5	<129	<32.2	<129	<129	<258	<967	<3,220	<64.5	<64.5	<64.5	<322	<64.5	<64.5	<322	<64.5	<322	<645	<64.5	<129	<64.5	<322
MW-108	(4-5')	3/25/2020	<1,600	<160	<399	<79.8	<160	<39.9	<160	<160	<319	<1,200	<3,990	<79.8	<79.8	<79.8	<399	<79.8	<79.8	<399	<79.8	<399	<798	<79.8	<160	<79.8	<399
MW-109	(4-5')	3/25/2020	<1,020	<102	<255	<51.0	<102	<25.5	<102	<102	<204	<764	<2,550	<51.0	<51.0	<51.0	<255	<51.0	<51.0	<255	<51.0	<255	<510	<51.0	<102	<51.0	<255
MW-110	(4-5')	3/25/2020	<1,110	<111	<276	<55.3	<111	<27.6	<111	<111	<221	<829	<2,760	<55.3	<55.3	<55.3	<276	<55.3	<55.3	<276	<55.3	<276	<553	<55.3	<111	<55.3	<276
MW-113	(2-3')	3/23/2020	<1,210	<121	<303	<60.6	<121	<30.3	<121	<121	<242	<909	<3,030	<60.6	<60.6	<60.6	<303	<60.6	<60.6	<303	<60.6	<303	<606	<60.6	<121	<60.6	<303
MW-113	(7-8')	3/24/2020	<1,320	<132	<329	<65.8	<132	<32.9	<132	<132	<263	<987	<3,290	<65.8	<65.8	<65.8	<329	<65.8	<65.8	<329	<65.8	<329	<658	<65.8	<132	<65.8	<329
MW-114	(3-4')	3/24/2020	<1,870	<187	<468	<93.7	<187	<46.8	<187	<187	<375	<1,410	<4,680	<93.7	<93.7	<93.7	<468	<93.7	<93.7	<468	<93.7	<468	<937	<93.7	<187	<93.7	<468
MW-114	(8-9')	3/24/2020	<2,030	<203	<507	<101	<203	<50.7	<203	<203	<406	<1,520	<5,070	<101	<101	<101	<507	<101	<101	<507	<101	<507	<1,010	<101	<203	<101	<507
MW-115	(2-3')	3/24/2020	<2,390	<239	<598	<120	<239	<59.8	<239	<239	<478	<1,790	<5,980	<120	<120	<120	<598	<120	<120	<598	<120	<598	<1,200	<120	<239	<120	<598
MW-115	(7-8')	3/24/2020	<1,490	<149	<372	<74.4	<149	<37.2	<149	<149	<297	<1,120	<3,720	<74.4	<74.4	<74.4	<372	<74.4	<74.4	<372	<74.4	<372	<744	<74.4	<149	<74.4	<372
MW-116	(7-8')	3/30/2020	<1,330	<133	<333	<66.5	<133	<33.3	<133	<133	<266	<998	<3,330	<66.5	<66.5	<66.5	<333	<66.5	<66.5	<333	<66.5	<333	<665	<66.5	<133	<66.5	<333
MW-117	(6-7')	3/30/2020	<2,380	<238	<595	<119	<238	<59.5	<238	<238	<476	<1,790	<5,950	<119	<119	<119	<595	<119	<119	<595	<119	<595	<1,190	<119	<238	<119	<595
MW-118	(10-11')	3/30/2020	<1,730	<173	<433	<86.6	<173	<43.3	<173	<173	<347	<1,300	<4,330	<86.6	<86.6	<86.6	<433	<86.6	<86.6	<433	<86.6	<433	<866	<86.6	<173	<86.6	<433
MW-119	(6-7')	4/21/2020	<1,310	<131	<327	<65.4	<131	<32.7	<131	<131	<262	<981	<3,270	<65.4	<65.4	<65.4	<327	<65.4	<65.4	<327	<65.4	<327	<654	<65.4	<131	<65.4	<327
MW-120	(4-5')	4/21/2020	<1,470	<147	<369	<73.7	<147	<36.9	<147	<147	<295	<1,110	<3,690	<73.7	<73.7	<73.7	<369	<73.7	<73.7	<369	<73.7	<369	<737	<73.7	<147	<73.7	<369
MW-121	(9-10')	4/21/2020	<1,370	<137	<343	<68.5	<137	<34.3	<137	<137	<274	<1,030	<3,430	<68.5	<68.5	<68.5	<343	<68.5	<68.5	<343	<68.5	<343	<685	<68.5	<137	<68.5	<343
MW-122	(4-5')	6/15/2020	<1050	<105	<264	<52.7	<105	<26.4	<105	<105	<211	<791	<2640	<52.7	<52.7	<52.7	<264	<52.7	<52.7	<264	<52.7	<264	<527	<52.7	<105	<52.7	<264
MW-123	(4-5')	6/15/2020	<957	<95.7	<239	<47.9	<95.7	<23.9	<95.7	<95.7	<191	<718	<2390	<47.9	<47.9	<47.9	<239	<47.9	<47.9	<239	<47.9	<239	<479	<47.9	<95.7	<47.9	<239
MW-124	(4-5')	6/15/2020	<986	<98.6	<247	<49.3	<98.6	<24.7	<98.6	<98.6	<197	<740	<2470	<49.3	<49.3	<49.3	<247	<49.3	<49.3	<247	<49.3	<247	<493	<49.3	<98.6	<49.3	<247
MW-125	(4-5')	6/16/2020	<1050	<105	<264	<52.7	<105	<26.4	<105	<105	<211	<791	<2640	<52.7	<52.7	<52.7	<264	<52.7	<52.7	<264	<52.7	<264	<527	<52.7	<105	<52.7	<264
MW-126	(4-5')	6/15/2020	<950	<95.0	<237	<47.5	<95.0	<23.7	<95.0	<95.0	<190	<712	<2370	<47.5	<47.5	<47.5	<237	<47.5	<47.5	<237	<47.5	<237	<475	<47.5	<95.0	<47.5	<237
MW-126	(7.5-8.5')	6/15/2020	<995	<99.5	<249	<49.7	<99.5	<24.9	<99.5	<99.5	<199	<746	<2490	<49.7	<49.7	<49.7	<249	<49.7	<49.7	<249	<49.7	<249	<497	<49.7	<99.5	<49.7	<249
MW-127	(6-7')	6/15/2020	<1220	<122	<306	<61.2	<122	<30.6	<122	<122	<245	<918	<3060	<61.2	<61.2	<61.2	<306	<61.2	<61.2	<306	<61.2	<306	<612	<61.2	<122	<61.2	<306
MW-127	(10-11')	6/15/2020	<1070	<107	<267	<53.5	<107	<26.7	<107	<107	<214	<802	<2670	<53.5	<53.5	<53.5	<267	<53.5	<53.5	<267	<53.5	<267	<535	<53.5	<107	<53.5	<267
MW-128	(4-5')	6/15/2020	<1310	<131	<327	<65.5	<131	<32.7	<131	<131	<262	<982	<3270	<65.5	<65.5	<65.5	<327	<65.5	<65.5	<327	<65.5	<327	<655	<65.5	<131	<65.5	<327
MW-128	(8-9')	6/15/2020	<1270	<127	<317	<63.5	<127	<31.7	<127	<127	<254	<952	<3170	<63.5	<63.5	<63.5	<317	<63.5	<63.5	<317	<63.5	<317	<635	<63.5	<127	<63.5	<317
MW-129	(3-4')	6/15/2020	<1020	<102	<255	<51.0	<102	<25.5	<102	<102	<204	<766	<2550	<51.0	<51.0	<51.0	<255	<51.0	<51.0	<255	<51.0	<255	<510	<51.0	<102	<51.0	<255
MW-130	(4-5')	6/15/2020	<991	<99.1	<248	<49.6	<99.1	<24.8	<99.1	<99.1	<198	<743	<2480	<49.6	<49.6	<49.6	<248	<49.6	<49.6	<248	<49.6	<248	<496	<49.6	<99.1	<49.6	<248
MW-131	(2-3')	6/15/2020	<1480	<148	<371	<74.2	<148	<37.1	<148	<148	<297	<1110	<3710	<74.2	<74.2	<74.2	<371	<74.2	<74.2	<371	<74.2	<371	<742	<74.2	<148	<74.2	<371
MW-132	(5.5-6.5')	8/12/2020	<902	<90.2	<225	<45.1	<90.2	<22.5	<90.2	<90.2	<180	<676	<2250	<45.1	<45.1	<45.1	<225	<45.1	<45.1	<225	<45.1	<225	<451	<45.1	<90.2	<45.1	<225
MW-133	(3-4')	8/12/2020	<802	<80.2	<201	<40.1	<80.2	<20.1	<80.2	<80.2	<160	<602	<2010	<40.1	<40.1	<40.1	<201	<40.1	<40.1	<201	<40.1	<201	<401	<40.1	<80.2	<40.1	<201
MW-133	(10-11')	8/12/2020	<921	<92.1	<230	<46.0	<92.1	<23.0	<92.1	<92.1	<184	<690	<2300	<46.0	<46.0	<46.0	<230	<46.0	<46.0	<230	<46.0	<230	<460	<46.0	<92.1	<46.0	<230

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Volatile organic compounds (VOCs) were analyzed by EPA Method 8260B.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1A- Summary of Soil Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	trans-1,4-Dichloro-2-butene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Diethyl ether (Ethyl ether)	Diisopropyl ether	Ethylbenzene	Ethyl-tert-butyl ether	Hexachloroethane	2-Hexanone	Iodomethane	Isopropylbenzene (Cumene)	p-Isopropyltoluene	Methylene Chloride	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)
Cas Number			95-50-1	541-73-1	106-46-7	110-57-6	75-71-8	75-34-3	107-06-2	75-35-4	156-59-2	156-60-5	78-87-5	638-04-0	918-84-3	60-29-7	108-20-3	100-41-4	637-92-3	118-74-1	591-78-6	74-88-4	98-82-8	99-87-6	75-09-2	91-57-6	108-10-1
Residential Drinking Water Protection Criteria			**14,000**	**170**	**1700**	--	**95,000**	**18,000**	**100**	**140**	**1,400**	**2,000**	**100**	--	--	**200**	--	**1,500**	**980**	**1,800**	**20,000**	--	**91,000**	--	**100**	**57,000**	**36,000**
Nonresidential Drinking Water Protection Criteria			14,000	480	1700	--	2.70E+05	50,000	100	140	1,400	2,000	100	--	--	200	--	1,500	980	1,800	58,000	--	260,000	--	100	1.70E+05	1.00E+05
Groundwater Surface Water Interface Protection Criteria			280	680	360	--	ID	15,000	7,200	2,600	12,000	30,000 (X)	4,600 (X)	--	--	ID	--	360	ID	350	ID	--	3,200	--	30,000 (X)	4,200	ID
Direct Contact Criteria			*6.3E+7 (C)*	*6.6E+5 (C)*	*1.90E+06*	--	*52,000,000*	*27,000,000*	*4.20E+05*	*200,000*	*2,500,000*	*3,800,000*	*6.6E+5 (C)*	--	--	*110,000,000*	--	*2.2E+7 (C)*	*2.20E+07*	*2.30E+05*	*3.20E+07*	--	*8.0E+7 (C)*	--	*5.8E+6 (C)*	*2.60E+07*	*5.60E+07*
Residential Volatilization to Indoor Air Pathway (VIAP)			**1,500**	**10**	**23**	--	**12**	**2.6**	**0.82**	**12**	**2.1**	**12**	**2.1**	--	--	**350**	**190**	**12**	--	**3.2**	**210**	--	**3.8**	--	**130**	**1,700**	**3,300**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			26,000	180	660	--	220	74	23	220	37	210	37	--	--	6,200	2,300	340	--	92	3,800	--	110	--	2,300	30,000	40,000
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in micrograms per kilogram (ug/kg)**																								
MW-104	(14-15')	3/23/2020	<190	<190	<190	<190	<474	<94.9	<94.9	<94.9	<94.9	<94.9	<94.9	<190	<190	<379	<474	<94.9	<474	<569	<4,740	<190	<474	<47.4	<190	<626	<4,740
MW-105	(12-13')	3/23/2020	<92.3	<92.3	<92.3	<92.3	<231	<46.1	<46.1	<46.1	<46.1	<46.1	<46.1	<92.3	<92.3	<185	<231	<46.1	<231	<277	<2,310	<92.3	<231	<23.1	<92.3	<304	<2,310
MW-106	(5-6')	3/25/2020	<104	<104	<104	<104	<260	<52.1	<52.1	<52.1	<52.1	<52.1	<52.1	<104	<104	<208	<260	<52.1	<260	<312	<2,600	<104	<260	<26.0	<104	<344	<2,600
MW-107	(6-7')	3/25/2020	<129	<129	<129	<129	<322	<64.5	<64.5	<64.5	<64.5	<64.5	<64.5	<129	<129	<258	<322	<64.5	<322	<387	<3,220	<129	<322	<32.2	<129	<426	<3,220
MW-108	(4-5')	3/25/2020	<160	<160	<160	<160	<399	<79.8	<79.8	<79.8	<79.8	<79.8	<79.8	<160	<160	<319	<399	<79.8	<399	<479	<3,990	<160	<399	<39.9	<160	<527	<3,990
MW-109	(4-5')	3/25/2020	<102	<102	<102	<102	<255	<51.0	<51.0	<51.0	<51.0	<51.0	<51.0	<102	<102	<204	<255	<51.0	<255	<306	<2,550	<102	<255	<25.5	<102	<336	<2,550
MW-110	(4-5')	3/25/2020	<111	<111	<111	<111	<276	<55.3	<55.3	<55.3	<55.3	<55.3	<55.3	<111	<111	<221	<276	<55.3	<276	<332	<2,760	<111	<276	<27.6	<111	<365	<2,760
MW-113	(2-3')	3/23/2020	<121	<121	<121	<121	<303	<60.6	<60.6	<60.6	<60.6	<60.6	<60.6	<121	<121	<242	<303	<60.6	<303	<364	<3,030	<121	<303	<30.3	<121	<400	<3,030
MW-113	(7-8')	3/24/2020	<132	<132	<132	<132	<329	<65.8	<65.8	<65.8	<65.8	<65.8	<65.8	<132	<132	<263	<329	<65.8	<329	<395	<3,290	<132	<329	<32.9	<132	<434	<3,290
MW-114	(3-4')	3/24/2020	<187	<187	<187	<187	<468	<93.7	<93.7	<93.7	<93.7	<93.7	<93.7	<187	<187	<375	<468	<93.7	<468	<562	<4,680	<187	<468	<46.8	<187	<618	<4,680
MW-114	(8-9')	3/24/2020	<203	<203	<203	<203	<507	<101	<101	<101	<101	<101	<101	<203	<203	<406	<507	<101	<507	<608	<5,070	<203	<507	<50.7	<203	<669	<5,070
MW-115	(2-3')	3/24/2020	<239	<239	<239	<239	<598	<120	<120	<120	<120	<120	<120	<239	<239	<478	<598	<120	<598	<718	<5,980	<239	<598	<59.8	<239	<789	<5,980
MW-115	(7-8')	3/24/2020	<149	<149	<149	<149	<372	<74.4	<74.4	<74.4	<74.4	<74.4	<74.4	<149	<149	<297	<372	<74.4	<372	<446	<3,720	<149	<372	<37.2	<149	<491	<3,720
MW-116	(7-8')	3/30/2020	<133	<133	<133	<133	<333	<66.5	<66.5	<66.5	<66.5	<66.5	<66.5	<133	<133	<266	<333	<66.5	<333	<399	<3,330	<133	<333	<33.3	<133	<439	<3,330
MW-117	(6-7')	3/30/2020	<238	<238	<238	<238	<595	<119	<119	<119	<119	<119	<119	<238	<238	<476	<595	<119	<595	<714	<5,950	<238	<595	<59.5	<238	<786	<5,950
MW-118	(10-11')	3/30/2020	<173	<173	<173	<173	<433	<86.6	<86.6	<86.6	<86.6	<86.6	<86.6	<173	<173	<347	<433	<86.6	<433	<520	<4,330	<173	<433	<43.3	<173	<572	<4,330
MW-119	(6-7')	4/21/2020	<131	<131	<131	<131	<327	<65.4	<65.4	<65.4	<65.4	<65.4	<65.4	<131	<131	<262	<327	<65.4	<327	<393	<3,270	<131	<327	<32.7	<131	<432	<3,270
MW-120	(4-5')	4/21/2020	<147	<147	<147	<147	<369	<73.7	<73.7	<73.7	<73.7	<73.7	<73.7	<147	<147	<295	<369	<73.7	<369	<442	<3,690	<147	<369	<36.9	<147	<487	<3,690
MW-121	(9-10')	4/21/2020	<137	<137	<137	<137	<343	<68.5	<68.5	<68.5	<68.5	<68.5	<68.5	<137	<137	<274	<343	<68.5	<343	<411	<3,430	<137	<343	<34.3	<137	<452	<3,430
MW-122	(4-5')	6/15/2020	<105	<105	<105	<105	<264	<52.7	<52.7	<52.7	<52.7	<52.7	<52.7	<105	<105	<211	<264	<52.7	<264	<316	<2640	<105	<264	<26.4	<105	<348	<2640
MW-123	(4-5')	6/15/2020	<95.7	<95.7	<95.7	<95.7	<239	<47.9	<47.9	<47.9	<47.9	<47.9	<47.9	<95.7	<95.7	<191	<239	<47.9	<239	<287	<2390	<95.7	<239	<23.9	<95.7	<316	<2390
MW-124	(4-5')	6/15/2020	<98.6	<98.6	<98.6	<98.6	<247	<49.3	<49.3	<49.3	<49.3	<49.3	<49.3	<98.6	<98.6	<197	<247	<49.3	<247	<296	<2470	<98.6	<247	<24.7	<98.6	<326	<2470
MW-125	(4-5')	6/16/2020	<105	<105	<105	<105	<264	<52.7	<52.7	<52.7	<52.7	<52.7	<52.7	<105	<105	<211	<264	<52.7	<264	<316	<2640	<105	<264	<26.4	<105	<348	<2640
MW-126	(4-5')	6/15/2020	<95.0	<95.0	<95.0	<95.0	<237	<47.5	<47.5	<47.5	<47.5	<47.5	<47.5	<95.0	<95.0	<190	<237	<47.5	<237	<285	<2370	<95.0	<237	<23.7	<95.0	<313	<2370
MW-126	(7.5-8.5')	6/15/2020	<99.5	<99.5	<99.5	<99.5	<249	<49.7	<49.7	<49.7	<49.7	<49.7	<49.7	<99.5	<99.5	<199	<249	<49.7	<249	<298	<2490	<99.5	<249	<24.9	<99.5	<328	<2490
MW-127	(6-7')	6/15/2020	<122	<122	<122	<122	<306	<61.2	<61.2	<61.2	<61.2	<61.2	<61.2	<122	<122	<245	<306	<61.2	<306	<367	<3060	<122	<306	<30.6	<122	<404	<3060
MW-127	(10-11')	6/15/2020	<107	<107	<107	<107	<267	<53.5	<53.5	<53.5	<53.5	<53.5	<53.5	<107	<107	<214	<267	<53.5	<267	<321	<2670	<107	<267	<26.7	<107	<353	<2670
MW-128	(4-5')	6/15/2020	<131	<131	<131	<131	<327	<65.5	<65.5	<65.5	<65.5	<65.5	<65.5	<131	<131	<262	<327	<65.5	<327	<393	<3270	<131	<327	<32.7	<131	<432	<3270
MW-128	(8-9')	6/15/2020	<127	<127	<127	<127	<317	<63.5	<63.5	<63.5	<63.5	<63.5	<63.5	<127	<127	<254	<317	<63.5	<317	<381	<3170	<127	<317	<31.7	<127	<419	<3170
MW-129	(3-4')	6/15/2020	<102	<102	<102	<102	<255	<51.0	<51.0	<51.0	<51.0	<51.0	<51.0	<102	<102	<204	<255	<51.0	<255	<306	<2550	<102	<255	<25.5	<102	<337	<2550
MW-130	(4-5')	6/15/2020	<99.1	<99.1	<99.1	<99.1	<248	<49.6	<49.6	<49.6	<49.6	<49.6	<49.6	<99.1	<99.1	<198	<248	<49.6	<248	<297	<2480	<99.1	<248	<24.8	<99.1	<327	<2480
MW-131	(2-3')	6/15/2020	<148	<148	<148	<148	<371	<74.2	<74.2	<74.2	<74.2	<74.2	<74.2	<148	<148	<297	<371	<74.2	<371	<445	<3710	<148	<371	<37.1	<148	<490	<3710
MW-132	(5.5-6.5')	8/12/2020	<90.2	<90.2	<90.2	<90.2	<225	<45.1	<45.1	<45.1	<45.1	<45.1	<45.1	<90.2	<90.2	<180	<225	<45.1	<225	<270	<2250	<90.2	<225	<22.5	<90.2	<298	<2250
MW-133	(3-4')	8/12/2020	<80.2	<80.2	<80.2	<80.2	<201	<40.1	<40.1	<40.1	<40.1	<40.1	<40.1	<80.2	<80.2	<160	<201	<40.1	<201	<241	<2010	<80.2	<201	<20.1	<80.2	<265	<2010
MW-133	(10-11')	8/12/2020	<92.1	<92.1	<92.1	<92.1	<230	<46.0	<46.0	<46.0	<46.0	<46.0	<46.0	<92.1	<92.1	<184	<230	<46.0	<230	<276	<2300	<92.1	<230	<23.0	<92.1	<304	<2300

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Volatile organic compounds (VOCs) were analyzed by EPA Method 8260B.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1A- Summary of Soil Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Methyl-tert-butyl ether	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	Xylenes	Methanol	Ethanol	n-Butanol
Cas Number			1634-04-4	91-20-3	103-65-1	100-42-5	630-20-6	79-34-5	127-18-4	10-99-9	108-88-3	87-61-6	120-82-1	71-55-6	79-00-5	79-01-6	75-69-4	96-18-4	526-73-8	95-63-6	108-67-8	75-01-4	1330-20-7	67-56-1	64-17-5	71-36-3
Residential Drinking Water Protection Criteria			**800**	**35,000**	**1,600**	**2,700**	**1,500**	**170**	**100**	**1,900**	**16,000**	--	**4,200**	**4,000**	**100**	**100**	**52,000**	**840**	--	**2,100**	**1,800**	**40**	**5,600**	**74,000**	**3.80E+07**	**19,000**
Nonresidential Drinking Water Protection Criteria			800	1.00E+05	4,600	2.70E+03	6400	700	100	5400	16,000	--	4,200	4,000	100	100	1.50E+05	2,400	--	2,100	1,800	40	5,600	2.00E+05	7.60E+07	54,000
Groundwater Surface Water Interface Protection Criteria			1.4E+5 (X)	730	ID	2,100 (X)	ID	1,600 (X)	1,200 (X)	2.2E+5(X)	5,400	--	5,900 (X)	1,800	6,600 (X)	4,000 (X)	NA	NA	--	570	1,100	260	980	1.2E+7 (C)	ID	2.00E+05
Direct Contact Criteria			*1.50E+06*	*5.20E+07*	*8.00E+06*	*4.00E+05*	*4.80E+05*	*5.30E+04*	*9.3E+5 (C)*	*2.90E+06*	*5.0E+7 (C)*	--	*9.90E+05*	*1.80E+05*	*1.10E+05*	*6.60E+05*	*2.6E+8 (C)*	*1.30E+06*	--	*1.0E+8 (C)*	*1.0E+8 (C)*	*3,800*	*4.1E+8 (C)*	*3.6E+8 (C)*	*2.40E+06*	*9.50E+07*
Residential Volatilization to Indoor Air Pathway (VIAP)			**74**	**67**	**1,800**	**150**	**3.2**	**2.7**	**6.2**	**13,000**	**3,700**	**830**	**53**	**450**	**0.37**	**0.33**	**19**	**2.6**	**270**	**150**	**100**	**0.082**	**280**	**1.40E+06**	**1.3+06**	**20,000**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			2,100	1,900	21,000	4,300	91	77	74	220,000	64,000	15,000	930	7,500	6.6	4.0	340	46	4,800	2,600	1,800	8.2	5,000	1.70E+07	1.60E+07	350,000
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in micrograms per kilogram (ug/kg)**																							
MW-104	(14-15')	3/23/2020	<474	<626	<190	<94.9	<190	<94.9	<94.9	<1,900	<190	<474	<474	<94.9	<94.9	<94.9	<190	<190	<474	<190	<190	<75.9	<47.4	18,900	<2,980	<5,240
MW-105	(12-13')	3/23/2020	<231	<304	<92.3	<46.1	<92.3	<46.1	<46.1	<923	<92.3	<231	<231	<46.1	<46.1	<46.1	<92.3	<92.3	<231	<92.3	<92.3	<36.9	<23.1	16,000	<2,950	<5,190
MW-106	(5-6')	3/25/2020	<260	<344	<104	<52.1	<104	<52.1	<52.1	<1,040	<104	<260	<260	<52.1	<52.1	<52.1	<104	<104	<260	<104	<104	<41.6	<26.0	15,200	<2,730	<4,810
MW-107	(6-7')	3/25/2020	<322	<426	<129	<64.5	<129	<64.5	<64.5	<1,290	<129	<322	<322	<64.5	<64.5	<64.5	<129	<129	<322	<129	<129	<51.6	<32.2	14,800	<2,870	<5,060
MW-108	(4-5')	3/25/2020	<399	<527	<160	<79.8	<160	<79.8	<79.8	<1,600	<160	<399	<399	<79.8	<79.8	<79.8	<160	<160	<399	<160	<160	<63.8	<39.9	13,000	<2,660	<4,670
MW-109	(4-5')	3/25/2020	<255	<336	<102	<51.0	<102	<51.0	<51.0	<1,020	<102	<255	<255	<51.0	<51.0	<51.0	<102	<102	<255	<102	<102	<40.8	<25.5	13,300	<,2640	<4,640
MW-110	(4-5')	3/25/2020	<276	<365	<111	<55.3	<111	<55.3	<55.3	<1,110	<111	<276	<276	<55.3	<55.3	<55.3	<111	<111	<276	<111	<111	<44.2	<27.6	17,600	<2,650	<4,670
MW-113	(2-3')	3/23/2020	<303	<400	<121	<60.6	<121	<60.6	<60.6	<1,210	<121	<303	<303	<60.6	<60.6	<60.6	<121	<121	<303	<121	<121	<48.5	<30.3	**233,000**	<2,790	<4,910
MW-113	(7-8')	3/24/2020	<329	<434	<132	<65.8	<132	<65.8	<65.8	<1,320	<132	<329	<329	<65.8	<65.8	<65.8	<132	<132	<329	<132	<132	<52.6	<32.9	11,700	<2,810	<4,950
MW-114	(3-4')	3/24/2020	<468	<618	<187	<93.7	<187	<93.7	<93.7	<1,870	<187	<468	<468	<93.7	<93.7	<93.7	<187	<187	<468	<187	<187	<74.9	<46.8	43,000	<3,010	<5,300
MW-114	(8-9')	3/24/2020	<507	<669	<203	<101	<203	<101	<101	<2,030	<203	<507	<507	<101	<101	<101	<203	<203	<507	<203	<203	<81.1	<50.7	6,850	<2,940	<5,170
MW-115	(2-3')	3/24/2020	<598	<789	<239	<120	<239	<120	<120	<2,390	<239	<598	<598	<120	<120	<120	<239	<239	<598	<239	<239	<95.7	<59.8	<5,190	<2,950	<5,190
MW-115	(7-8')	3/24/2020	<372	<491	<149	<74.4	<149	<74.4	<74.4	<1,490	<149	<372	<372	<74.4	<74.4	<74.4	<149	<149	<372	<149	<149	<59.5	<37.2	13,400	<3,090	<5,440
MW-116	(7-8')	3/30/2020	<333	<439	<133	<66.5	<133	<66.5	<66.5	<1,330	<133	<333	<333	<66.5	<66.5	<66.5	<133	<133	<333	<133	<133	<53.2	<33.3	9,010	<2,900	<5,110
MW-117	(6-7')	3/30/2020	<595	<786	<238	<119	<238	<119	<119	<2,380	<238	<595	<595	<119	<119	<119	<238	<238	<595	<238	<238	<95.2	<59.5	5,230	<2,840	<5,000
MW-118	(10-11')	3/30/2020	<433	<572	<173	<86.6	<173	<86.6	<86.6	<1,730	<173	<433	<433	<86.6	<86.6	<86.6	<173	<173	<433	<173	<173	<69.3	<43.3	17,100	<2,660	<4,690
MW-119	(6-7')	4/21/2020	<327	<432	<131	<65.4	<131	<65.4	<65.4	<1,310	<131	<327	<327	<65.4	<65.4	<65.4	<131	<131	<327	<131	<131	<52.3	<65.4	63,900	<4,980	<2,830
MW-120	(4-5')	4/21/2020	<369	<487	<147	<73.7	<147	<73.7	<73.7	<1,470	<147	<369	<369	<73.7	<73.7	<73.7	<147	<147	<369	<147	<147	<59.0	<73.8	**175,000**	<5,410	<3,070
MW-121	(9-10')	4/21/2020	<343	<452	<137	<68.5	<137	<68.5	<68.5	<1,370	<137	<343	<343	<68.5	<68.5	<68.5	<137	<137	<343	<137	<137	<54.8	<68.6	60,100	<5,020	<2,850
MW-122	(4-5')	6/15/2020	<264	<348	<105	<52.7	<105	<52.7	<52.7	<1050	<105	<264	<264	<52.7	<52.7	<52.7	<105	<105	<264	<105	<105	<42.2	<52.8	<4830	<2750	<4830
MW-123	(4-5')	6/15/2020	<239	<316	<95.7	<47.9	<95.7	<47.9	<47.9	<957	<95.7	<239	<239	<47.9	<47.9	<47.9	<95.7	<95.7	<239	<95.7	<95.7	<38.3	<47.8	<4700	<2670	<4700
MW-124	(4-5')	6/15/2020	<247	<326	<98.6	<49.3	<98.6	<49.3	<49.3	<986	<98.6	<247	<247	<49.3	<49.3	<49.3	<98.6	<98.6	<247	<98.6	<98.6	<39.5	<49.4	<4700	<2670	<4700
MW-125	(4-5')	6/16/2020	<264	<348	<105	<52.7	<105	<52.7	<52.7	<1050	<105	<264	<264	<52.7	<52.7	<52.7	<105	<105	<264	<105	<105	<42.2	<52.8	<4670	<2650	<4670
MW-126	(4-5')	6/15/2020	<237	<313	<95.0	<47.5	<95.0	<47.5	<47.5	<950	<95.0	<237	<237	<47.5	<47.5	<47.5	<95.0	<95.0	<237	<95.0	<95.0	<38.0	<47.4	<4610	<2620	<4610
MW-126	(7.5-8.5')	6/15/2020	<249	<328	<99.5	<49.7	<99.5	<49.7	<49.7	<995	<99.5	<249	<249	<49.7	<49.7	<49.7	<99.5	<99.5	<249	<99.5	<99.5	<39.8	<49.8	<4710	<2670	<4710
MW-127	(6-7')	6/15/2020	<306	<404	<122	<61.2	<122	<61.2	<61.2	<1220	<122	<306	<306	<61.2	<61.2	<61.2	<122	<122	<306	<122	<122	<49.0	<53.4	<4990	<2830	<4990
MW-127	(10-11')	6/15/2020	<267	<353	<107	<53.5	<107	<53.5	<53.5	<1070	<107	<267	<267	<53.5	<53.5	<53.5	<107	<107	<267	<107	<107	<42.8	<61.2	<4770	<2710	<4770
MW-128	(4-5')	6/15/2020	<327	<432	<131	<65.5	<131	<65.5	<65.5	<1310	<131	<327	<327	<65.5	<65.5	<65.5	<131	<131	<327	<131	<131	<52.4	<65.4	<5150	<2920	<5150
MW-128	(8-9')	6/15/2020	<317	<419	<127	<63.5	<127	<63.5	<63.5	<1270	<127	<317	<317	<63.5	<63.5	<63.5	<127	<127	<317	<127	<127	<50.8	<63.4	<4890	<2780	<4890
MW-129	(3-4')	6/15/2020	<255	<337	<102	<51.0	<102	<51.0	<51.0	<1020	<102	<255	<255	<51.0	<51.0	<51.0	<102	<102	<255	<102	<102	<40.8	<51	<4620	<2620	<4620
MW-130	(4-5')	6/15/2020	<248	<327	<99.1	<49.6	<99.1	<49.6	<49.6	<991	<99.1	<248	<248	<49.6	<49.6	<49.6	<99.1	<99.1	<248	<99.1	<99.1	<39.6	<49.6	<4650	<2640	<4650
MW-131	(2-3')	6/15/2020	<371	<490	<148	<74.2	<148	<74.2	<74.2	<1480	<148	<371	<371	<74.2	<74.2	<74.2	<148	<148	<371	<148	<148	<59.4	<74.2	<5650	<3210	<5650
MW-132	(5.5-6.5')	8/12/2020	<225	<298	<90.2	<45.1	<90.2	<45.1	<45.1	<902	<90.2	<225	<225	<45.1	<45.1	<45.1	<90.2	<90.2	<225	<90.2	<90.2	<36.1	<22.5	NA	NA	NA
MW-133	(3-4')	8/12/2020	<201	<265	<80.2	<40.1	<80.2	<40.1	<40.1	<802	<80.2	<201	<201	<40.1	<40.1	<40.1	<80.2	<80.2	<201	<80.2	<80.2	<32.1	<20.1	NA	NA	NA
MW-133	(10-11')	8/12/2020	<230	<304	<92.1	<46.0	<92.1	<46.0	<46.0	<921	<92.1	<230	<230	<46.0	<46.0	<46.0	<92.1	<92.1	<230	<92.1	<92.1	<36.8	<23.0	NA	NA	NA

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Volatile organic compounds (VOCs) were analyzed by EPA Method 8260B.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

Table 1C - Summary of Soil Analytical Results - Metals
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Calcium	Cadmium	Chromium (III)	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Titanium	Vanadium	Zinc
CAS Number			7429-90-5	7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-42-8	--	7440-43-9	16065-83-1	18540-29-9	7440-48-4	7440-50-8	7439-89-6	7439-92-1	7439-95-4	7439-96-5	7439-97-6	7439-98-7	7440-02-0	7440-09-7	7782-49-2	7440-22-4	17341-25-2	7440-26-4	7440-28-0	7440-32-6	7440-62-2	7440-66-6
Statewide Default Background Levels (SDBC)			6,900,000	NA	5,800	75,000	NA	NA	--	1,200	18,000	--	6,800	32,000	12,000,000	21,000	NA	440,000	130	NA	20,000	--	410	1,000	NA	NA	NA	--	NA	47,000
Residential Drinking Water Protection Criteria			**1,000**	**4,300**	**4,600**	**1,300,000**	**51,000**	**10,000**	--	**6,000**	**1,000,000,000**	**30,000**	**800**	**5,800,000**	**6,000**	**700,000**	**8,000,000**	**1,000**	**1,700**	**1,500**	**100,000**	--	**4,000**	**4,500**	**4,600,000**	**92,000**	**2,300**	--	**72,000**	**2,400,000**
Nonresidential Drinking Water Protection Criteria			1,000	4,300	4,600	1,300,000	51,000	10,000	--	6,000	1,000,000,000	30,000	2,000	5,800,000	6,000	700,000	22,000,000	1,000	1,700	4,200	100,000	--	4,000	13,000	7,000,000	260,000	2,300	--	990,000	5,000,000
Groundwater Surface Water Interface Protection Criteria			NA	94,000	4,600	(G)	(G)	140,000	--	(G,X)	(G,X)	3,300	2,000	(G)	NA	(G,X)	NA	(G,X)	50; 1.2	64,000	(G)	--	400	100; 27	NA	420,000	4,200	--	430,000	(G)
Direct Contact Criteria			*3.70E+08*	*670,000*	*37,000*	*1.30E+08*	*1.60E+06*	*3.50E+08*	--	*2.10E+06*	*1.00E+09*	*9.20E+06*	*9.00E+06*	*7.30E+07*	*5.80E+08*	*9.00E+05*	*1.00E+09*	*9.00E+07*	*5.80E+05*	*9.60E+06*	*1.50E+08*	--	*9.60E+06*	*9.00E+06*	*1.00E+09*	*1.00E+09*	*130,000*	--	*5,500,000*	*6.20E+08*
Residential Volatilization to Indoor Air Pathway (VIAP)			**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	--	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**22**	**NLV**	**NLV**	--	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	--	**NLV**	**NLV**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			NLV	NLV	NLV	NLV	NLV	NLV	--	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	390	NLV	NLV	--	NLV	NLV	NLV	NLV	NLV	--	NLV	NLV
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in micrograms per kilogram (ug/kg)**																											
MW-101	(2-3')	3/23/2020	NA	NA	<2,110	13,300	NA	NA	NA	<210	5,900	<2,200	NA	NA	NA	<10,500	NA	NA	<59.9	NA	NA	NA	<1,050	<105	NA	NA	NA	NA	NA	NA
MW-102	(2-3')	3/23/2020	NA	NA	2,190	16,800	NA	NA	NA	<210	10,500	<2,100	NA	NA	NA	<10,300	NA	NA	70.6	NA	NA	NA	<1,050	<105	NA	NA	NA	NA	NA	NA
MW-103	(2-3')	3/23/2020	NA	NA	<2,470	20,800	NA	NA	NA	<267	6,600	<2,700	NA	NA	NA	<12,400	NA	NA	<76.9	NA	NA	NA	<1,340	<134	NA	NA	NA	NA	NA	NA
MW-104	(2-3')	3/23/2020	NA	NA	<2,240	17,500	NA	NA	NA	<217	6,300	<2,300	NA	NA	NA	<11,200	NA	NA	<62.3	NA	NA	NA	<1,080	<108	NA	NA	NA	NA	NA	NA
MW-105	(2-3')	3/23/2020	NA	NA	<2,090	18,200	NA	NA	NA	<221	5,600	<2,200	NA	NA	NA	<10,400	NA	NA	<62.7	NA	NA	NA	<1,100	<110	NA	NA	NA	NA	NA	NA
MW-106	(2-3')	3/25/2020	NA	NA	<1,960	5,360	NA	NA	NA	<205	5,700	<2,100	NA	NA	NA	<9,790	NA	NA	<58.9	NA	NA	NA	<1,030	<103	NA	NA	NA	NA	NA	NA
MW-107	(2-3')	3/25/2020	NA	NA	<2,180	9,360	NA	NA	NA	<210	8,800	<2,200	NA	NA	NA	<10,900	NA	NA	<60.1	NA	NA	NA	<1,050	<105	NA	NA	NA	NA	NA	NA
MW-108	(2-3')	3/25/2020	NA	NA	<1,960	12,200	NA	NA	NA	<209	7,200	<2,200	NA	NA	NA	<9,820	NA	NA	<64.0	NA	NA	NA	<2,090	<105	NA	NA	NA	NA	NA	NA
MW-109	(1-2')	3/25/2020	NA	NA	<2,040	13,900	NA	NA	NA	<211	5,400	<2,200	NA	NA	NA	<10,200	NA	NA	<60.7	NA	NA	NA	<1,050	<105	NA	NA	NA	NA	NA	NA
MW-110	(1-2')	3/25/2020	NA	NA	<2,100	9,050	NA	NA	NA	<202	5,300	<2,100	NA	NA	NA	<10,500	NA	NA	<57.7	NA	NA	NA	<2,020	<101	NA	NA	NA	NA	NA	NA
MW-111	(3-4')	3/25/2020	NA	NA	<2,030	7,070	NA	NA	NA	<198	5,400	<2,100	NA	NA	NA	<10,100	NA	NA	<57.8	NA	NA	NA	<990	<99.0	NA	NA	NA	NA	NA	NA
MW-112	(3-4')	3/25/2020	NA	NA	<2,020	8,750	NA	NA	NA	<219	4,700	<2,300	NA	NA	NA	<10,100	NA	NA	<66.7	NA	NA	NA	<1,100	<110	NA	NA	NA	NA	NA	NA
MW-113	(2-3')	3/23/2020	NA	NA	3,260	24,700	NA	NA	NA	249	7,200	<2,200	NA	NA	NA	13,800	NA	NA	<61.5	NA	NA	NA	<1,090	<109	NA	NA	NA	NA	NA	NA
MW-113	(7-8')	3/24/2020	NA	NA	<2,140	8,370	NA	NA	NA	<210	5,600	<2,200	NA	NA	NA	<10,700	NA	NA	<61.3	NA	NA	NA	<2,100	<105	NA	NA	NA	NA	NA	NA
MW-114	(3-4')	3/24/2020	NA	NA	7,760	225,000	NA	NA	NA	2,800	11,600	<2,400	NA	NA	NA	75,900	NA	NA	218	NA	NA	NA	<2,410	2,890	NA	NA	NA	NA	NA	NA
MW-114	(8-9')	3/24/2020	NA	NA	6,350	63,900	NA	NA	NA	263	16,300	<2,300	NA	NA	NA	21,500	NA	NA	<67.7	NA	NA	NA	<2,190	<110	NA	NA	NA	NA	NA	NA
MW-115	(2-3')	3/24/2020	NA	NA	6,680	59,000	NA	NA	NA	<234	17,700	<2,300	NA	NA	NA	<11,700	NA	NA	<66.1	NA	NA	NA	<2,340	<117	NA	NA	NA	NA	NA	NA
MW-115	(7-8')	3/24/2020	NA	NA	24,600	1,950,000	NA	NA	NA	77,000	179,000	<2,500	NA	NA	NA	895,000	NA	NA	252	NA	NA	NA	<1,220	1,390	NA	NA	NA	NA	NA	NA
MW-116	(2-3')	3/30/2020	NA	NA	<2,120	13,500	NA	NA	NA	<208	8,800	<2,200	NA	NA	NA	<10,600	NA	NA	<64.9	NA	NA	NA	312	<104	NA	NA	NA	NA	NA	NA
MW-116	(7-8')	3/30/2020	NA	NA	<2,170	7,980	NA	NA	NA	<217	3,900	<2,300	NA	NA	NA	<10,800	NA	NA	<62.5	NA	NA	NA	<217	<109	NA	NA	NA	NA	NA	NA
MW-117	(2-3')	3/30/2020	NA	NA	<2,130	8,430	NA	NA	NA	<220	5,800	<2,200	NA	NA	NA	<10,600	NA	NA	<65.4	NA	NA	NA	369	<110	NA	NA	NA	NA	NA	NA
MW-117	(6-7')	3/30/2020	NA	NA	<2,190	6,150	NA	NA	NA	<212	4,100	<2,300	NA	NA	NA	<10,900	NA	NA	<64.3	NA	NA	NA	<1,060	<106	NA	NA	NA	NA	NA	NA
MW-118	(10-11')	3/30/2020	NA	NA	<1,980	6,390	NA	NA	NA	<197	4,500	<2,100	NA	NA	NA	<9,920	NA	NA	<58.3	NA	NA	NA	<197	<98.4	NA	NA	NA	NA	NA	NA
MW-118	(2-3')	3/30/2020	NA	NA	17,000	7,340	NA	NA	NA	<200	4,900	<2,200	NA	NA	NA	<9,870	NA	NA	<64.0	NA	NA	NA	<200	<99.8	NA	NA	NA	NA	NA	NA
MW-119	(2-3')	4/21/2020	NA	NA	6,380	36,300	NA	NA	NA	232	9,240	NA	NA	NA	NA	<11,800	NA	NA	<64.3	NA	NA	NA	2,540	<116	NA	NA	NA	NA	NA	NA
MW-119	(6-7')	4/21/2020	NA	NA	<2,230	6,180	NA	NA	NA	<221	5,080	NA	NA	NA	NA	<11,200	NA	NA	<58.3	NA	NA	NA	<1,110	<111	NA	NA	NA	NA	NA	NA
MW-120	(2-3')	4/21/2020	NA	NA	<2,060	11,200	NA	NA	NA	<210	5,240	NA	NA	NA	NA	<10,300	NA	NA	<54.8	NA	NA	NA	<1,050	<105	NA	NA	NA	NA	NA	NA
MW-120	(4-5')	4/21/2020	NA	NA	<2,170	8,570	NA	NA	NA	<240	4,410	NA	NA	NA	NA	<10,900	NA	NA	<67.3	NA	NA	NA	<1,200	<120	NA	NA	NA	NA	NA	NA
MW-121	(2-3')	4/21/2020	NA	NA	3,120	19,700	NA	NA	NA	<213	7,240	NA	NA	NA	NA	<10,000	NA	NA	<55.9	NA	NA	NA	<1,070	<107	NA	NA	NA	NA	NA	NA
MW-121	(9-10')	4/21/2020	NA	NA	<2,200	7,690	NA	NA	NA	<220	3,040	NA	NA	NA	NA	<11,000	NA	NA	<62.3	NA	NA	NA	<1,100	<110	NA	NA	NA	NA	NA	NA
MW-122	(4-5')	6/15/2020	4,330,000	<1010	2,510	48,100	<506	<8090	8,920,000	<218	8,690	NA	**1,400**	6,720	5,840,000	50,700	2,440,000	89,200	1,110	<1010	4,940	238,000	262	157	31,000	12,200	<544	237,000	14,200	48,800
MW-123	(4-5')	6/15/2020	2,870,000	<929	2,530	12,700	<464	<7430	703,000	<203	7,230	NA	**1,720**	2,000	6,680,000	<9290	834,000	126,000	<85.3	<929	3,880	144,000	228	<101	28,100	<4640	<506	228,000	13,300	7,510
MW-124	(4-5')	6/15/2020	3,620,000	<957	<1910	8,540	<478	<7650	628,000	<203	5,880	NA	**1,350**	1,580	3,940,000	<9570	739,000	27,300	<86.7	<957	3,880	148,000	<203	<102	23200 J	<4780	<509	220,000	8,010	8,190
MW-125	(4-5')	6/16/2020	5,130,000	<1030	2,940	33,400	<517	<8260	28,700,000	290	11,100	NA	2,270	9,020	5,840,000	33,800	4,260,000	122,000	940	<1030	6,660	337,000	<1020	1,840	65,200	29,300	<512	284,000	13,200	50,800
MW-126	(4-5')	6/15/2020	4,740,000	<910	3,710	12,300	<455	<7280	3,580,000	<208	24,700	<2.1	**1,290**	23,000	58,100,000	<9100	980,000	440,000	<78.6	**3,830**	17,700	143,000	245	<104	24,500	6,300	<521	187,000	8,930	16,600
MW-126	(7.5-8.5')	6/15/2020	2,850,000	<1020	<2040	8,970	<511	<8180	1,790,000	<211	5,810	NA	**1,710**	3,020	4,180,000	<10200	988,000	79,400	<87.7	<1020	3,960	175,000	<1060	<106	23900 J	<5110	<528	159,000	8,380	11,600
MW-127	(6-7')	6/15/2020	2,480,000	<1040	<2080	7,000	<519	<8310	842,000	<224	4,330	NA	**1,190**	2,060	2,510,000	<10400	785,000	29,500	<85.9	<1040	3,670	184,000	<224	<112	28,900	<5190	<561	204,000	5,740	7,580
MW-127	(10-11')	6/15/2020	1,630,000	<1060	<2120	4,410	<529	<8470	28,100,000	<212	3,580	NA	**1,150**	2,810	2,440,000	<10600	4,010,000	61,300	<84.5	<1060	4,460	195,000	<212	<106	56,800	24,900	<530	175,000	10,200	6,750
MW-128	(4-5')	6/15/2020	4,160,000	<1080	2,770	21,400	<539	<8620	62,400,000	<220	7,200	NA	**1,520**	8,240	5,040,000	<10800	5,520,000	110,000	<95.6	**1,870**	5,840	390,000	223	<110	90,100	45,900	<550	275,000	12,000	17,800
MW-128	(8-9')	6/15/2020	2,900,000	<961	<1920	7,670	<480	<7690	663,000	<216	6,740	NA	**1,640**	2,900	3,950,000	<9610	1,110,000	148,000	<93.4	<961	5,440	232,000	<1080	<108	26,100	<4800	<540	179,000	6,710	9,870
MW-129	(3-4')	6/15/2020	4,190,000	<926	2,450	23,100	<463	<7410	24,200,000	316	8,290	NA	**1,610**	20,800	6,060,000	47,200	3,800,000	92,200	666	<926	5,930	336,000	<999	<99.9	72,400	30,000	<500	247,000	10,200	43,600
MW-130	(4-5')	6/15/2020	4,020,000	<985	<1970	9,000	<492	<7880	927,000	<210	5,510	NA	**1,260**	1,440	3,160,000	<9850	730,000	25,900	<83.0	<985	4,170	143,000	<210	<105	21700 J	<4920	<526	229,000	7,980	9,160
MW-131	(2-3')	6/15/2020	5,290,000	<1140	<2290	14,300	<572	<9160	2,600,000	<250	7,550	NA	2,120	6,650	5,240,000	16,800	1,130,000	66,400	<101	<1140	4,460	191,000	319	203	27700 J	<5720	<624	218,000	10,800	33,700
MW-132	(5.5-6.5')	8/12/2020	5,780,000	<1000	5,010	75,400	<502	11,500	61,200,000	412	14,200	NA	<2780	25,000	10,100,000	29,800	**8,760,000**	179,000	1,090	**2,220**	10,400	786,000	<1,110	<111	376,000	75,600	<555	394,000	14,900	116,000
MW-133	(3-4')	8/12/2020	6,450,000	<985	4,800	104,000	574	12,100	56,200,000	467	17,400	NA	<2710	16,000	7,850,000	48,100	**10,400,000**	218,000	798	1,040	10,200	980,000	<1090	789	482,000	71,500	<543	359,000	21,300	79,600
MW-133	(10-11')	8/12/2020	3,720,000	<1100	2,410	38,400	<551	<8820	29,700,000	372	7,160	NA	**1,490**	14,500	4,830,000	35,800	5,650,000	126,000	249	<1100	4,850	489,000	<1130	<113	106,000	35,000	<567	274,000	10,600	71,400

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
5,800	Analyte exceeds Statewide Default Background Levels.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.
Metals analyzed by EPA Method 6010B or 6020. Mercury analyzed by EPA Method 7470A.
EGLE = Michigan Department of Environment, Great Lakes, and Energy.
VIAP = Volatilization to Indoor Air Pathway
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1B - Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(ghi) perylene	4-Bromophenyl phenyl ether	Butylbenzylphthalate	Carbazole	4-Chloro-3-methylphenol	bis(2-Chloroethoxy)methane	bis(2-Chloroethyl)ether	bis(2-Chloroisopropyl)ether	2-Chloronaphthalene	2-Chlorophenol	4-Chlorophenyl phenyl ether	Chrysene	Dibenzo(ah) anthracene
CAS Number			83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	207-08-9	191-24-2	101-55-3	85-68-7	86-74-8	59-50-7	111-91-1	111-44-4	108-60-1	91-58-7	95-57-8	7005-72-3	218-01-9	53-70-3
Residential Drinking Water Protection Criteria			**3.00E+05**	**5,900**	**41,000**	**NLL**	**NLL**	**NLL**	**NLL**	**NLL**	--	**2,200,000**	**9,400**	**5,800**	--	**100**	--	**620,000**	**900**	--	**NLL**	**NLL**
Nonresidential Drinking Water Protection Criteria			8.80E+05	17,000	41,000	NLL	NLL	NLL	NLL	NLL	--	5,000,000	39,000	16,000	--	170	--	1,800,000	2,600	--	NLL	NLL
Groundwater Surface Water Interface Protection Criteria			8,700	ID	ID	NLL	NLL	NLL	NLL	NLL	--	120,000	1,100	280	--	100; 20	--	NA	360	--	NLL	NLL
Direct Contact Criteria			*1.30E+08*	*5.20E+06*	*7.30E+08*	*80,000*	*8,000*	*80,000*	*8.00E+05*	*7.00E+06*	--	*1.20E+08*	*2.40E+06*	*1.50E+07*	--	*58,000*	--	*180000000*	*4,500,000*	--	*8,000,000*	*8,000*
Residential Volatilization to Indoor Air Pathway (VIAP)			**2.00E+05**	--	**1.30E+07**	**1.60E+05**	--	--	--	--	--	--	--	--	--	**3.4**	--	--	**12,000**	--	--	--
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			3.60E+06	--	2.20E+08	1.10E+07	--	--	--	--	--	--	--	--	--	96	--	--	140,000	--	--	--
Sample ID	**Sample Depth**	**Sample Date**	**Reported in microgram per kilogram (ug/kg)**																			
MW-104	(14-15')	3/23/2020	<388	<388	<388	<388	<388	<388	<388	<388	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<388	<388
MW-105	(12-13')	3/23/2020	<389	<389	<389	<389	<389	<389	<389	<389	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<389	<389
MW-106	(5-6')	3/25/2020	<357	<357	<357	<357	<357	<357	<357	<357	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<357	<357
MW-107	(6-7')	3/25/2020	<374	<374	<374	<374	<374	<374	<374	<374	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<374	<374
MW-108	(4-5')	3/25/2020	<349	<349	<349	<349	<349	<349	<349	<349	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<349	<349
MW-109	(4-5')	3/25/2020	<348	<348	<348	<348	<348	<348	<348	<348	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<348	<348
MW-110	(4-5')	3/25/2020	<350	<350	<350	<350	<350	<350	<350	<350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	<350
MW-113	(2-3')	3/23/2020	<368	<368	<368	<368	<368	<368	<368	<368	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<368	<368
MW-113	(7-8')	3/24/2020	<371	<371	<371	<371	<371	<371	<371	<371	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<371	<371
MW-114	(3-4')	3/24/2020	<3,950	<3,950	11,100	12,600	*11,600*	12,700	7,880	6,950	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11,400	<3,950
MW-114	(8-9')	3/24/2020	<383	<383	<383	<383	<383	<383	<383	<383	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<383	<383
MW-115	(2-3')	3/24/2020	<387	<387	<387	<387	<387	<387	<387	<387	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<387	<387
MW-115	(7-8')	3/24/2020	<406	<406	<406	<406	<406	<406	<406	<406	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<406	<406
MW-116	(7-8')	3/30/2020	<382	<382	<382	<382	<382	<382	<382	<382	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<382	<382
MW-117	(6-7')	3/30/2020	<375	<375	<375	<375	<375	<375	<375	<375	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<375	<375
MW-118	(10-11')	3/30/2020	<350	<350	<350	<350	<350	<350	<350	<350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	<350
MW-119	(6-7')	4/21/2020	<364	<364	<364	<364	<364	<364	<364	<364	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<364	<364
MW-120	(4-5')	4/21/2020	<401	<401	<401	<401	<401	<401	<401	<401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<401	<401
MW-121	(9-10')	4/21/2020	<369	<369	<369	<369	<369	<369	<369	<369	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<369	<369
MW-122	(4-5')	6/15/2020	<352	<352	<352	<352	<352	427	<352	<352	<352	<352	<352	<299	<352	<171	<352	<352	<352	<352	<352	<352
MW-123	(4-5')	6/15/2020	<344	<344	<344	<344	<344	<344	<344	<344	<344	<344	<344	<292	<344	<167	<344	<344	<344	<344	<344	<344
MW-124	(4-5')	6/15/2020	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<297	<350	<170	<350	<350	<350	<350	<350	<350
MW-125	(4-5')	6/16/2020	<347	<347	549	2,190	1,860	2,650	1,040	1,000	<347	<347	<347	<294	<347	<168	<347	<347	<347	<347	2,070	<347
MW-126	(4-5')	6/15/2020	<344	<344	<344	<344	<344	461	<344	<344	<344	<344	<344	<292	<344	<167	<344	<344	<344	<344	<344	<344
MW-126	(7.5-8.5')	6/15/2020	<333	<333	<333	<333	<333	<333	<333	<333	<333	<333	<333	<282	<333	<161	<333	<333	<333	<333	<333	<333
MW-127	(6-7')	6/15/2020	<366	<366	<366	<366	<366	<366	<366	<366	<366	<366	<366	<310	<366	<177	<366	<366	<366	<366	<366	<366
MW-127	(10-11')	6/15/2020	<8880	<8880	9,250	<8880	<8880	<8880	<8880	<8880	<8880	<8880	<8880	<7540	<8880	<4310	<8880	<8880	<8880	<8880	11,600	<8880
MW-128	(4-5')	6/15/2020	<427	<427	841	1,510	765	1,110	545	496	<427	<427	620	<363	<427	<207	<427	<427	<427	<427	1,280	<427
MW-128	(8-9')	6/15/2020	<347	<347	<347	<347	<347	<347	<347	<347	<347	<347	<347	<295	<347	<168	<347	<347	<347	<347	<347	<347
MW-129	(3-4')	6/15/2020	<1630	<1630	<1630	1,650	<1630	2,220	<1630	<1630	<1630	90,700	<1630	<1380	<1630	<790	<1630	<1630	<1630	<1630	<1630	<1630
MW-130	(4-5')	6/15/2020	<348	<348	<348	<348	<348	<348	<348	<348	<348	<348	<348	<295	<348	<169	<348	<348	<348	<348	<348	<348
MW-131	(2-3')	6/15/2020	<422	<422	<422	<422	<422	<422	<422	<422	<422	<422	<422	<358	<422	<205	<422	<422	<422	<422	<422	<422
MW-132	(5.5-6.5')	8/12/2020	<369	<369	485	1,490	1,370	1,750	791	851	<369	42,200	<369	<313	<369	<179	<369	<369	<369	<369	1,480	<369
MW-133	(3-4')	8/12/2020	5,470	<1790	7,580	21,100	*20,400*	27,200	10,600	13,300	<1790	<1790	5,010	<1520	<1790	<869	<1790	<1790	<1790	<1790	21,800	3,620
MW-133	(10-11')	8/12/2020	<3940	<3940	5,700	16,100	*14,500*	20,500	6,710	8,410	<3940	43,500	<3940	<3340	<3940	<1910	<3940	<3940	<3940	<3940	15,500	<3940

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Polynuclear aromatic hydrocarbons (PNAs) analyzed by EPA Method 8270 SIM.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1B - Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Dibenzofuran	2,4-Dichlorophenol	Diethylphthalate	2,4-Dimethylphenol	Dimethylphthalate	Di-n-butylphthalate	4,6-Dinitro-2-methylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Di-n-octylphthalate	1,2-Diphenylhydrazine	bis(2-Ethylhexyl)phthalate	Fluoranthene	Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(123cd) pyrene
CAS Number			132-64-9	120-83-2	84-66-2	105-67-9	131-11-3	84-7-42	534-52-1	51-28-5	121-14-2	606-20-2	117-84-0	122-66-7	117-81-7	206-44-0	86-73-7	87-68-3	118-74-1	77-47-4	67-72-1	193-39-5
Residential Drinking Water Protection Criteria			**ID**	**1,500**	**110,000**	**7,400**	**1,500,000**	**960,000**	**830; 400**	**--**	**430**	**--**	**##########**	**--**	**NLL**	**7.30E+05**	**3.90E+05**	**26,000**	**1,800**	**320,000**	**430**	**NLL**
Nonresidential Drinking Water Protection Criteria			ID	4,200	320,000	20,000	4,200,000	2,700,000	830; 400	--	640	--	##########	--	NLL	7.30E+05	8.90E+05	72,000	1,800	320,000	1,200	NLL
Groundwater Surface Water Interface Protection Criteria			1,700	330; 220	2,200	7,600	NA	11,000	NA	--	NA	--	ID	--	NLL	5,500	5,300	91	350	ID	1,800	NLL
Direct Contact Criteria			*ID*	*3,900,000*	##########	*36,000,000*	*1.00E+09*	*87,000,000*	*260,000*	--	*220,000*	--	*2.00E+73*	--	*12,000,000*	*1.30E+08*	*8.70E+07*	*4.70E+05*	*37,000*	*6.70E+06*	*7.30E+05*	*80,000*
Residential Volatilization to Indoor Air Pathway (VIAP)			**7.10E+06**	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.70E+05**	--	**6.7**	**0.32**	**3.2**	--
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			1.30E+08	--	--	--	--	--	--	--	--	--	--	--	--	--	8.30E+06	--	120	5.7	92	--
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in microgram per kilogram (ug/kg)**																			
MW-104	(14-15')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<388	<388	NA	NA	NA	NA	<388
MW-105	(12-13')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<389	<389	NA	NA	NA	NA	<389
MW-106	(5-6')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<357	<357	NA	NA	NA	NA	<357
MW-107	(6-7')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<374	<374	NA	NA	NA	NA	<374
MW-108	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<349	<349	NA	NA	NA	NA	<349
MW-109	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<348	<348	NA	NA	NA	NA	<348
MW-110	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	<350	NA	NA	NA	NA	<350
MW-113	(2-3')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<368	<368	NA	NA	NA	NA	<368
MW-113	(7-8')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<371	<371	NA	NA	NA	NA	<371
MW-114	(3-4')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	33,900	4,400	NA	NA	NA	NA	6,190
MW-114	(8-9')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	724	<383	NA	NA	NA	NA	<383
MW-115	(2-3')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<387	<387	NA	NA	NA	NA	<387
MW-115	(7-8')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<406	<406	NA	NA	NA	NA	<406
MW-116	(7-8')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<382	<382	NA	NA	NA	NA	<382
MW-117	(6-7')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<375	<375	NA	NA	NA	NA	<375
MW-118	(10-11')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	<350	NA	NA	NA	NA	<350
MW-119	(6-7')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<364	<364	NA	NA	NA	NA	<364
MW-120	(4-5')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<401	<401	NA	NA	NA	NA	<401
MW-121	(9-10')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<369	<369	NA	NA	NA	NA	<369
MW-122	(4-5')	6/15/2020	<352	<352	<352	<352	<352	<352	<885	<1710	<352	<94.4	<352	<1710	<352	689	<352	<102	<352	<1070	<352	<352
MW-123	(4-5')	6/15/2020	<344	<344	<344	<344	<344	<344	<864	<1670	<344	<92.2	<344	<1670	<344	<344	<344	<100	<344	<1040	<344	<344
MW-124	(4-5')	6/15/2020	<350	<350	<350	<350	<350	<350	<880	<1700	<350	<93.9	<350	<1700	<350	<350	<350	<102	<350	<1060	<350	<350
MW-125	(4-5')	6/16/2020	<347	<347	<347	<347	<347	<347	<872	<1680	<347	<93.0	<347	<1680	<347	4,260	<347	<101	<347	<1050	<347	914
MW-126	(4-5')	6/15/2020	<344	<344	<344	<344	<344	<344	<864	<1670	<344	<92.1	<344	<1670	<344	426	<344	<100	<344	<1040	<344	<344
MW-126	(7.5-8.5')	6/15/2020	<333	<333	<333	<333	<333	<333	<837	<1610	<333	<89.3	<333	<1610	<333	<333	<333	<96.9	<333	<1010	<333	<333
MW-127	(6-7')	6/15/2020	<366	<366	<366	<366	<366	<366	<920	<1770	<366	<98.1	<366	<1770	<366	<366	<366	<106	<366	<1110	<366	<366
MW-127	(10-11')	6/15/2020	<8880	<8880	<8880	<8880	<8880	<8880	<22300	<43100	<8880	<2380	<8880	<43100	<8880	<8880	16,500	<2580	<8880	<26900	<8880	<8880
MW-128	(4-5')	6/15/2020	988	<427	<427	<427	<427	<427	<1070	<2070	<427	<115	<427	<2070	<427	5,490	<427	<124	<427	<1290	<427	454
MW-128	(8-9')	6/15/2020	<347	<347	<347	<347	<347	<347	<873	<1680	<347	<93.1	<347	<1680	<347	<347	<347	<101	<347	<1050	<347	<347
MW-129	(3-4')	6/15/2020	<1630	<1630	<1630	<1630	<1630	<1630	<4100	<7900	<1630	<437	<1630	<7900	<1630	2,960	<1630	<474	<1630	<4940	<1630	<1630
MW-130	(4-5')	6/15/2020	<348	<348	<348	<348	<348	<348	<875	<1690	<348	<93.3	<348	<1690	<348	<348	<348	<101	<348	<1050	<348	<348
MW-131	(2-3')	6/15/2020	<422	<422	<422	<422	<422	<422	<1060	<2050	<422	<113	<422	<2050	<422	<422	<422	<123	<422	<1280	<422	<422
MW-132	(5.5-6.5')	8/12/2020	<369	<369	<369	<369	<369	<369	<929	<1790	<369	<99.1	<369	<1790	<369	3,230	<369	<107	<369	<1120	<369	718
MW-133	(3-4')	8/12/2020	2,430	<1790	<1790	<1790	<1790	<1790	<4510	<8690	<1790	<481	<1790	<8690	<1790	53,000	4,150	<521	<1790	<5430	<1790	11,400
MW-133	(10-11')	8/12/2020	<3940	<3940	<3940	<3940	<3940	<3940	<9900	<19100	<3940	<1060	5,080	<19100	5170	38,500	<3940	<1140	<3940	<11900	<3940	7,940

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Polynuclear aromatic hydrocarbons (PNAs) analyzed by EPA Method 8270 SIM.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1B - Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/kg); VIAP Screening Levels Updated September 4, 2020.			Isophorone	2-Methyl naphthalene	2-Methylphenol(o-Cresol)	3&4-Methylphenol(m&p Cresol)	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenol	4-Nitrophenol	N-Nitrosodimethylamine	N-Nitro-di-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	1,2,4-Trichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
CAS Number			78-59-1	91-57-6	95-48-7	106-44-5	91-20-3	88-74-4	99-09-2	100-01-6	98-95-3	88-75-5	100-02-7	62-75-9	62-16-47	86-30-6	87-86-5	85-01-8	108-95-2	129-00-0	120-82-1	95-95-4	88-06-2
Residential Drinking Water Protection Criteria			**15,000**	**57,000**	**7,400**	**7,400**	**35,000**	--	--	--	**300; 68**	**400**	--	--	**330; 100**	**5,400**	**22**	**56,000**	**88,000**	**480,000**	**4,200**	**39,000**	**2,400**
Nonresidential Drinking Water Protection Criteria			62,000	170,000	20,000	20,000	100,000	--	--	--	300; 190	1,200	--	--	330; 100	22,000	22	160,000	260,000	480,000	4,200	110,000	9,400
Groundwater Surface Water Interface Protection Criteria			26,000	4,200	1,000; 600	1,000; 600	730	--	--	--	3,600	ID	--	--	NA	NA	(G,X)	2,100	9,000	ID	5,900	NA	330; 100
Direct Contact Criteria			*22,000,000*	*8.10E+06*	*3.60E+07*	*3.60E+07*	*1.60E+07*	--	--	--	*340,000*	*2,000,000*	--	--	*5,400*	*7,800,000*	*3.20E+05*	*5.20E+06*	*2.30E+08*	*8.40E+07*	*5.80E+06*	*7.30E+07*	*3.30E+06*
Residential Volatilization to Indoor Air Pathway (VIAP)			--	**1,700**	--	--	**67**	--	--	--	**170**	--	--	--	--	--	--	**1,700**	--	**2.50E+07**	**53**	--	--
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			--	30,000	--	--	1,900	--	--	--	4,800	--	--	--	--	--	--	29,000	--	4.40E+08	930	--	--
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in microgram per kilogram (ug/kg)**																				
MW-104	(14-15')	3/23/2020	NA	<388	NA	NA	<388	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<388	NA	<388	NA	NA	NA
MW-105	(12-13')	3/23/2020	NA	<389	NA	NA	<389	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<389	NA	<389	NA	NA	NA
MW-106	(5-6')	3/25/2020	NA	<357	NA	NA	<357	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<357	NA	<357	NA	NA	NA
MW-107	(6-7')	3/25/2020	NA	<374	NA	NA	<374	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<374	NA	<374	NA	NA	NA
MW-108	(4-5')	3/25/2020	NA	<349	NA	NA	<349	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<349	NA	<349	NA	NA	NA
MW-109	(4-5')	3/25/2020	NA	<348	NA	NA	<348	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<348	NA	<348	NA	NA	NA
MW-110	(4-5')	3/25/2020	NA	<350	NA	NA	<350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	NA	<350	NA	NA	NA
MW-113	(2-3')	3/23/2020	NA	<368	NA	NA	<368	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<368	NA	<368	NA	NA	NA
MW-113	(7-8')	3/24/2020	NA	<371	NA	NA	<371	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<371	NA	<371	NA	NA	NA
MW-114	(3-4')	3/24/2020	NA	<3,950	NA	NA	<3,950	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**33,500**	NA	24,900	NA	NA	NA
MW-114	(8-9')	3/24/2020	NA	<383	NA	NA	<383	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	561	NA	528	NA	NA	NA
MW-115	(2-3')	3/24/2020	NA	<387	NA	NA	<387	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<387	NA	<387	NA	NA	NA
MW-115	(7-8')	3/24/2020	NA	<406	NA	NA	<406	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<406	NA	<406	NA	NA	NA
MW-116	(7-8')	3/30/2020	NA	<382	NA	NA	<382	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<382	NA	<382	NA	NA	NA
MW-117	(6-7')	3/30/2020	NA	<375	NA	NA	<375	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<375	NA	<375	NA	NA	NA
MW-118	(10-11')	3/30/2020	NA	<350	NA	NA	<350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<350	NA	<350	NA	NA	NA
MW-119	(6-7')	4/21/2020	NA	<364	NA	NA	<364	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<364	NA	<364	NA	NA	NA
MW-120	(4-5')	4/21/2020	NA	<401	NA	NA	<401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<401	NA	<401	NA	NA	NA
MW-121	(9-10')	4/21/2020	NA	<369	NA	NA	<369	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<369	NA	<369	NA	NA	NA
MW-122	(4-5')	6/15/2020	<352	<352	<1070	<1070	<352	<352	<352	<352	<352	<352	<1710	<352	<352	<352	<1570	<352	<352	586	<352	<352	<352
MW-123	(4-5')	6/15/2020	<344	<344	<1040	<1040	<344	<344	<344	<344	<344	<344	<1670	<344	<344	<344	<1530	<344	<344	<344	<344	<344	<344
MW-124	(4-5')	6/15/2020	<350	<350	<1060	<1060	<350	<350	<350	<350	<350	<350	<1700	<350	<350	<350	<1560	<350	<350	<350	<350	<350	<350
MW-125	(4-5')	6/16/2020	<347	<347	<1050	<1050	<347	<347	<347	<347	<347	<347	<1680	<347	<347	<347	<1540	**2,250**	<347	3,800	<347	<347	<347
MW-126	(4-5')	6/15/2020	<344	<344	<1040	<1040	<344	<344	<344	<344	<344	<344	<1670	<344	<344	<344	<1530	<344	<344	436	<344	<344	<344
MW-126	(7.5-8.5')	6/15/2020	<333	<333	<1010	<1010	<333	<333	<333	<333	<333	<333	<1610	<333	<333	<333	<1480	<333	<333	<333	<333	<333	<333
MW-127	(6-7')	6/15/2020	<366	<366	<1110	<1110	<366	<366	<366	<366	<366	<366	<1770	<366	<366	<366	<1630	<366	<366	<366	<366	<366	<366
MW-127	(10-11')	6/15/2020	<8880	**61,800**	<26900	<26900	<8880	<8880	<8880	<8880	<8880	<8880	<43100	<8880	<8880	<8880	<39600	**68,700**	<8880	23,800	<8880	<8880	<8880
MW-128	(4-5')	6/15/2020	<427	<427	<1290	<1290	**591**	<427	<427	<427	<427	<427	<2070	<427	<427	<427	<1900	**6,780**	<427	4,370	<427	<427	<427
MW-128	(8-9')	6/15/2020	<347	<347	<1050	<1050	<347	<347	<347	<347	<347	<347	<1680	<347	<347	<347	<1550	<347	<347	<347	<347	<347	<347
MW-129	(3-4')	6/15/2020	<1630	<1630	<4940	<4940	<1630	<1630	<1630	<1630	<1630	<1630	<7900	<1630	<1630	<1630	<7260	**1,870**	<1630	2,620	<1630	<1630	<1630
MW-130	(4-5')	6/15/2020	<348	<348	<1050	<1050	<348	<348	<348	<348	<348	<348	<1690	<348	<348	<348	<1550	<348	<348	<348	<348	<348	<348
MW-131	(2-3')	6/15/2020	<422	<422	<1280	<1280	<422	<422	<422	<422	<422	<422	<2050	<422	<422	<422	<1880	<422	<422	<422	<422	<422	<422
MW-132	(5.5-6.5')	8/12/2020	<369	<369	<1120	<1120	<369	<369	<369	<369	<369	<369	<1790	<369	<369	<369	<1650	**2,130**	<369	3,040	<369	<369	<369
MW-133	(3-4')	8/12/2020	<1790	<1790	<5430	<5430	1,960	<1790	<1790	<1790	<1790	<1790	<8690	<1790	<1790	<1790	<7980	38,300	<1790	46,900	<1790	<1790	<1790
MW-133	(10-11')	8/12/2020	<3940	<3940	<11900	<11900	<3940	<3940	<3940	<3940	<3940	<3940	<19100	<3940	<3940	<3940	<17500	**22,100**	<3940	25,600	<3940	<3940	<3940

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4,600	Analyte exceeds Residential Drinking Water Protection Criteria.
4,600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4,600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
37,000	Analyte exceeds Direct Contact Criteria.
22	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
390	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
--	No criteria developed.
NLV	Not Likely to Volatilize
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Polynuclear aromatic hydrocarbons (PNAs) analyzed by EPA Method 8270 SIM.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 1D - Summary of Soil Analytical Results - Metals
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated December 30, 2013; GSI Protection Criteria Updated June 25, 2018 (ug/kg)			PCB-1016 (Aroclor 1016)	PCB-1221 (Aroclor 1221)	PCB-1232 (Aroclor 1232)	PCB-1242 (Aroclor 1242)	PCB-1248 (Aroclor 1248)	PCB-1254 (Aroclor 1254)	PCB-1260 (Aroclor 1260)	PCB-1262 (Aroclor 1262)	PCB-1268 (Aroclor 1268)
CAS Number			12674-11-2	11104-28-2	11141-16-5	53469-21-9	12672-29-6	11097-69-1	11096-82-5	37324-23-5	11100-14-4
Residential Drinking Water Criteria			**NLL**	**NLL**	**NLL**	**NLL**	**NLL**	**NLL**	**NLL**	**NLL**	**NLL**
Nonresidential Drinking Water Criteria			NLL	NLL	NLL	NLL	NLL	NLL	NLL	NLL	NLL
Groundwater Surface Water Interface Criteria			NLL	NLL	NLL	NLL	NLL	NLL	NLL	NLL	NLL
Residential Direct Contact Criteria			***4,000***	***4,000***	***4,000***	***4,000***	***4,000***	***4,000***	***4,000***	***4,000***	***4,000***
Nonresidential Direct Contact Criteria			*16,000*	*16,000*	*16,000*	*16,000*	*16,000*	*16,000*	*16,000*	*16,000*	*16,000*
Volatilization to Indoor Air Pathway (VIAP)			16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000	16,000,000
Sample ID	**Sample Depth (feet)**	**Sample Date**	**Reported in micrograms per kilogram (ug/kg)**								
MW-104	(14-15')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-105	(12-13')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-106	(5-6')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-107	(6-7')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-108	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-109	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-110	(4-5')	3/25/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-113	(2-3')	3/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-113	(7-8')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-114	(3-4')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-114	(8-9')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-115	(2-3')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-115	(7-8')	3/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-116	(7-8')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-117	(6-7')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-118	(10-11')	3/30/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-119	(6-7')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-120	(4-5')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-121	(9-10')	4/21/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-122	(4-5')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-123	(4-5')	6/15/2020	<350	<350	<350	<350	<350	<350	<350	<350	<350
MW-124	(4-5')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-125	(4-5')	6/16/2020	<350	<350	<350	<350	<350	<350	<350	<350	<350
MW-126	(4-5')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-126	(7.5-8.5')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-127	(6-7')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-127	(10-11')	6/15/2020	<358	<358	<358	<358	<358	<358	<358	<358	<358
MW-128	(4-5')	6/15/2020	<383	<383	<383	<383	<383	<383	<383	<383	<383
MW-128	(8-9')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-129	(3-4')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-130	(4-5')	6/15/2020	<349	<349	<349	<349	<349	<349	<349	<349	<349
MW-131	(2-3')	6/15/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-132	(5.5-6.5')	8/12/2020	<359	<359	<359	<359	<359	<359	<359	<359	<359
MW-133	(3-4')	8/12/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-133	(10-11')	8/12/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
NLL	Analyte not likely to leach to groundwater (residential)
NLL	Analyte not likely to leach to groundwater (non-residential)
4,000	Analyte exceeds groundwater surface water interface protection criteria
4,000	Analyte exceeds residential direct contact criteria
4,000	Analyte exceeds nonresidential direct contact criteria
16,000,000	Analyte exceeds volatilization to indoor air pathway (VIAP)
NA	Not analyzed

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

EGLE= Michigan Department of Environment, Great Lakes, and Energy.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

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Table 2A - Summary of Groundwater Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			Acetone	Acrylonitrile	tert-Amylmethyl ether	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone (MEK)	tert-Butyl Alcohol	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cyclohexane	1,2-Dibromo-3-chloropropane	Dibromochloromethane	1,2-Dibromoethane (EDB)	Dibromomethane
CAS Number			67-64-1	107-13-1	994-05-8	71-43-2	108-86-1	NA	74-97-5	75-25-2	74-83-9	78-93-3	75-65-0	104-51-8	135-98-8	98-06-6	75-15-0	56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	108-94-1	13440-24-9	124-48-1	95-50-1	74-95-3
Residential Drinking Water Criteria			**730**	**2.6**	**190**	**5**	**18**	**--**	**80**	**80**	**10**	**13,000**	**3,900**	**80**	**80**	**80**	**800**	**5**	**100**	**430**	**80**	**260**	**--**	**--**	**80**	**600**	**80**
Nonresidential Drinking Water Criteria			2,100	11	190	5	50	--	80	80	29	38,000	11,000	230	230	230	2,300	5	100	1,700	80	1,100	--	--	80	600	230
Groundwater Surface Water Interface Criteria			1,700	2.0; 1.2	--	200	--	--	ID	ID	5.0; 4.2	2,200	--	ID	ID	ID	ID	38	25	1,100	350	ID	--	--	ID	13	--
Residential Volatilization to Indoor Air Pathway (VIAP)			**50,000**	**4.6**	**82**	**1.0**	**62**	**--**	**1.2**	**89**	**2.1**	**2,600**	**17,000**	**44**	**270**	**0.077**	**92**	**0.41**	**33**	**620**	**0.49**	**15**	**290**	**--**	**0.78**	**0.13**	**8.8**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			40000000	330	3,500	66	2,700	--	73	6,200	80	4.30E+06	7.50E+05	1,600	12,000	2.6	3,100	18	1,400	22,000	32	560	8,100	--	130	8.9	380
Water Solubility			1.00E+09	7.50E+07	--	*1.75E+06*	--	--	*4.74E+06*	*3.10E+06*	*1.45E+07*	*2.40E+08*	*1.00E+09*	--	--	--	*1.19E+06*	*7.93E+05*	*4.72E+05*	*5.74E+06*	*7.92E+06*	*6.34E+06*	--	--	*2.60E+06*	*1.56E+05*	--
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																								
MW-101	7.5' - 12.5'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-102	8' - 13'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-103	8' - 13'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-104	15' - 20'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-105	9' - 14'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-106	7.5' - 12.5'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	8.3	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-107	7' - 12'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-108	5' - 10'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-109	5' - 10'	4/8/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-110	5' - 10'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-111	4' - 9'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-112	4' - 9'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-113	8' - 13'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-114	8' - 13'	4/9/2020	<50.0	<2.0	<5.0	1.9	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-115	7.5' - 12.5'	4/9/2020	<50.0	<2.0	<5.0	1.5	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-116	8' - 13'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-117	7.5' - 12.5'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-118	11' - 16'	4/9/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-119	5' - 10'	4/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-120	3' - 8'	4/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-121	8' - 13'	4/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.59	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-122	5' - 10'	6/24/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-123	5' - 10'	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-124	7' - 12'	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-125	8' - 13'	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-126	8.5' - 13.5'	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-127	8' - 13'	6/24/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	2.7	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-128	8' - 13'	6/24/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-129	8' - 13'	6/24/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-130	5' - 10'	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-131	5' - 10'	6/24/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-12	Unknown	6/23/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<5.0	<10.0	<0.25	<5.0	<0.23	<5.0
MW-132	10' - 15'	8/13/2020	162	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	5.2	<10.0	<0.25	<5.0	<0.23	<5.0
MW-133	10' - 15'	8/13/2020	<50.0	<2.0	<5.0	<1.0	<1.0	<0.22	<1.0	<1.0	<5.0	<25.0	<50.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	9.2	<10.0	<0.25	<5.0	<0.23	<5.0

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4600	Analyte exceeds Residential Drinking Water Protection Criteria.
4600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
4.6	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
330	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
4240	Analyte exceeds Water Solubility.
--	No criteria developed.
NA	Sample not analyzed for this analyte

Volatile organic compounds (VOCs) were anlalyzed by EPA Method 8260B.
Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.
EGLE = Michigan Department of Environment, Great Lakes, and Energy.
VIAP = Volatilization to Indoor Air Pathway Screening Levels.
J= Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.
VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2A - Summary of Groundwater Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	trans-1,4-Dichloro-2-butene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Diethyl ether (Ethyl ether)	Diisopropyl ether	1,4-Dioxane	Ethylbenzene	Ethyl-tert-butyl ether	Hexachloroethane	2-Hexanone	Iodomethane	Isopropylbenzene (Cumene)	p-Isopropyltoluene	Methylene Chloride	2-Methylnaphthalene	4-Methyl-2-pentanone (MIBK)
CAS Number			95-50-1	541-73-1	106-46-7	110-57-6	75-71-8	75-34-3	107-06-2	7-53-4	156-59-2	156-60-5	78-87-5	638-04-0	918-84-3	60-29-7	108-20-3	123-91-1	100-41-4	637-92-3	67-72-1	591-78-6	74-88-4	98-82-8	99-87-6	75-09-2	91-57-6	108-10-1
Residential Drinking Water Criteria			**600**	**6.6**	**75**	--	**1,700**	**880**	**5**	**7**	**70**	**100**	**5**	--	--	**10**	**30**	**7.2**	**74**	**49**	**7.3**	**1,000**	--	**800**	--	**5**	**260**	**1,800**
Nonresidential Drinking Water Criteria			600	19	75	--	4,800	2,500	5	7	70	100	5	--	--	10	86	350	74	49	21	2,900	--	2,300	--	5	750	5200
Groundwater Surface Water Interface Criteria			13	28	17	--	ID	740	360	130	620	1,500	230	--	--	ID	ID	280	18	ID	7	ID	--	28	--	1,500	19	ID
Residential Volatilization to Indoor Air Pathway (VIAP)			**370**	**2.6**	**5.9**	--	**13**	**4.7**	**1.4**	**4.7**	**3.4**	**16**	**2.6**	--	--	**1,200**	**36**	**1,900**	**2.8**	**22**	**1.5**	**660**	--	**0.60**	--	**79**	**66**	**200**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			16,000	110	400	--	410	300	97	480	140	580	110	--	--	53,000	13,000	1.30E+05	170	580	100	29,000	--	36	--	12,000	2,900	3.30E+05
Water Solubility			*1.56E+05*	*1.11E+05*	*73,800*	--	*3.00E+05*	*5.06E+06*	*8.52E+06*	*2.25E+06*	*3.50E+06*	*6.30E+06*	*2.80E+06*	--	--	*6.1E+7 (S)*	*8,041*	--	*1.69E+05*	*5.63E+06*	*5.00E+04*	*1.60E+07*	--	*56,000*	--	*1.70E+07*	*2.46E+04*	*2.00E+07*
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																									
MW-101	7.5' - 12.5'	4/8/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-102	8' - 13'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-103	8' - 13'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-104	15' - 20'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-105	9' - 14'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-106	7.5' - 12.5'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-107	7' - 12'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-108	5' - 10'	4/8/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-109	5' - 10'	4/8/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-110	5' - 10'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-111	4' - 9'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-112	4' - 9'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-113	8' - 13'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-114	8' - 13'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	1.1	<1.0	**6.4**	1.2	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-115	7.5' - 12.5'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-116	8' - 13'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-117	7.5' - 12.5'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-118	11' - 16'	4/9/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-119	5' - 10'	4/23/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-120	3' - 8'	4/23/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-121	8' - 13'	4/23/2020	<1.0	<1.0	<1.0	<0.82	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.45	<5.0	<0.28	<5.0	<5.0	<50.0
MW-122	5' - 10'	6/24/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-123	5' - 10'	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-124	7' - 12'	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-125	8' - 13'	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-126	8.5' - 13.5'	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-127	8' - 13'	6/24/2020	1.6	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	0.12 J	<5.0	18.5 J	<50.0
MW-128	8' - 13'	6/24/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-129	8' - 13'	6/24/2020	<1.0	<1.0	<1.0	<0.40	<5.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-130	5' - 10'	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-131	5' - 10'	6/24/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	0.46	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-12	Unknown	6/23/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	NA	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-132	10' - 15'	8/13/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	0.23	**3.7**	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0
MW-133	10' - 15'	8/13/2020	<1.0	<1.0	<1.0	<0.40	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0	<5.0	<0.090	<1.0	<5.0	<5.0	<50.0	<0.51	<5.0	<0.11	<5.0	<5.0	<50.0

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4600	Analyte exceeds Residential Drinking Water Protection Criteria.
4600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
4.6	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
330	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
4240	Analyte exceeds Water Solubility.
--	No criteria developed.
NA	Sample not analyzed for this analyte

Volatile organic compounds (VOCs) were anlalyzed by EPA Method 8260B.
Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.
EGLE = Michigan Department of Environment, Great Lakes, and Energy.
VIAP = Volatilization to Indoor Air Pathway Screening Levels.
J= Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.
VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2A - Summary of Groundwater Analytical Results - Volatile Organic Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			Methyl-tert-butyl ether	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	Xylenes	n-Butanol	Ethanol	Methanol
CAS Number			1634-04-4	91-20-3	103-65-1	100-42-5	630-20-6	79-34-5	127-18-4	109-99-9	108-88-3	87-61-6	120-82-1	71-55-6	79-00-5	79-01-6	75-69-4	96-18-4	526-73-8	95-63-6	108-67-8	75-01-4	1330-20-7	71-36-3	64-17-5	67-56-1
Residential Drinking Water Criteria			**40**	**520**	**80**	**100**	**77**	**9**	**5**	**95**	**790**	**--**	**70**	**200**	**5**	**5**	**2,600**	**42**	**--**	**63**	**72**	**2**	**280**	**950**	**1.90E+06**	**3,700**
Nonresidential Drinking Water Criteria			40	1500	230	100	320	35	5	270	790	--	70	200	5	5	7,300	120	--	63	72	2	280	2,700	3.80E+06	1.00E+04
Groundwater Surface Water Interface Criteria			7,100	11	ID	80	ID	78	60	11,000	270	--	99	89	330	200	--	--	--	17	45	13	49	9,800	ID	5.90E+05
Residential Volatilization to Indoor Air Pathway (VIAP)			**250**	**4.2**	**43**	**33**	**3.1**	**2.4**	**1.5**	**45,000**	**300**	**58**	**3.8**	**180**	**0.47**	**0.073**	**22**	**1.9**	**43**	**25**	**18**	**0.12**	**75**	**98,000**	**100,000**	**120,000**
Nonresidential Volatilization to Indoor Air Pathway (VIAP)			17,000	300	6,100	2,300	210	170	130	2.00E+05	59,000	2,600	160	19,000	20	10	560	84	1,800	990	690	18.0	3,000	4.30E+06	2.30E+08	230000000
Water Solubility			*4.68E+07*	*3.10E+04*	--	*3.10E+05*	*1.10E+06*	*2.97E+06*	*2.00E+05*	*1.00E+09*	*5.26E+05*	--	*3.00E+05*	*1.33E+06*	*4.42E+06*	*1.10E+06*	*1.10E+06*	--	--	*5.59E+04*	*6.12E+04*	*2.76E+06*	*1.86E+05*	*7.40E+07*	*9.70E+07*	*2.90E+07*
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																							
MW-101	7.5' - 12.5'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-102	8' - 13'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-103	8' - 13'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	1.9 J	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-104	15' - 20'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	2.3	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-105	9' - 14'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-106	7.5' - 12.5'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-107	7' - 12'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	**18.5**	4.5	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-108	5' - 10'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	1.5 J	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	<400
MW-109	5' - 10'	4/8/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-110	5' - 10'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-111	4' - 9'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	**2.7**	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-112	4' - 9'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-113	8' - 13'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-114	8' - 13'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	**1.4**	<1.0	<1.0	<5.0	<1.0	<1.0	**12.9**	0.22	<800	<1,000	<400
MW-115	7.5' - 12.5'	4/9/2020	<5.0	**6.9**	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	2.46 J	<800	<1,000	<400
MW-116	8' - 13'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-117	7.5' - 12.5'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-118	11' - 16'	4/9/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1,000	<400
MW-119	5' - 10'	4/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	1,470 J
MW-120	3' - 8'	4/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	1,350 J
MW-121	8' - 13'	4/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.55	<800	<1,000	1,540 J
MW-122	5' - 10'	6/24/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-123	5' - 10'	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-124	7' - 12'	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-125	8' - 13'	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1000	<400
MW-126	8.5' - 13.5'	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	***6.0***	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	**1.1**	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-127	8' - 13'	6/24/2020	<5.0	**8.0**	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	1.6 J	<1.0	<5.0	2.9 J	1.1 J	<1.0	2.37	<800	<1000	<400
MW-128	8' - 13'	6/24/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	***7.8***	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1000	<400
MW-129	8' - 13'	6/24/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	**1.5**	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-130	5' - 10'	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	<800	<1000	<400
MW-131	5' - 10'	6/24/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	0.18	NA	NA	NA
MW-12	Unknown	6/23/2020	<5.0	<5.0	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA
MW-132	10' - 15'	8/13/2020	<5.0	**29.2**	<100	<1.0	<1.0	<1.0	<1.0	<90.0	1.5	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	2.2 J	1.1 J	<1.0	20.9	<800	<1000	**8,740**
MW-133	10' - 15'	8/13/2020	<5.0	**8.9**	<100	<1.0	<1.0	<1.0	<1.0	<90.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<0.40	NA	NA	NA

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
4600	Analyte exceeds Residential Drinking Water Protection Criteria.
4600	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
4600	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
4.6	Analyte exceeds Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
330	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.
4240	Analyte exceeds Water Solubility.
--	No criteria developed.
NA	Sample not analyzed for this analyte

Volatile organic compounds (VOCs) were anlalyzed by EPA Method 8260B.
Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.
EGLE = Michigan Department of Environment, Great Lakes, and Energy.
VIAP = Volatilization to Indoor Air Pathway Screening Levels.
J= Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.
VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2B - Summary of Groundwater Analytical Results - Semi Volatile Organic Compounds (SVOCs)
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(ghi) perylene	Benzo(k) fluoranthene	4-Bromophenylphenyl ether	Butylbenzylphthalate	Carbazole	4-Chloro-3-methylphenol	bis(2-Chloroethoxy)methane	bis(2-Chloroethyl)ether	bis(2-Chloroisopropyl)ether	2-Chloronaphthalene	2-Chlorophenol	4-Chlorophenylphenyl ether	Chrysene	Dibenzo(ah) anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethylphthalate	2,4-Dimethylphenol	Dimethylphthalate	Di-n-butyl phthalate	4,6-Dinitro-2-methylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene
CAS Number	83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	101-55-3	85-68-7	86-74-8	59-50-7	111-91-1	111-44-4	108-60-1	91-58-7	95-57-8	7005-72-3	218-01-9	53-70-3	132-64-9	120-83-2	84-66-2	105-67-9	131-11-3	84-7-42	534-52-1	51-28-5	121-14-2
Residential Drinking Water Criteria	**1,300**	**52**	**43**	**2.1**	**5**	**1.5**	**1.0; 0.26**	**1.0; 0.8**	--	**1,200**	**85**	**150**	--	**2**	--	**1,800**	**45**	--	**1.6**	**2.0; 0.21**	**ID**	**73**	**5,500**	**370**	**73,000**	**880**	**20; 2.6**	--	**7.7**
Nonresidential Drinking Water Criteria	3,800	150	43	8.5	5	1.5	1.0; 0.26	1.0; 0.8	--	2,700	350	420	--	8.3	--	5,200	130	--	1.6	2.0; 0.85	ID	210	16,000	1,000	2.10E+05	2,500	20; 7.3	--	32
Groundwater Surface Water Interface Criteria	38	ID	ID	ID	ID	ID	ID	NA	--	67	10; 4.0	7.4	--	1.0; 0.79	--	NA	18	--	ID	ID	4	11	110	380	NA	9.7	NA	--	NA
Residential Groundwater VIAP	**4,200**	**3,900**	**43**	**NLV**	**NLV**	**ID**	**NLV**	**NLV**	--	**NLV**	**NLV**	**NLV**	--	**38,000**	--	**ID**	**4.90E+05**	--	**ID**	**NLV**	**10,000**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	**NLV**	--	**NLV**
Nonresidential Groundwater VIAP	4,200	3,900	43	NLV	NLV	ID	NLV	NLV	--	NLV	NLV	NLV	--	210,000	--	ID	1.10E+06	--	ID	NLV	10,000	NLV	NLV	NLV	NLV	NLV	NLV	--	NLV
Water Solubility	*4,240*	*3,930*	*43.4*	*9.4*	*1.62*	*1.5*	*0.8*	*0.26*	--	*2,690*	*7,480*	*3,900,000*	--	*17,200,000*	--	*6,740*	*22,000,000*	--	*1.6*	*2.49*	*10,000*	*4,500,000*	*1,080,000*	*7,870,000*	*4,190,000*	*11,200*	*200,000*	--	*270,000*
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																										
MW-101	7.5' - 12.5'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-102	8' - 13'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-103	8' - 13'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-104	15' - 20'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-105	9' - 14'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-106	7.5' - 12.5'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-107	7' - 12'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-108	5' - 10'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-109	5' - 10'	4/8/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-110	5' - 10'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-111	4' - 9'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-112	4' - 9'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-113	8' - 13'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-114	8' - 13'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-115	7.5' - 12.5'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-116	8' - 13'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-117	7.5' - 12.5'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-118	11' - 16'	4/9/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-119	5' - 10'	4/23/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-120	3' - 8'	4/23/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-121	8' - 13'	4/23/2020	<5.0	<5.0	<5.0	<1.0	<0.20	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
MW-122	5' - 10'	6/24/2020	<4.8	<4.8	<4.8	<0.95	<0.19	<0.95	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	<0.95	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-123	5' - 10'	6/23/2020	<4.8	<4.8	<4.8	<0.95	<0.19	<0.95	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	<0.95	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-124	7' - 12'	6/23/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	<9.1	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-125	8' - 13'	6/23/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	<9.1	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-126	8.5' - 13.5'	6/23/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	<9.1	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-127	8' - 13'	6/24/2020	<4.8	<4.8	<4.8	1.2	1.1	1.3	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	1.3	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-128	8' - 13'	6/24/2020	<4.8	<4.8	<4.8	<0.95	<0.19	<0.95	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	<0.95	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-129	8' - 13'	6/24/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	<9.1	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-130	5' - 10'	6/23/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	<9.1	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-131	5' - 10'	6/24/2020	<4.8	<4.8	<4.8	<0.95	<0.19	<0.95	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	<0.95	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-12	Unknown	6/23/2020	<4.8	<4.8	<4.8	<0.95	<0.19	<0.95	<0.95	<0.95	<3.4	<4.8	<9.5	<4.8	<3.6	<2.1	<3.8	<4.8	<9.5	<2.7	<0.95	<1.9	<3.8	<9.5	<4.8	<4.8	<4.8	<4.8	<19.0	<3.7	<4.8
MW-132	10' - 15'	8/13/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	11.5	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5
MW-133	10' - 15'	8/13/2020	<4.5	<4.5	<4.5	<0.91	<0.18	<0.91	<0.91	<0.91	<3.2	<4.5	10.9	<4.5	<3.4	<2.0	<3.6	<4.5	<9.1	<2.6	<0.91	<1.8	<3.6	<9.1	<4.5	<4.5	<4.5	<4.5	<18.2	<3.5	<4.5

Notes:

1.2	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
1,300	Analyte exceeds Residential Drinking Water Protection Criteria.
3,800	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
2.0	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
4,200	Analyte exceeds Residential Groundwater Volatilization to Indoor Air Protection (VIAP).
4,200	Analyte exceeds Nonresidential Groundwater Volatilization to Indoor Air Protection (VIAP).
4,240	Analyte exceeds Water Solubility.
--	No criteria developed.
NA	Sample not analyzed for this analyte.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Polynuclear aromatic hydrocarbons (PNAs) were analyzed by EPA Method 8270 SIM 40E.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway Screening Levels.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2B - Summary of Groundwater Analytical Results - Semi Volatile Organic Compounds (SVOCs)
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			2,6-Dinitrotoluene	Di-n-octylphthalate	1,2-Diphenylhydrazine	bis(2-Ethylhexyl)phthalate	Fluoranthene	Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(123cd) pyrene	Isophorone	2-Methyl naphthalene	2-Methylphenol(o-Cresol)	3&4-Methylphenol(m&p Cresol)	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenol	4-Nitrophenol	N-Nitrosodimethylamine	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	1,2,4-Trichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
CAS Number			606-20-2	117-84-0	122-66-7	117-81-7	206-44-0	86-73-7	87-68-3	118-74-1	77-47-4	67-72-1	193-39-5	78-59-1	91-57-6	95-48-7	106-44-5	91-20-3	88-74-4	99-09-2	100-01-6	98-95-3	88-75-5	100-02-7	62-75-9	62-16-47	86-30-6	87-86-5	85-01-8	108-95-2	129-00-0	120-82-1	95-95-4	88-06-2
Residential Drinking Water Criteria			--	**130**	--	**6**	**210**	**880**	**15**	**1**	**50**	**7.3**	**2.0; 0.022**	**770**	**260**	**370**	**370**	**520**	--	--	--	**3.4**	**20**	--	--	**5.0; 0.19**	**270**	**1**	**52**	**4,400**	**140**	**70**	**730**	**120**
Nonresidential Drinking Water Criteria			--	380	--	6	210	200	42	1	50	21	2.0; 0.022	3,100	750	1,000	1,000	1,500	--	--	--	9.6	58	--	--	5.0; 0.77	1,100	1	150	13,000	140	70	2100	470
Groundwater Surface Water Interface Criteria			--	ID	--	14	2	12	0.05	0.2; 0.0003	ID	7	ID	1,300	19	30; 25	30; 25	11	--	--	--	180	ID	--	--	NA	NA	(G,X)	2.0; 1.7	450	ID	99	NA	5
Residential Groundwater VIAP			--	**NLV**	--	**NLV**	**210**	**2,000**	**1,600**	**440**	**130**	**27,000**	**NLV**	**NLV**	**25,000**	**NLV**	**NLV**	**31,000**	--	--	--	**280,000**	**NLV**	--	--	**NLV**	**NLV**	**NLV**	**1,000**	**NLV**	**140**	**300,000**	**NLV**	**NLV**
Nonresidential Groundwater VIAP			--	NLV	--	NLV	210	2,000	3,200	3,000	420	50,000	NLV	NLV	25,000	NLV	NLV	31,000	--	--	--	550,000	NLV	--	--	NLV	NLV	NLV	1,000	NLV	140	300,000	NLV	NLV
Water Solubility			--	*3,000*	--	*340*	*206*	*1,980*	*3,230*	*6,200*	*1,800*	*50,000*	*0.022*	*1.20E+07*	*24,600*	*14,000*	*14,000*	*31,000*	--	--	--	*2,090,000*	*2,500,000*	--	--	*9,890,000*	*35,100*	*1,850,000*	*1,000*	*82,800,000*	*135*	*300,000*	*1,200,000*	*800,000*
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																															
MW-101	7.5' - 12.5'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-102	8' - 13'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-103	8' - 13'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-104	15' - 20'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-105	9' - 14'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-106	7.5' - 12.5'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-107	7' - 12'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-108	5' - 10'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-109	5' - 10'	4/8/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-110	5' - 10'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-111	4' - 9'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-112	4' - 9'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-113	8' - 13'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-114	8' - 13'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-115	7.5' - 12.5'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	7.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8	NA	<5.0	NA	NA	NA
MW-116	8' - 13'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-117	7.5' - 12.5'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-118	11' - 16'	4/9/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-119	5' - 10'	4/23/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-120	3' - 8'	4/23/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-121	8' - 13'	4/23/2020	NA	NA	NA	NA	<1.0	<5.0	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA
MW-122	5' - 10'	6/24/2020	<3.2	<4.8	<3.5	<4.8	<0.95	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	<1.9	<4.8	<4.8	<1.0	<4.8	<3.8
MW-123	5' - 10'	6/23/2020	<3.2	<4.8	<3.5	<4.8	<0.95	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	<1.9	<4.8	<4.8	<1.0	<4.8	<3.8
MW-124	7' - 12'	6/23/2020	<3.0	<4.5	<3.3	<4.5	<0.91	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	<4.5	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	<1.8	<4.5	<4.5	<0.99	<4.5	<3.6
MW-125	8' - 13'	6/23/2020	<3.0	<4.5	<3.3	<4.5	<0.91	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	<4.5	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	<1.8	<4.5	<4.5	<0.99	<4.5	<3.6
MW-126	8.5' - 13.5'	6/23/2020	<3.0	<4.5	<3.3	<4.5	<0.91	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	<4.5	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	<1.8	<4.5	<4.5	<0.99	<4.5	<3.6
MW-127	8' - 13'	6/24/2020	<3.2	<4.8	<3.5	<4.8	2.0	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	3.7	<4.8	<4.8	<1.0	<4.8	<3.8
MW-128	8' - 13'	6/24/2020	<3.2	<4.8	<3.5	<4.8	<0.95	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	<1.9	<4.8	<4.8	<1.0	<4.8	<3.8
MW-129	8' - 13'	6/24/2020	<3.0	<4.5	<3.3	<4.5	<0.91	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	<4.5	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	<1.8	<4.5	<4.5	<0.99	<4.5	<3.6
MW-130	5' - 10'	6/23/2020	<3.0	<4.5	<3.3	<4.5	<0.91	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	<4.5	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	<1.8	<4.5	<4.5	<0.99	<4.5	<3.6
MW-131	5' - 10'	6/24/2020	<3.2	<4.8	<3.5	<4.8	<0.95	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	<1.9	<4.8	<4.8	<1.0	<4.8	<3.8
MW-12	Unknown	6/23/2020	<3.2	<4.8	<3.5	<4.8	<0.95	<4.8	<2.9	<2.6	<23.8	<4.8	<1.9	<4.8	<4.8	<9.5	<19.0	<4.8	<5.5	<4.8	<4.6	<2.9	<4.8	<5.8	<2.7	<4.8	<4.8	<1.8	<1.9	<4.8	<4.8	<1.0	<4.8	<3.8
MW-132	10' - 15'	8/13/2020	<3.0	<4.5	<3.3	<4.5	1.5	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	16.2	<5.3	<4.6	<4.4	<2.7	5.7	8.2 J	<2.6	<4.5	<4.5	<1.8	5.6	34.9	<4.5	<0.99	<4.5	<3.6
MW-133	10' - 15'	8/13/2020	<3.0	<4.5	<3.3	<4.5	1.3	<4.5	<2.7	<2.4	<22.7	<4.5	<1.8	<4.5	<4.5	<9.1	<18.2	4.8	<5.3	<4.6	<4.4	<2.7	<4.5	<5.5	<2.6	<4.5	<4.5	<1.8	4.2	<4.5	<4.5	<0.99	<4.5	<3.6

Notes:

1.2	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
1,300	Analyte exceeds Residential Drinking Water Protection Criteria.
3,800	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
2.0	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
4,200	Analyte exceeds Residential Groundwater Volatilization to Indoor Air Protection (VIAP).
4,200	Analyte exceeds Nonresidential Groundwater Volatilization to Indoor Air Protection (VIAP).
4,240	Analyte exceeds Water Solubility.
--	No criteria developed.
NA	Sample not analyzed for this analyte.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Polynuclear aromatic hydrocarbons (PNAs) were analyzed by EPA Method 8270 SIM 40E.

EGLE = Michigan Department of Environment, Great Lakes, and Energy.

VIAP = Volatilization to Indoor Air Pathway Screening Levels.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2C - Summary of Groundwater Analytical Results - Metals
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Calcium	Cadmium	Chromium	Cobalt	Copper	Cyanide	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Tetraethyl lead	Thallium	Titanium	Vanadium	Zinc
CAS Number			7429-90-5	7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-42-8	--	7440-43-9	16065-83-1	7440-48-4	7440-50-8	57-12-5	7439-89-6	7439-92-1	7439-95-4	7439-96-5	7439-97-6	7439-98-7	7440-02-0	7440-09-7	7782-49-2	7440-22-4	17341-25-2	7440-26-4	78-00-2	7440-28-0	7440-32-6	7440-62-2	7440-66-6
Residential Drinking Water Criteria			**50**	**6**	**10**	**2,000**	**4**	**500**	--	**5**	**100**	**40**	**1,000**	**200**	**300**	**4**	**400,000**	**50**	**2**	**73**	**100**	--	**50**	**34**	**230,000**	**4,600**	--	**2**	--	**4.5**	**2,400**
Nonresidential Drinking Water Criteria			50	6	10	2,000	4	500	--	5	100	100	1,000	200	300	4	1,100,000	50	2	210	100	--	50	98	350,000	13,000	--	2	--	62	5,000
Groundwater Surface Water Interface Criteria			NA	130	10	(G)	(G)	7,200	--	(G,X)	(G,X)	100	(G)	5.2	NA	(G,X)	NA	(G,X)	0.0013	3,200	(G)	--	5	0.2; 0.06	--	21,000	--	3.7	--	27	(G)
Residential Volatilization to Indoor Air Pathway Screening Levels (VIAP)			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.088**	--	--	--	--	--	--	--	--	--	--	--	--
Nonresidential Volatilization to Indoor Air Pathway Screening Levels (VIAP)			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.7	--	--	--	--	--	--	--	--	--	--	--	--
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**																												
MW-101	7.5' - 12.5'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-102	8' - 13'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-103	8' - 13'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-104	15' - 20'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-105	9' - 14'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	5.4	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-106	7.5' - 12.5'	4/8/2020	NA	NA	<5.0	135	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-107	7' - 12'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-108	5' - 10'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-109	5' - 10'	4/8/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-110	5' - 10'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-111	4' - 9'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-112	4' - 9'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-113	8' - 13'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-114	8' - 13'	4/9/2020	NA	NA	**10.8**	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-115	7.5' - 12.5'	4/9/2020	NA	NA	<5.0	106	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-116	8' - 13'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-117	7.5' - 12.5'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-118	11' - 16'	4/9/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-119	5' - 10'	4/23/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-120	3' - 8'	4/23/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-121	8' - 13'	4/23/2020	NA	NA	<5.0	<100	NA	NA	NA	<1.0	<10.0	NA	NA	NA	NA	<3.0	NA	NA	<0.079	NA	NA	NA	<5.0	<0.20	NA	NA	NA	NA	NA	NA	NA
MW-122	5' - 10'	6/24/2020	**1,130**	<2.0	<5.0	<100	<1.0	<300	106,000	<1.0	<10.0	<20.0	9.2	<5.0	**1,940**	<3.0	16,800	<50.0	**0.15 J**	<50.0	<20.0	15,700	<5.0	<0.20	14,100	<1000	NA	<2.0	239	**10.6**	<50.0
MW-123	5' - 10'	6/23/2020	**9,930**	<2.0	<5.0	283	<1.0	<300	119,000	<1.0	25.5	<20.0	17.8	NA	**10,800**	**18.8**	18,300	**218**	**0.27**	<50.0	<20.0	63,600	<5.0	<0.20	59,300	<1000	NA	<2.0	436	**33.5**	342
MW-124	7' - 12'	6/23/2020	**784**	<2.0	<5.0	<100	<1.0	<300	103,000	<1.0	<10.0	<20.0	8.7	NA	**1,290**	<3.0	14,600	**781**	<0.12	<50.0	<20.0	1,940	<5.0	<0.20	21,500	<1000	NA	<2.0	221	<4.0	<50.0
MW-125	8' - 13'	6/23/2020	**516**	<2.0	<5.0	<100	<1.0	<300	107,000	<1.0	<10.0	<20.0	<4.0	NA	**727**	<3.0	15,600	**69.9**	<0.12	<50.0	<20.0	17,100	<5.0	<0.20	12,900	<1000	<0.87	<2.0	212	<4.0	<50.0
MW-126	8.5' - 13.5'	6/23/2020	**376**	<2.0	<5.0	<100	<1.0	**590**	181,000	<1.0	<10.0	<20.0	<4.0	NA	**1,270**	<3.0	13,900	**251**	<0.12	<50.0	<20.0	36,900	<5.0	<0.20	62,300	<1000	NA	<2.0	364	**11.1**	<50.0
MW-127	8' - 13'	6/24/2020	**1,530**	<2.0	<5.0	<100	<1.0	<300	163,000	<1.0	<10.0	<20.0	6.8	<5.0	**2,000**	3.4	22,900	**422**	<0.12	<50.0	<20.0	11,300	<5.0	<0.20	33,200	<1000	NA	<2.0	352	**4.5**	<50.0
MW-128	8' - 13'	6/24/2020	**204**	<2.0	<5.0	128	<1.0	**928**	209,000	<1.0	<10.0	<20.0	4.6	<5.0	**356**	<3.0	34,100	**239**	<0.12	<50.0	<20.0	43,100	<5.0	<0.20	40,800	<1000	NA	<2.0	412	<4.0	<50.0
MW-129	8' - 13'	6/24/2020	**461**	<2.0	6.5	<100	<1.0	**583**	112,000	<1.0	<10.0	<20.0	11.4	<5.0	**636**	<3.0	5,240	**338**	<0.12	50.2	<20.0	60,200	<5.0	<0.20	59,700	<1000	NA	<2.0	228	**7.2**	<50.0
MW-130	5' - 10'	6/23/2020	**462**	<2.0	<5.0	<100	<1.0	<300	102,000	<1.0	<10.0	<20.0	<4.0	NA	**710**	3.2	17,000	**273**	<0.12	<50.0	<20.0	7,410	<5.0	<0.20	36,000	<1000	<0.86	<2.0	208	<4.0	<50.0
MW-131	5' - 10'	6/24/2020	**2,400**	<2.0	<5.0	<100	<1.0	<300	70,500	<1.0	<10.0	<20.0	6.3	<5.0	**3,320**	**5.8**	7,520	**553**	<0.12	<50.0	<20.0	9,520	<5.0	<0.20	16,000	<1000	NA	<2.0	189	**6.7**	<50.0
MW-12	Unknown	6/23/2020	<50.0	<2.0	<5.0	185	<1.0	<300	89,500	<1.0	<10.0	<20.0	<4.0	NA	<200	<3.0	17,900	**945**	<0.12	<50.0	<20.0	3,880	<5.0	<0.20	**276,000**	<1000	NA	<2.0	172	<4.0	<50.0
MW-132	10' - 15'	8/13/2020	**3,350**	<2.0	<5.0	238	<1.0	<300	275,000	<1.0	<10.0	<20.0	34.1	<5.0	<200	**22.5**	<1000	<50.0	<0.080	<50.0	36	181,000	<5.0	<0.20	90,600	2,700	NA	<2.0	650	<4.0	<50.0
MW-133	10' - 15'	8/13/2020	<50.0	<2.0	<5.0	<100	<1.0	**1,210**	221,000	<1.0	<10.0	<20.0	<4.0	<5.0	206	<3.0	30,900	**170**	<0.080	<50.0	<20.0	66,600	<5.0	<0.20	42,500	1,180	NA	<2.0	519	**5.8**	<50.0

Notes:

540	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
10	Analyte exceeds Residential Drinking Water Protection Criteria.
10	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
10	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
0.088	Analyte exceeds Residential Volatilization to Indoor Air Pathway Screening Levels (VIAP).
0.30	Analyte exceeds Nonresidential Volatilization to Indoor Air Pathway Screening Levels (VIAP).
--	No criteria developed.
NA	Sample not analyzed for this analyte.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

Metals were analyzed by EPA Method 6010 or 6020. Mercury analyzed by EPA Method 7470A.

EGLE = Michigan Department of Environment, Great lakes, and Energy.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2D - Summary of Groundwater Analytical Results - PCBs
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ug/L); VIAP Screening Levels Updated September 4, 2020.			PCB-1016 (Aroclor 1016) 12674-11-2	PCB-1221 (Aroclor 1221) 11104-28-2	PCB-1232 (Aroclor 1232) 11141-16-5	PCB-1242 (Aroclor 1242) 53469-21-9	PCB-1248 (Aroclor 1248) 12672-29-6	PCB-1254 (Aroclor 1254) 11097-69-1	PCB-1260 (Aroclor 1260) 11096-82-5	PCB-1262 (Aroclor 1262) 37324-23-5	PCB-1268 (Aroclor 1268) 11100-14-4
Residential Drinking Water Criteria			**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**
Nonresidential Drinking Water Criteria			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Groundwater Surface Water Interface (GSI) Criteria			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Residential Groundwater VIAP			**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**	**0.031**
Nonresidential Groundwater VIAP			0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Water Solubility			*44.7*	*44.7*	*44.7*	*44.7*	*44.7*	*44.7*	*44.7*	*44.7*	*44.7*
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in micrograms per liter (ug/L)**								
MW-101	7.5' - 12.5'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-102	8' - 13'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-103	8' - 13'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-104	15' - 20'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-105	9' - 14'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-106	7.5' - 12.5'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-107	7' - 12'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-108	5' - 10'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-109	5' - 10'	4/8/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-110	5' - 10'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-111	4' - 9'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-112	4' - 9'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-113	8' - 13'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-114	8' - 13'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-115	7.5' - 12.5'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-116	8' - 13'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-117	7.5' - 12.5'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-118	11' - 16'	4/9/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-119	5' - 10'	4/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-120	3' - 8'	4/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-121	8' - 13'	4/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-122	5' - 10'	6/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-123	5' - 10'	6/23/2020	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MW-124	7' - 12'	6/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-125	8' - 13'	6/23/2020	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
MW-126	8.5' - 13.5'	6/23/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-127	8' - 13'	6/24/2020	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MW-128	8' - 13'	6/24/2020	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MW-129	8' - 13'	6/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-130	5' - 10'	6/23/2020	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
MW-131	5' - 10'	6/24/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-132	10' - 15'	8/13/2020	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19
MW-133	10' - 15'	8/13/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

5.0	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
0.5	Analyte exceeds Residential Drinking Water Protection Criteria.
0.5	Analyte exceeds Nonresidential Drinking Water Protection Criteria.
0.2	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
0.031	Analyte exceeds Residential Groundwater Volatilization to Indoor Air Pathway Screening Levels (VIAP).
0.97	Analyte exceeds Nonresidential Groundwater Volatilization to Indoor Air Pathway Screening Levels (VIAP).
44.7	Analyte exceeds Water Solubility Criteria.
NA	Sample not analyzed for this analyte.

Analyses were conducted at Pace Analytical (PACE) in Indianapolis, Indiana.

PCBs were analyzed by EPA Method 8082A.

EGLE = Michigan Department of Environment, Great lakes, and Energy.

Notes in parentheses and standard abbreviations from Part 201 Rules 299.1 through 299.50, dated June 25, 2018.

VIAP screening levels based on shallow groundwater (< 10 feet below ground surface) for residential; groundwater not in contact (> 5 feet below ground surface) for nonresidential, based on EGLE VIAP Screening Levels, dated September 4, 2020.

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Table 2E - Summary of Groundwater Analytical Results - Perfluorinated Compounds
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

EGLE Part 201 Generic Cleanup Criteria and Screening Levels, dated January 10, 2018; GSI Criteria Updated June 25, 2018 (ng/L)			PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFOSA	N-EtFOSAA	N-MeFOSAA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	4:2FTS	6:2FTS	8:2FTS
CAS number			375-22-4	2706-90-3	307-24-4	375-85-9	335-67-1	375-95-1	335-76-2	2058-94-8	307-55-1	72629-94-8	376-06-7	754-91-6	2991-50-6	2355-31-9	375-73-5	2706-91-4	355-46-4	375-92-8	1763-23-1	68259-12-1	335-77-3	757124-72-4	27619-97-2	39108-34-4
PFAS Drinking Water Standard (ng/L)			--	--	400,000	--	8	6	--	--	--	--	--	--	--	--	420	--	51	--	16	--	--	--	--	--
Groundwater Surface Water Interface Criteria (ng/L)			--	--	--	--	12,000	--	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--
Water Solubility (ng/L)			--	--	--	--	*9.50e9*	--	--	--	--	--	--	--	--	--	--	--	--	--	*3100.00*	--	--	--	--	--
Well ID	**Screen Interval (feet)**	**Sample Date**	**Reported in nanograms per Liter (ng/L)**																							
MW-101	7.5 - 12.5'	4/14/2020	3.5	<0.26	<0.37	<0.44	<0.43	<0.58	<0.67	<0.55	<0.40	<0.44	<0.40	<0.24	<0.92	<0.44	5.2	<0.37	4.7	<0.46	<0.39	<0.46	<0.33	<0.58	<0.93	<0.77
MW-102	8 - 13'	4/14/2020	12	26	24	6.6	7.8	<0.57	<0.66	<0.54	<0.40	<0.44	<0.40	<0.23	<0.90	<0.43	5.2	2.1	5.1	<0.45	2.6	<0.45	<0.32	<0.57	<0.92	<0.75
MW-103	8 - 13'	4/14/2020	4.6	4.7	5.6	3.2	7.8	<0.59	<0.68	<0.55	<0.41	<0.45	<0.41	<0.24	<0.93	<0.45	3.9	<0.37	7.0	<0.46	13	<0.46	<0.33	<0.59	3.4	<0.77
MW-104	15 - 20'	4/14/2020	8.0	3.2	4.6	3.4	6.2	<0.57	<0.66	<0.54	<0.39	<0.43	<0.39	<0.23	<0.90	<0.43	4.8	<0.36	10	<0.45	<0.38	<0.45	<0.32	<5.7	<0.91	<0.75
MW-105	9 - 14'	4/14/2020	<0.31	<0.27	<0.37	<0.45	4.5	<0.59	<0.69	<0.56	<0.41	<0.45	<0.41	<0.24	<0.94	<0.45	3.2	<0.37	5.6	<0.47	2.4	<0.47	<0.33	<0.59	<0.95	<0.78
MW-106	7.5 - 12.5'	4/15/2020	11	8.0	10	5.4	16	<0.59	<0.68	<0.55	<0.41	<0.45	<0.41	<0.24	<0.93	<0.45	5.8	<0.37	9.5	<0.46	<0.40	<0.46	<0.33	<0.59	<0.94	<0.77
MW-107	7 - 12'	4/15/2020	8.9	5.3	7.2	5.1	11	<0.58	<0.67	<0.55	<0.40	<0.45	<0.40	<0.24	<0.92	<0.44	3.9	<0.37	2.5	<0.46	<0.39	<0.46	<0.33	<0.58	<0.94	<0.77
MW-108	5 - 10'	4/15/2020	7.9	2.5	3.3	<0.45	5.0	<0.59	<0.69	<0.56	<0.41	<0.45	<0.41	<0.24	<0.94	<0.45	3.5	<0.37	<0.38	<0.47	<0.40	<0.47	<0.33	<0.59	<0.95	<0.78
MW-109	5 - 10'	4/15/2020	10	17	26	26	19	<0.60	<0.69	<0.57	<0.42	<0.46	<0.42	<0.25	<0.95	<0.46	4.3	<0.38	<0.39	<0.47	<0.40	<0.47	<0.34	<0.60	120	<0.79
MW-110	5 - 10'	4/15/2020	5.5	4.3	5.7	5.8	7.4	<0.59	<0.68	<0.55	<0.41	<0.45	<0.41	<0.24	<0.93	<0.45	4.3	<0.37	<0.38	<0.46	<0.39	<0.46	<0.33	<0.59	3.1	<0.77
MW-111	4 - 9'	4/16/2020	3.0	<0.26	<0.36	<0.44	4.9	<0.57	<0.66	<0.54	<0.39	<0.44	<0.39	<0.23	<0.90	<0.43	3.5	<0.36	<0.37	<0.45	<0.38	<0.45	<0.32	<0.57	<0.92	<0.75
MW-112	4 - 9'	4/16/2020	19	2.7	3.8	2.8	42	<0.58	<0.67	<0.55	<0.40	<0.44	<0.40	<0.24	<0.92	<0.44	7.0	<0.36	3.9	<0.46	7.7	<0.46	<0.32	<0.58	5.5	<0.76
MW-113	8 - 13'	4/16/2020	<0.30	<0.26	<0.36	<0.44	<0.42	<0.57	<0.66	<0.54	<0.39	<0.44	<0.39	<0.23	<0.90	<0.43	<0.20	<0.36	<0.37	<0.45	<0.38	<0.45	<0.32	<0.57	<0.92	<0.75
MW-114	8 - 13'	4/16/2020	8.1	<0.26	5.1	<0.44	3.8	<0.58	<0.66	<0.54	<0.40	<0.44	<0.40	<0.24	<0.91	<0.44	2.5	<0.36	10	<0.45	2.7	<0.45	<0.32	<5.8	<9.2	<7.6
MW-115	7.5 - 12.5'	4/16/2020	4.4	<0.53	<0.73	<0.89	<0.85	<1.2	<1.3	<1.1	<0.81	<0.89	<0.81	<0.48	<1.8	<0.89	<0.40	<0.73	<0.75	<0.92	<0.79	<0.92	<0.65	<1.2	4.8	<1.5
MW-116	8 - 13'	6/24/2020	6.2	<0.51	4.1	<0.86	5.6	<1.1	<1.3	<1.1	<0.78	<0.86	<0.78	<0.46	<1.8	<0.86	<0.39	<0.71	<0.73	<0.89	<0.76	<0.89	<0.63	<11	74	<15
MW-117	7.5 - 12.5'	6/24/2020	5.0	4.3	4.4	3.4	6.1	<0.59	<0.69	<0.56	<0.41	<0.45	<0.41	<0.24	<0.94	<0.45	10.0	<0.37	3.5	<0.47	<0.40	<0.47	<0.33	<0.59	33	<0.78
MW-118	11 - 16'	6/24/2020	5.5	2.3	2.4	<0.44	5.8	<0.58	<0.67	<0.55	<0.40	<0.44	<0.40	<0.24	<0.92	<0.44	5.7	<0.36	4.2	<0.46	<0.39	<0.46	<0.32	<0.58	13	<0.76
MW-119	5 - 10'	4/23/2020	<0.30	<0.26	<0.36	<0.44	<0.42	<0.57	<0.66	<0.54	<0.40	<0.44	<0.40	<0.23	<0.91	<0.44	<0.20	<0.36	<0.37	<0.45	<0.39	<0.45	<0.32	<0.57	<0.92	<0.75
MW-120	3 - 8'	4/23/2020	7.2	<0.27	<0.37	<0.45	6.4	<0.59	<0.68	<0.56	<0.41	<0.45	<0.41	<0.24	<0.94	<0.45	3.1	<0.37	<0.38	<0.47	<0.40	<0.47	<0.33	<0.59	<0.95	<0.78
MW-121	8 - 13'	4/23/2020	12	18	22	12	32	<0.58	<0.67	<0.55	<0.40	<0.44	<0.40	<0.24	<0.92	<0.44	3.9	<0.37	5.9	<0.46	<0.39	<0.46	<0.33	<0.58	3.3	<0.77
MW-122	5' - 10'	6/24/2020	6.8	9.9	11.0	8.7	22	<1.3	<1.4	<1.2	<0.87	<0.96	<0.87	<0.51	<2.0	<0.95	4.1	<0.79	4.2	<0.99	<0.85	<0.99	<0.70	<1.3	15	<1.7
MW-127	8' - 13'	6/24/2020	6.2	<0.58	7.8	6.5	27	<1.3	<1.5	<1.2	<0.89	<0.98	<0.89	<0.53	<2.0	<0.98	<0.45	<0.81	8.4	<1.0	18	<1.0	<0.72	<1.3	6.6	<1.7
MW-128	8' - 13'	6/24/2020	13	19	24	19	40	6.6	<0.66	<0.54	<0.39	<0.43	<0.39	<0.23	<0.90	<0.43	4.0	<0.36	8.7	2.0	58	<0.45	<0.32	<5.7	<9.1	<0.75
MW-129	8' - 13'	6/24/2020	15	26	33	20	80	9.8	<1.5	<1.2	<0.87	<0.96	<0.87	<0.52	<2.0	<0.96	<0.44	<0.79	9.0	<0.99	96	<0.99	<0.71	<13	<20	<1.7
MW-131	5' - 10'	6/24/2020	10	11	14	10	33	5.4	<1.4	<1.2	<0.86	<0.95	<0.86	<0.51	<2.0	<0.95	4.4	<0.78	6.3	<0.98	68	<0.98	8.7	<12	11	<1.6
MW-132	10' - 15'	8/14/2020	10	16	16	7.9	44	<1.4	<1.6	<1.3	<0.94	<1.0	<0.94	<0.56	<2.2	<1.0	12.0	<0.86	8.6	<1.1	27	<1.1	<0.76	<14	<22	<1.8
MW-133	10' - 15'	8/14/2020	10	19	21	15	43	<1.4	<1.6	<1.3	<0.95	<1.1	<0.95	<0.56	<2.2	<1.0	<0.48	<0.87	8.6	<1.1	74	<1.1	<0.77	<1.4	<2.2	<1.8

Notes:

5	Analyte detected above laboratory method detection limits (MDLs).
<5.0	Analyte "Not-Detected" above MDLs.
8	Analyte exceeds PFAS Drinking Water Standard.
12,000	Analyte exceeds Groundwater Surface Water Interface Protection Criteria.
3.10	Analyte exceeds Water Solubility.
--	No criteria developed.

Analyses were conducted at Pace Analytical (PACE) in Minneapolis, Minnesota.

Perfluorinated compounds were analyzed using an isotope dilution based on Department of Defense (DoD) Quality Systems Manual (QSM) 5.1.1.
EGLE = Michigan Department of Environment, Great Lakes, and Energy.

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Table 3 - Analytical Results Summary: Soil Gas
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

Lab Sample ID				Appendix D2 VI Shallow Soil Gas Screening Levels	Non-Residential VIAP Soil Gas	L1119489-01	L1119489-02	L1119489-03	L1119489-04	L1119489-05	L1119489-06	L1119489-07
Client Sample ID						A1	A2	A3	A4	B1	B2	B3
Sample Depth						4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	4'-5'
Sample Date						7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019
Matrix						Air	Air	Air	Air	Air	Air	Air
Analyte	**CAS No.**	**Units**	**Method**									
TPH (GC/MS) LOW FRACTION	8006-61-9	µg/M^3	TO-15	NA	NA	**615**	**546**	**680**	**609**	**1040**	**537**	**1620**
Analyte	**CAS No.**	**Units**	**Method**									
ACETONE	67-64-1	µg/M^3	TO-15	3400000	1,000,000	**20.5**	**6.41**	**39.9**	**68.8**	**13.4**	<5.94	**32.1**
BENZENE	71-43-2	µg/M^3	TO-15	2200	260	**8.2**	**2.66**	**2.59**	**7.68**	**7.14**	<1.28	<1.28
2-BUTANONE (MEK)	78-93-3	µg/M^3	TO-15	2900000	170,000	<7.37	<7.37	<7.37	<7.37	<7.37	<7.37	<7.37
CARBON DISULFIDE	75-15-0	µg/M^3	TO-15	410000	36,000	**2.57**	<1.24	**4.9**	**4.64**	**16**	**4.52**	<1.24
CARBON TETRACHLORIDE	56-23-5	µg/M^3	TO-15	3000	360	<2.52	<2.52	<2.52	<2.52	<2.52	<2.52	<2.52
CHLOROBENZENE	108-90-7	µg/M^3	TO-15	41000	2,600	**6.89**	**6.94**	**4.28**	**8.28**	**9.08**	<1.85	<1.85
CHLORODIFLUOROMETHANE	75-45-6	µg/M^3	TO-15	NA	NA	<1.42	<1.42	<1.42	**1.59**	<1.42	<1.42	**1.52**
CHLOROETHANE	75-00-3	µg/M^3	TO-15	5800000	200,000	<1.06	<1.06	<1.06	<1.06	<1.06	<1.06	<1.06
CHLOROFORM	67-66-3	µg/M^3	TO-15	7600	87	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95
CHLOROMETHANE	74-87-3	µg/M^3	TO-15	29000	4,600	<0.826	<0.826	<0.826	**0.864**	<0.826	<0.826	**0.919**
CYCLOHEXANE	110-82-7	µg/M^3	TO-15	3500000	310,000	<1.38	<1.38	<1.38	**1.49**	<1.38	<1.38	<1.38
1,2-DICHLOROBENZENE	95-50-1	µg/M^3	TO-15	180000	15,000	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40
1,4-DICHLOROBENZENE	106-46-7	µg/M^3	TO-15	2600	510	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40
DICHLORODIFLUOROMETHANE	75-71-8	µg/M^3	TO-15	29000000	17,000	**2.18**	**2.26**	**2.2**	**2.21**	**2.19**	**2.3**	**2.81**
1,1-DICHLOROETHANE	75-34-3	µg/M^3	TO-15	290000	1,200	<1.60	<1.60	<1.60	<1.60	<1.60	<1.60	<1.60
1,2-DICHLOROETHANE	107-06-2	µg/M^3	TO-15	700	77	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62
CIS-1,2-DICHLOROETHENE	156-59-2	µg/M^3	TO-15	4100	410	<1.59	<1.59	<1.59	<1.59	<1.59	<1.59	<1.59
1,2-DICHLOROTETRAFLUOROETHAN	76-14-2	µg/M^3	TO-15	NA	NA	<2.80	<2.80	<2.80	<2.80	<2.80	<2.80	<2.80
1,1-DIFLUOROETHANE	75-37-6	µg/M^3	TO-15	NA	NA	**60.6**	**3.7**	**192**	**263**	**3.14**	**3.2**	**5.83**
1,4-DIOXANE	123-91-1	µg/M^3	TO-15	NA	400	<1.44	<1.44	<1.44	<1.44	<1.44	<1.44	<1.44
ETHANOL	64-17-5	µg/M^3	TO-15	NA	630,000	**40.5**	**23**	**32.9**	**60.2**	**30.7**	**6.42**	**18.5**
ETHYL ACETATE	141-78-6	µg/M^3	TO-15	1900000	3,600	**2.32**	<1.44	**1.54**	**3.05**	<1.44	<1.44	<1.44
ETHYLBENZENE	100-41-4	µg/M^3	TO-15	59000	800	**5.5**	**6.82**	**3.71**	**4.86**	**6.99**	**3.28**	**2.26**
4-ETHYLTOLUENE	622-96-8	µg/M^3	TO-15	NA	NA	<1.96	**2.68**	<1.96	<1.96	**2.18**	<1.96	**2.7**
HEPTANE	142-82-5	µg/M^3	TO-15	2000000	NA	<1.64	<1.64	<1.64	**1.73**	**1.81**	<1.64	<1.64
N-HEXANE	110-54-3	µg/M^3	TO-15	410000	36,000	**3.01**	<1.41	**9.61**	**13.8**	**1.87**	<1.41	**1.66**
ISOPROPYLBENZENE	98-82-8	µg/M^3	TO-15	1700	190	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97
METHYL CYCLOHEXANE	108-87-2	µg/M^3	TO-15	NA	NA	<1.61	<1.61	<1.61	**1.83**	**1.86**	<1.61	<1.61
METHYL METHACRYLATE	80-62-6	µg/M^3	TO-15	NA	NA	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	<1.64
METHYLENE CHLORIDE	75-09-2	µg/M^3	TO-15	39000	31,000	**11.1**	<1.39	**18.9**	**20.4**	<1.39	<1.39	**6.77**
NAPHTHALENE	91-20-3	µg/M^3	TO-15	1500	59	<6.60	<6.60	<6.60	<6.60	<6.60	<6.60	<6.60
2-PROPANOL	67-63-0	µg/M^3	TO-15	NA	NA	**7.42**	<6.15	**9.05**	**15.9**	<6.15	<6.15	<6.15
PROPENE	115-07-1	µg/M^3	TO-15	NA	NA	<1.38	<1.38	<1.38	**1.6**	**1.74**	<1.38	<1.38
STYRENE	100-42-5	µg/M^3	TO-15	32000	3,500	**3.7**	<1.70	**3.04**	**4.22**	**5.75**	**2.07**	**1.99**
TETRACHLOROETHENE	127-18-4	µg/M^3	TO-15	23000	1,400	<2.72	**4.69**	**28**	**5.73**	<2.72	**5.69**	**1,470**
TETRAHYDROFURAN	109-99-9	µg/M^3	TO-15	11000	100,000	**7.58**	**2.22**	**2.4**	**7.75**	**6**	<1.18	<1.18
TOLUENE	108-88-3	µg/M^3	TO-15	2900000	250,000	**22.6**	**18.9**	**17.8**	**28.4**	**84.2**	**18.4**	**10.3**
1,1,1-TRICHLOROETHANE	71-55-6	µg/M^3	TO-15	3500000	230,000	<2.18	<2.18	<2.18	<2.18	<2.18	<2.18	<2.18
TRICHLOROETHENE	79-01-6	µg/M^3	TO-15	1200	67	<2.14	<2.14	<2.14	<2.14	**2.52**	<2.14	**3.98**
TRICHLOROFLUOROMETHANE	75-69-4	µg/M^3	TO-15	33000000	22,000	<2.25	**63.9**	**37.5**	**88.2**	<2.25	**187**	**37.1**
1,1,2-TRICHLOROTRIFLUOROETHANI	76-13-1	µg/M^3	TO-15	11000000	NA	<3.07	<3.07	<3.07	<3.07	<3.07	<3.07	<3.07
1,2,3-TRIMETHYLBENZENE	526-73-8	µg/M^3	TO-15	130000	3,100	<1.96	**3.05**	<1.96	<1.96	**2.02**	<1.96	<1.96
1,2,4-TRIMETHYLBENZENE	95-63-6	µg/M^3	TO-15	130000	3,100	**7.82**	**13.6**	**6.62**	**4.91**	**9.91**	**7.78**	**4.72**
1,3,5-TRIMETHYLBENZENE	108-67-8	µg/M^3	TO-15	130000	3,100	**2.01**	**3.49**	<1.96	<1.96	**2.63**	<1.96	<1.96
2,2,4-TRIMETHYLPENTANE	540-84-1	µg/M^3	TO-15	2000000	180,000	<1.87	<1.87	<1.87	<1.87	<1.87	<1.87	<1.87
XYLENES, Total	1330-20-7	µg/M^3	TO-15	NA	11,000	**31.03**	**46.9**	**22.82**	**25.9**	**41**	**21.78**	**13.46**
Analyte	**CAS No.**	**Units**	**Method**									
Mercury Vapor (max/average) (field screening results of 7/24/19	7439-97-6	ng/M^3	Lumex RA-915+	NA	15µg/M^3 15,000 ng/M^3	**11/9**	**34/32**	**76/74**	**37/34**	**24/21**	**24/22**	**31/28**

Lab Sample ID				Appendix D2 VI Shallow Soil Gas Screening Levels	Non-Residential VIAP Soil Gas	L1119489-08	L1119489-09
Client Sample ID						B4	C1
Sample Depth						4'-5'	4'-5'
Sample Date						7/15/2019	7/15/2019
Matrix						Air	Air
Analyte	**CAS No.**	**Units**	**Method**				
TPH (GC/MS) LOW FRACTION	8006-61-9	µg/M^3	TO-15	NA	NA	**1150**	**1100**
Analyte	**CAS No.**	**Units**	**Method**				
ACETONE	67-64-1	µg/M^3	TO-15	3400000	1,000,000	<5.94	**13.3**
BENZENE	71-43-2	µg/M^3	TO-15	2200	260	<1.28	**3.01**
2-BUTANONE (MEK)	78-93-3	µg/M^3	TO-15	2900000	170,000	<7.37	<7.37
CARBON DISULFIDE	75-15-0	µg/M^3	TO-15	410000	36,000	**4.1**	**10.1**
CARBON TETRACHLORIDE	56-23-5	µg/M^3	TO-15	3000	360	**6.53**	<2.52
CHLOROBENZENE	108-90-7	µg/M^3	TO-15	41000	2,600	<1.85	**6.2**
CHLORODIFLUOROMETHANE	75-45-6	µg/M^3	TO-15	NA	NA	<1.42	<1.42
CHLOROETHANE	75-00-3	µg/M^3	TO-15	5800000	200,000	**1.29**	<1.06
CHLOROFORM	67-66-3	µg/M^3	TO-15	7600	87	**5.58**	<1.95
CHLOROMETHANE	74-87-3	µg/M^3	TO-15	29000	4,600	<0.826	<0.826
CYCLOHEXANE	110-82-7	µg/M^3	TO-15	3500000	310,000	<1.38	<1.38
1,2-DICHLOROBENZENE	95-50-1	µg/M^3	TO-15	180000	15,000	<2.40	<2.40
1,4-DICHLOROBENZENE	106-46-7	µg/M^3	TO-15	2600	510	<2.40	<2.40
DICHLORODIFLUOROMETHANE	75-71-8	µg/M^3	TO-15	29000000	17,000	**2.51**	**2.46**
1,1-DICHLOROETHANE	75-34-3	µg/M^3	TO-15	290000	1,200	<1.60	<1.60
1,2-DICHLOROETHANE	107-06-2	µg/M^3	TO-15	700	77	**2.55**	<1.62
CIS-1,2-DICHLOROETHENE	156-59-2	µg/M^3	TO-15	4100	410	<1.59	<1.59
1,2-DICHLOROTETRAFLUOROETHANE	76-14-2	µg/M^3	TO-15	NA	NA	<2.80	<2.80
1,1-DIFLUOROETHANE	75-37-6	µg/M^3	TO-15	NA	NA	<1.08	**4.38**
1,4-DIOXANE	123-91-1	µg/M^3	TO-15	NA	400	<1.44	<1.44
ETHANOL	64-17-5	µg/M^3	TO-15	NA	630,000	**36.3**	**18.7**
ETHYL ACETATE	141-78-6	µg/M^3	TO-15	1900000	3,600	<1.44	**1.7**
ETHYLBENZENE	100-41-4	µg/M^3	TO-15	59000	800	**4.89**	**8.25**
4-ETHYLTOLUENE	622-96-8	µg/M^3	TO-15	NA	NA	**2.97**	**3.13**
HEPTANE	142-82-5	µg/M^3	TO-15	2000000	NA	<1.64	**1.94**
N-HEXANE	110-54-3	µg/M^3	TO-15	410000	36,000	<1.41	**1.82**
ISOPROPYLBENZENE	98-82-8	µg/M^3	TO-15	1700	190	<1.97	<1.97
METHYL CYCLOHEXANE	108-87-2	µg/M^3	TO-15	NA	NA	<1.61	**2.19**
METHYL METHACRYLATE	80-62-6	µg/M^3	TO-15	NA	NA	<1.64	**1.76**
METHYLENE CHLORIDE	75-09-2	µg/M^3	TO-15	39000	31,000	<1.39	**1.69**
NAPHTHALENE	91-20-3	µg/M^3	TO-15	1500	59	<6.60	<6.60
2-PROPANOL	67-63-0	µg/M^3	TO-15	NA	NA	<6.15	<6.15
PROPENE	115-07-1	µg/M^3	TO-15	NA	NA	<1.38	<1.38
STYRENE	100-42-5	µg/M^3	TO-15	32000	3,500	**1.88**	**6.63**
TETRACHLOROETHENE	127-18-4	µg/M^3	TO-15	23000	1,400	**420**	**5.33**
TETRAHYDROFURAN	109-99-9	µg/M^3	TO-15	11000	100,000	<1.18	**2.41**
TOLUENE	108-88-3	µg/M^3	TO-15	2900000	250,000	**11.4**	**20**
1,1,1-TRICHLOROETHANE	71-55-6	µg/M^3	TO-15	3500000	230,000	**5.28**	<2.18
TRICHLOROETHENE	79-01-6	µg/M^3	TO-15	1200	67	**140**	<2.14
TRICHLOROFLUOROMETHANE	75-69-4	µg/M^3	TO-15	33000000	22,000	**126**	**10.3**
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	µg/M^3	TO-15	11000000	NA	<3.07	<3.07
1,2,3-TRIMETHYLBENZENE	526-73-8	µg/M^3	TO-15	130000	3,100	**2.81**	**2.75**
1,2,4-TRIMETHYLBENZENE	95-63-6	µg/M^3	TO-15	130000	3,100	**11.4**	**11.9**
1,3,5-TRIMETHYLBENZENE	108-67-8	µg/M^3	TO-15	130000	3,100	**3.03**	**3.2**
2,2,4-TRIMETHYLPENTANE	540-84-1	µg/M^3	TO-15	2000000	180,000	<1.87	<1.87
XYLENES, Total	1330-20-7	µg/M^3	TO-15	NA	11,000	**29.32**	**50.6**
Analyte	**CAS No.**	**Units**	**Method**				
Mercury Vapor (max/average) (field screening results of 7/24/19	7439-97-6	ng/M^3	Lumex RA-915+	NA	15µg/M^3 15,000 ng/M^3	**64/62**	**34/32**

1470 Red shading indicates analyte exceeds the Non-Residential Volatilizatoin to Indoor Air Pathway (VIAP) screening levels (September 2020)
5.69 Clear shading indicates analyte detected below criteria
<3.0 Green shading indicates analyte "Not-Detected" in excess of laboratory method detection levels (MDLs)
NA NA - Criteria for analyte not available
*Tedlar bag result - Tedlar bags collected 7/15/19

1470 Red shading indicates analyte exceeds the Non-Residential Volatilizatoin to Indoor Air Pathway (VIAP) screening levels (September 202
5.69 Clear shading indicates analyte detected below criteria
<3.0 Green shading indicates analyte "Not-Detected" in excess of laboratory method detection levels (MDLs)
NA NA - Criteria for analyte not available
*Tedlar bag result - Tedlar bags collected 7/15/19

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Table 3 - Analytical Results Summary: Soil Gas
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

L1119489-10	L1119489-11	L1119489-12	L1119489-13	L1119489-14	Lab Sample ID				Appendix D2 VI Shallow Soil Gas Screening Levels	Non-Residential VIAP Soil Gas	L1119489-15	L1119489-16	L1119489-17	L1119489-18	L1119489-19	L1119489-20	L1119489-21	L1119489-22
C2	C3	C4	D1	D2	Client Sample ID						D3	D4	E1	E2	E3	E4	F3	F4
4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	Sample Depth						4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	4'-5'	4'-5'
7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	Sample Date						7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019	7/15/2019
Air	Air	Air	Air	Air	Matrix						Air	Air	Air	Air	Air	Air	Air	Air
					Analyte	**CAS No.**	**Units**	**Method**										
787	**704**	**1160**	**1310**	**889**	TPH (GC/MS) LOW FRACTION	8006-61-9	µg/M^3	TO-15	NA	NA	**568**	**1200**	**1090**	**989**	**760**	**2230**	**905**	**1340**
					Analyte	**CAS No.**	**Units**	**Method**										
9.12	**46.7**	**18.7**	**102**	**53.3**	ACETONE	67-64-1	µg/M^3	TO-15	3400000	1,000,000	**12.4**	**146**	**15.7**	**9.73**	**14.1**	**30.7**	**22.5**	**12.3**
6.41	<1.28	<1.28	**5.3**	**7.37**	BENZENE	71-43-2	µg/M^3	TO-15	2200	260	**5.65**	**4.56**	**4.81**	**4.82**	**5.55**	**11.9**	**2.23**	**1.82**
<7.37	<7.37	<7.37	**66.7**	**12.9**	2-BUTANONE (MEK)	78-93-3	µg/M^3	TO-15	2900000	170,000	<7.37	**23.4**	<7.37	<7.37	<7.37	<7.37	<7.37	<7.37
2.58	**5.55**	**1.66**	**26.3**	<1.24	CARBON DISULFIDE	75-15-0	µg/M^3	TO-15	410000	36,000	**2.97**	**14**	**5.71**	**1.38**	<1.24	**104**	<1.24	**25.1**
<2.52	<2.52	<2.52	<2.52	<2.52	CARBON TETRACHLORIDE	56-23-5	µg/M^3	TO-15	3000	360	<2.52	<2.52	<2.52	<2.52	<2.52	<2.52	<2.52	<2.52
9.23	<1.85	<1.85	**5.02**	**12.5**	CHLOROBENZENE	108-90-7	µg/M^3	TO-15	41000	2,600	**12**	**5.01**	**10.5**	**8.69**	**10.3**	<1.85	**4.69**	<1.85
<1.42	<1.42	<1.42	**2.24**	<1.42	CHLORODIFLUOROMETHANE	75-45-6	µg/M^3	TO-15	NA	NA	**2.14**	<1.42	<1.42	<1.42	**6.64**	**70.3**	<1.42	<1.42
<1.06	<1.06	<1.06	**18.8**	<1.06	CHLOROETHANE	75-00-3	µg/M^3	TO-15	5800000	200,000	**3.83**	**8.59**	<1.06	<1.06	<1.06	**1.74**	<1.06	<1.06
<1.95	<1.95	**9.2**	<1.95	<1.95	CHLOROFORM	67-66-3	µg/M^3	TO-15	7600	87	**3.3**	**3.53**	<1.95	<1.95	<1.95	**8.28**	<1.95	**4.54**
<0.826	**1.04**	<0.826	**0.96**	**1.26**	CHLOROMETHANE	74-87-3	µg/M^3	TO-15	29000	4,600	<0.826	**1.24**	<0.826	<0.826	<0.826	<0.826	<0.826	<0.826
<1.38	<1.38	<1.38	**6.65**	<1.38	CYCLOHEXANE	110-82-7	µg/M^3	TO-15	3500000	310,000	<1.38	**4.16**	<1.38	<1.38	<1.38	**6.06**	<1.38	<1.38
<2.40	<2.40	<2.40	<2.40	<2.40	1,2-DICHLOROBENZENE	95-50-1	µg/M^3	TO-15	180000	15,000	**2.74**	<2.40	**4.34**	<2.40	<2.40	<2.40	<2.40	<2.40
<2.40	<2.40	<2.40	<2.40	<2.40	1,4-DICHLOROBENZENE	106-46-7	µg/M^3	TO-15	2600	510	<2.40	<2.40	**2.9**	<2.40	<2.40	<2.40	<2.40	<2.40
2.38	**4.93**	**4.03**	**2.45**	**2.54**	DICHLORODIFLUOROMETHANE	75-71-8	µg/M^3	TO-15	29000000	17,000	**18.9**	**4.18**	**2.39**	**6.53**	**12.2**	**107**	**1130**	**107**
<1.60	<1.60	<1.60	<1.60	<1.60	1,1-DICHLOROETHANE	75-34-3	µg/M^3	TO-15	290000	1,200	<1.60	<1.60	<1.60	<1.60	<1.60	**1.84**	<1.60	<1.60
<1.62	<1.62	<1.62	<1.62	<1.62	1,2-DICHLOROETHANE	107-06-2	µg/M^3	TO-15	700	77	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62
<1.59	<1.59	<1.59	<1.59	<1.59	CIS-1,2-DICHLOROETHENE	156-59-2	µg/M^3	TO-15	4100	410	<1.59	<1.59	<1.59	<1.59	<1.59	<1.59	<1.59	<1.59
<2.80	<2.80	<2.80	<2.80	**4.08**	1,2-DICHLOROTETRAFLUOROETHANE	76-14-2	µg/M^3	TO-15	NA	NA	<2.80	<2.80	<2.80	<2.80	<2.80	<2.80	<2.80	<2.80
3.87	**3.93**	**16.6**	**39.1**	**2.85**	1,1-DIFLUOROETHANE	75-37-6	µg/M^3	TO-15	NA	NA	**37.5**	**8.65**	**1.78**	**2.99**	<1.08	**3.28**	**12.5**	**2.03**
<1.44	**4.73**	<1.44	<1.44	<1.44	1,4-DIOXANE	123-91-1	µg/M^3	TO-15	NA	400	<1.44	**1.7**	<1.44	<1.44	<1.44	<1.44	<1.44	<1.44
33.9	**14.1**	<2.38	**164**	**36.7**	ETHANOL	64-17-5	µg/M^3	TO-15	NA	630,000	**46.1**	**88.8**	**20.2**	**29.1**	**28.5**	**6120**	**39.7**	**8240**
1.48	<1.44	<1.44	**29.3**	**2.86**	ETHYL ACETATE	141-78-6	µg/M^3	TO-15	1900000	3,600	**1.69**	**2.11**	<1.44	<1.44	**1.99**	<1.44	<1.44	<1.44
6.79	**3.51**	**5.2**	**15.6**	**7.62**	ETHYLBENZENE	100-41-4	µg/M^3	TO-15	59000	800	**5.42**	**11.9**	**4.67**	**6.18**	**6.79**	**8.43**	**4.9**	**5.24**
3.12	**2.36**	**3.57**	**3.96**	**3.13**	4-ETHYLTOLUENE	622-96-8	µg/M^3	TO-15	NA	NA	**2.22**	**3.46**	**3.02**	**2.74**	**3.48**	**4.05**	**2.85**	**2.88**
<1.64	<1.64	<1.64	**13.4**	<1.64	HEPTANE	142-82-5	µg/M^3	TO-15	2000000	NA	<1.64	**7.38**	**2.59**	<1.64	<1.64	**9.78**	**1.84**	<1.64
<1.41	<1.41	**1.87**	**14**	<1.41	N-HEXANE	110-54-3	µg/M^3	TO-15	410000	36,000	**1.94**	**7.58**	**2.46**	<1.41	<1.41	**14.3**	**2.42**	**1.63**
<1.97	<1.97	<1.97	<1.97	<1.97	ISOPROPYLBENZENE	98-82-8	µg/M^3	TO-15	1700	190	<1.97	**2.17**	<1.97	<1.97	<1.97	<1.97	<1.97	<1.97
<1.61	<1.61	<1.61	**21.3**	<1.61	METHYL CYCLOHEXANE	108-87-2	µg/M^3	TO-15	NA	NA	<1.61	**11.4**	<1.61	<1.61	<1.61	**15**	<1.61	**1.63**
1.7	<1.64	<1.64	**6.96**	**4.48**	METHYL METHACRYLATE	80-62-6	µg/M^3	TO-15	NA	NA	<1.64	**2.34**	**1.9**	<1.64	<1.64	**2.92**	**1.99**	**1.86**
<1.39	**1.68**	**5.38**	**9.76**	<1.39	METHYLENE CHLORIDE	75-09-2	µg/M^3	TO-15	39000	31,000	**7.05**	**1.91**	<1.39	<1.39	<1.39	**3.99**	**3.85**	<1.39
<6.60	<6.60	<6.60	<6.60	<6.60	NAPHTHALENE	91-20-3	µg/M^3	TO-15	1500	59	<6.60	<6.60	**25.8**	<6.60	<6.60	<6.60	<6.60	<6.60
<6.15	**17.3**	<6.15	**48.9**	**8.8**	2-PROPANOL	67-63-0	µg/M^3	TO-15	NA	NA	<6.15	**26.3**	<6.15	<6.15	**7.54**	<6.15	<6.15	<6.15
<1.38	<1.38	<1.38	<1.38	<1.38	PROPENE	115-07-1	µg/M^3	TO-15	NA	NA	<1.38	<1.38	<1.38	<1.38	<1.38	**97**	<1.38	<1.38
5.05	<1.70	**1.91**	**17.1**	**5.79**	STYRENE	100-42-5	µg/M^3	TO-15	32000	3,500	**3.84**	**8.17**	**4.45**	**5.61**	**4.57**	**6.54**	**4.07**	**2.05**
49.9	**14.2**	**19.2**	**19.2**	**27.8**	TETRACHLOROETHENE	127-18-4	µg/M^3	TO-15	23000	1,400	**7.41**	**6.92**	**373**	**72.3**	**13.3**	**29.8**	**18.7**	**81.8**
6.13	**2.36**	<1.18	**4.07**	**11.1**	TETRAHYDROFURAN	109-99-9	µg/M^3	TO-15	11000	100,000	**4.75**	**19.7**	**5.13**	**4.32**	**5**	<1.18	**1.69**	<1.18
19.4	**9.22**	**14.3**	**149**	**24.8**	TOLUENE	108-88-3	µg/M^3	TO-15	2900000	250,000	**15.9**	**69.2**	**11**	**16.1**	**18.2**	**40.1**	**13.5**	**12**
<2.18	**3.25**	**16.9**	<2.18	<2.18	1,1,1-TRICHLOROETHANE	71-55-6	µg/M^3	TO-15	3500000	230,000	**3.7**	**3.13**	<2.18	<2.18	**8.13**	**5.15**	**3.4**	**9.57**
2.22	**192**	**15.5**	<2.14	<2.14	TRICHLOROETHENE	79-01-6	µg/M^3	TO-15	1200	67	**9.5**	**14**	<2.14	<2.14	<2.14	**157**	<2.14	**3.18**
75.7	**941**	**5160**	**28.2**	**231**	TRICHLOROFLUOROMETHANE	75-69-4	µg/M^3	TO-15	33000000	22,000	**4400**	**741**	**4.67**	**118**	**167**	**919**	**1150**	**4140**
<3.07	<3.07	<3.07	<3.07	<3.07	1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	µg/M^3	TO-15	11000000	NA	**5.1**	<3.07	<3.07	<3.07	<3.07	**3.49**	<3.07	<3.07
2.69	**3.18**	**3.16**	**3.68**	**2.98**	1,2,3-TRIMETHYLBENZENE	526-73-8	µg/M^3	TO-15	130000	3,100	**3.37**	**3.36**	**6.15**	**2.7**	**3.91**	**6.72**	**2.95**	**3.65**
11.6	**11.5**	**14.2**	**16.3**	**13.2**	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/M^3	TO-15	130000	3,100	**11.9**	**15.1**	**18.1**	**11.9**	**16.6**	**22.8**	**12.3**	**15**
3.06	**2.95**	**3.58**	**4.38**	**3.59**	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/M^3	TO-15	130000	3,100	**3.06**	**4.06**	**6.5**	**3.15**	**4.1**	**9.35**	**3.19**	**3.88**
<1.87	<1.87	<1.87	**6.76**	<1.87	2,2,4-TRIMETHYLPENTANE	540-84-1	µg/M^3	TO-15	2000000	180,000	<1.87	**4.55**	<1.87	<1.87	<1.87	**35**	<1.87	<1.87
39.3	**22.4**	**33.97**	**68.9**	**45.1**	XYLENES, Total	1330-20-7	µg/M^3	TO-15	NA	11,000	**30.8**	**63.8**	**28.92**	**38.8**	**40.5**	**51.9**	**31.4**	**31.37**
					Analyte	**CAS No.**	**Units**	**Method**										
19/19	**50/48**	**141/135**	**62/58**	**58/50**	Mercury Vapor (max/average) (field screening results of 7/24/19	7439-97-6	ng/M^3	Lumex RA-915+	NA	15µg/M^3 15,000 ng/M^3	**71/69**	**55/51***	**32/29**	**81/74**	**51/49**	**143/141**	**54/51**	**160/149**

.0)

1470	Red shading indicates analyte exceeds the Non-Residential Volatilizatoin to Indoor Air Pathway (VIAP) screening levels (September 2020)
5.69	Clear shading indicates analyte detected below criteria
<3.0	Green shading indicates analyte "Not-Detected" in excess of laboratory method detection levels (MDLs)
NA	NA - Criteria for analyte not available
	*Tedlar bag result - Tedlar bags collected 7/15/19

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

Table 4 - Mercury Vapor Sampling Results
Former Hayes Lemmerz Site
W. Eight Mile Road, Ferndale, Oakland County, Michigan

SAMPLE ID		DATE/TIME COLLECTED (Tedlars)	PID RESULTS	Hg Vapor Results Max / Average	DATE/TIME FIELD SCREENED	Hg Vapor Results Max / Average
1	A-1	7/15/19 11:22	0.0	47 / 43	7/24/19 15:32	11 / 9
2	A-2	7/15/19 11:24	0.0	45 / 44	7/24/19 15:41	34 / 32
3	A-3	7/15/19 11:26	0.0	47 / 45	7/24/19 15:49	76 / 74
4	A-4	7/15/19 11:28	0.0	49 / 46	7/24/19 16:03	37 / 34
5	B-1	7/15/19 12:12	0.0	47 / 44	7/24/19 15:04	24 / 21
6	B-2	7/15/19 12:14	0.0	51 / 47	7/24/19 15:12	24 / 22
7	B-3	7/15/19 12:16	0.0	52 / 48	7/24/19 15:18	31 / 28
8	B-4	7/15/19 12:18	0.0	53 / 50	7/24/19 15:26	64 / 62
9	C-1	7/15/19 13:40	0.0	42 / 37	7/24/19 14:50	34 / 32
10	C-2	7/15/19 13:42	0.0	38 / 35	7/24/19 14:57	19 / 19
11	C-3	7/15/19 13:45	0.0	42 / 38	7/24/19 16:10	50 / 48
12	C-4	7/15/19 13:47	0.0	56 / 40	7/24/19 12:57	141 / 135
13	D-1	7/15/19 14:05	0.0	45 / 41	7/24/19 14:45	62 / 58
14	D-2	7/15/19 14:07	0.0	48 / 44	7/24/19 14:37	58 / 50
15	D-3	7/15/19 14:10	0.0	55 / 50	7/24/19 14:30	71 / 69
16	D-4	7/15/19 14:12	0.0	55 / 51		
17	E-1	7/15/19 15:54	0.0	46 / 42	7/24/19 12:59	32 / 29
18	E-2	7/15/19 15:59	0.0	45 / 42	7/24/19 12:52	81 / 74
19	E-3	7/15/19 17:10	0.0	46 / 43	7/24/19 12:48	51 / 49
20	E-4	7/15/19 17:14	0.0	75 / 73	7/24/19 12:40	143 / 141
21	F-3	7/15/19 16:30	0.0	46 / 43	7/24/19 12:20	54 / 51
22	F-4	7/15/19 16:35	0.0	94 / 86	7/24/19 12:30	160 / 149
23	Dup-1		0.0	50 / 46		/

Notes: PID results as ppm

Hg vapor results as nm/M^3

APPENDIX C

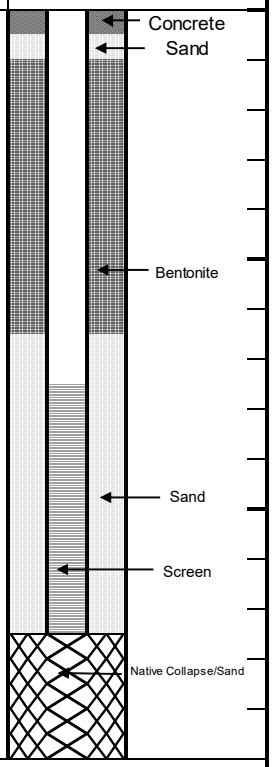
Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001 | **Boring ID:** MW-101 | **Page:** 1 of 1
Project Name: Detroit Axle | **Start Date:** 03/23/20 | **End Date:** 03/23/20
Site Location: 1600 W. 8 Mile Rd. | **Casing:** Schedule 40 PVC
City: Ferndale, MI 48220 | **Casing Diameter:** 2" | **Length:** 7.5'
Boring Diameter: 4" HA / 2.25" Macrocore | **Screen Slot Size:** 0.010"
Drilling Method: Hand Auger / Macrocore/Hollow Auger | **Screen Diameter:** 2" | **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil/Grass	0.0
1				12"				0.0
2	Soil	2-3'	1440	12"				0.0
3				12"	SW		FILL SAND, tan, damp, fine grain	0.0
4				12"				0.0
5				12"				0.0
6				12"				0.0
7				12"	SW		SAND, brown, damp, fine grain	0.0
8				12"				0.0
9	Soil	8-9'	1450	12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, light brown, wet at 10', fine grain with interbedded medium sand lenses	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 7.99'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

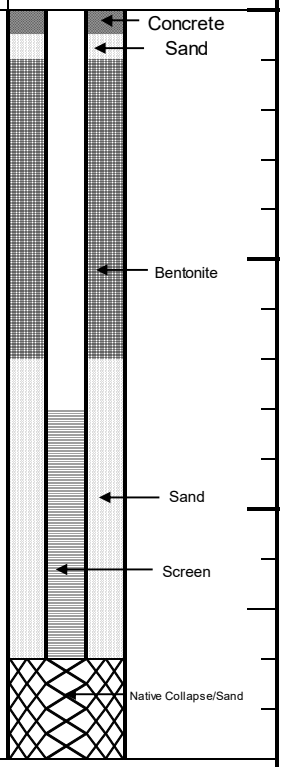
Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001 | **Boring ID:** MW-102 | **Page:** 1 of 1
Project Name: Detroit Axle | **Start Date:** 03/23/20 | **End Date:** 03/23/20
Site Location: 1600 W. 8 Mile Rd. | **Casing:** Schedule 40 PVC
City: Ferndale, MI 48220 | **Casing Diameter:** 2" | **Length:** 8'
Boring Diameter: 4" HA / 2.25" Macrocore | **Screen Slot Size:** 0.010"
Drilling Method: Hand Auger / Macrocore/Hollow Auger | **Screen Diameter:** 2" | **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Topsoil/Grass	0.0
2				12"				0.0
3	Soil	2-3'	1350	12"				0.0
4				12"	SW		FILL SAND, brown, damp, fine grain	0.0
5				12"				0.0
6				12"				0.0
7				12"				0.0
8				12"	SW		SAND, brown, damp, medium to fine grain	0.0
9	Soil	8-9'	1356	12"				0.0
10				12"	SW		SAND, tan, wet at 10', fine grain	0.0
11				12"				0.0
12				12"				0.0
13				12"	SW		SAND, grey, wet, fine grain with interbedded medium sand lenses	0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 9.60'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services | **Driller:** Ian
Drill Rig Type: Geoprobe 7720DT | **Assistant:** Trevor

Monitoring Well Boring Log

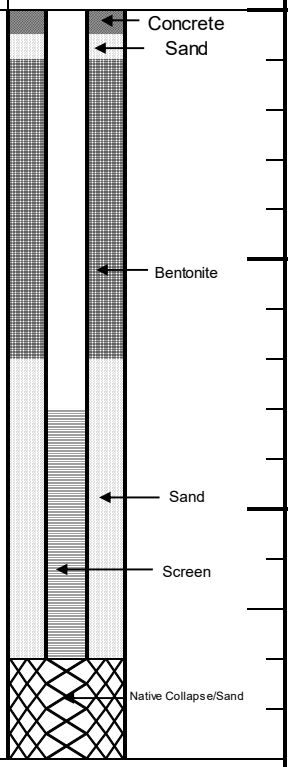
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-103 **Page:** 1 of 1
Start Date: 03/23/20 **End Date:** 03/23/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 8'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil/Grass	0.0
1				12"				0.0
2	Soil	2-3'	1047	12"				0.0
3				12"	SW		FILL SAND, tan, damp, medium to fine grain	0.0
4				12"				0.0
5				12"				0.0
6				12"				0.0
7				12"	SW		SAND, brown, damp, fine grain	0.0
8				12"				0.0
9	Soil	8-9'	1315	12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, grey, wet at 10', fine grain with interbedded medium lenses	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 9.55'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

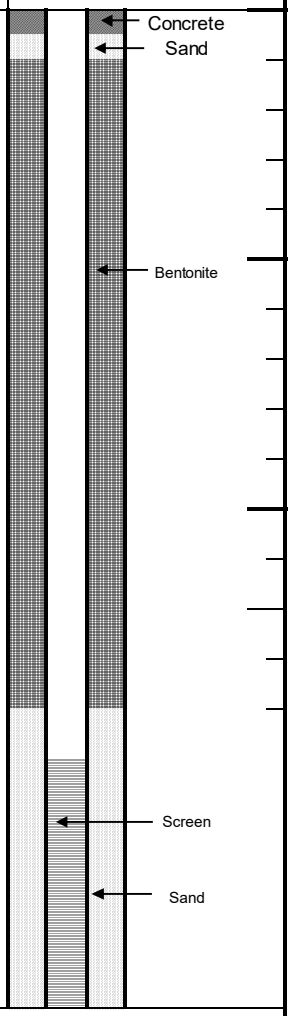
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-104 **Page:** 1 of 1
Start Date: 03/23/20 **End Date:** 03/23/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 15'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil/Grass	0.0
1				12"				0.0
2	Soil	2-3'	1020	12"	SW		FILL SAND, brown, damp, medium to fine grain	0.0
3				12"	SW		FILL SAND, reddish brown, damp, medium to fine grain	0.0
4				12"				0.0
5				12"	SW		FILL SAND, tan, damp, fine grain	0.0
6				12"				0.0
7				12"				0.0
8				12"	SW		SAND, tan, damp, fine grain	0.0
9				12"				0.0
10				12"	SW		SAND, tan, moist, medium to fine grain	0.0
11				12"				0.0
12				12"				0.0
13				12"	SW		SAND, grey, moist, fine grain	0.0
14	Soil	13-14'	1230	12"				0.0
15				12"				0.0
16				12"				0.0
17				12"				0.0
18				12"	SW		SAND, grey, wet at 15', fine grain	0.0
19				12"				0.0
20				12"				0.0

EOB 20'



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(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 15.00'
4/8/20 - Gauging Event: 9.49'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT
Driller: Ian
Assistant: Trevor

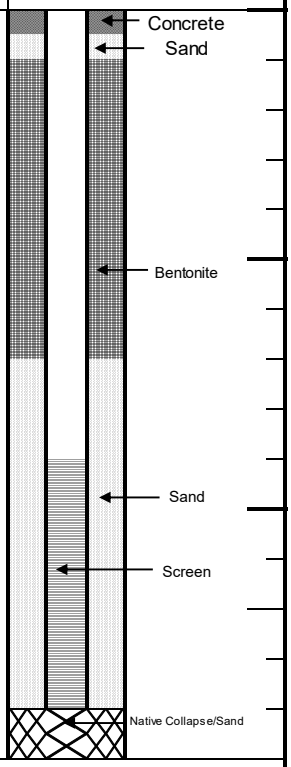
Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-105 **Page:** 1 of 1
Start Date: 03/23/20 **End Date:** 03/23/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 9'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Topsoil	0.0
2				12"	SW		FILL SAND, brown, damp, med to fine grain, trace roots	0.0
3	Soil	2-3'	1010	12"				0.0
4				12"				0.0
5				12"				0.0
6				12"				0.0
7				12"				0.0
8				12"	SW		SAND, tan, damp, fine grain	0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"				0.0
13				12"				0.0
14	Soil	12-13'	1215	12"				0.0
15				12"	SW		SAND, grey, moist at 14', fine grain	0.0
							EOB 15'	



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 11.00'
4/8/20 - Gauging Event: 10.66'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

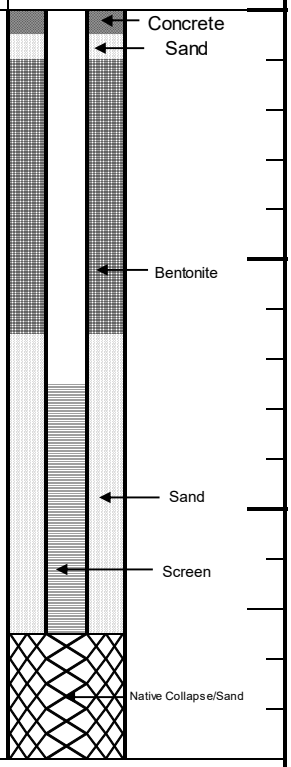
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-106 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 7.5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Leaves\Topsoil	0.1
2				12"				0.3
3	Soil	2-3'	0810	12"				0.3
4				12"	SW		FILL SAND, reddish brown, from 1' to 1.5', tan from 2' to 6', damp, fine grain	0.3
5				12"				0.3
6				12"				0.3
7				12"	SW		SAND, tan, wet at 7', fine grain	0.1
8	Soil	7-8'	0822	12"				0.0
9				12"	SW		SAND, tan, moist, medium to fine grain, medium grain lens at 10'	0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, tan, moist, medium to fine grain, medium grain lens at 12'	0.0
13				12"				0.0
14				12"	SW		SAND, grey, moist, fine grain	0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 7.66'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

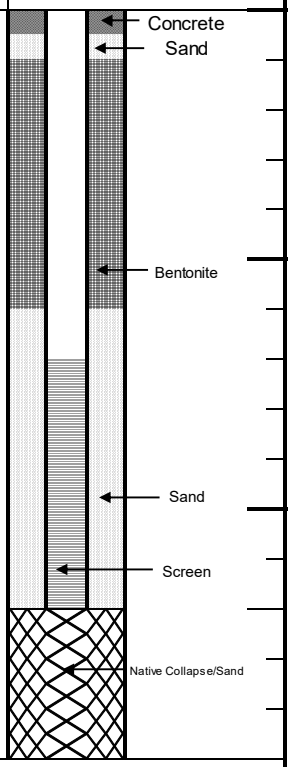
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-107 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 7'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Topsoil	0.1
2				12"				0.1
3	Soil	2-3'	0850	12"				0.1
4				12"	SW		FILL SAND, brown, damp, fine grain	0.1
5				12"				0.1
6				12"				0.1
7				12"				0.1
8	Soil	7-8'	0855	12"	SW		SAND, brown, wet at 9', fine grain, medium grain lens at 8'	0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, grey, wet, fine grain	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Borehole Observations After Drilling
Immediately after: 9.00'
4/8/20 - Gauging Event: 7.38'
Backfill : Well materials

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Driller: Ian
Assistant: Trevor

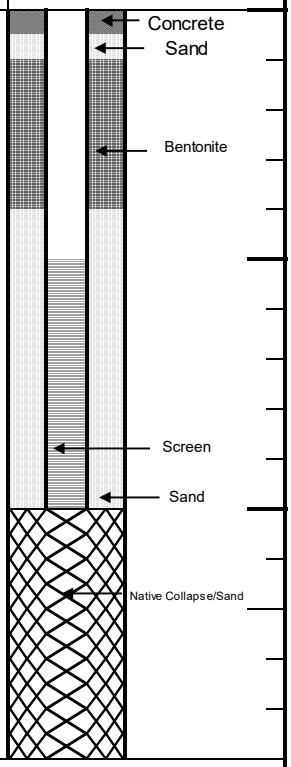
Monitoring Well Boring Log

ATC
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-108 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil/Leaves	0.1
1				12"				0.1
2	Soil	2-3'	0909	12"				0.1
3				12"	SW		FILL SAND, brown, damp, fine grain, trace roots	0.1
4	Soil	4-5'	0915	12"				0.1
5				12"				0.1
6				12"	SW		SAND, brown, saturated at at 6', fine grain, medium grain lens at 7'	0.1
7				12"				0.0
8				12"				0.0
9				12"				0.0
10				12"	SW		SAND, grey, wet, fine grain	0.0
11				12"				0.0
12				12"				0.0
13				12"				0.0
14				12"				0.0
15							EOB 15'	



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 6.00'
4/8/20 - Gauging Event: 9.97'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

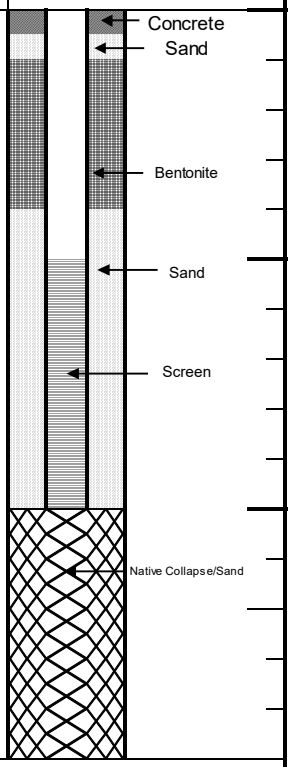
Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-109 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Leaves/Topsoil	0.1
1	Soil	1-2'	0935	12"	SW		FILL SAND, brown, damp, fine grain, roots	1.4
2				12"				1.4
3				12"				1.3
4	Soil	4-5'	0940	12"	SW		FILL SAND, tan, saturated at 6', fine grain	1.3
5				12"				1.3
6				12"				0.2
7				12"				0.0
8				12"	SW		SAND, brown to tan, wet, fine grain with medium grain lenses at 7' and 9'	0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, light tan, wet, fine grain	0.0
13				12"				0.0
14				12"				0.0
15							EOB 15'	



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(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 6.00'
4/8/20 - Gauging Event: 5.69'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

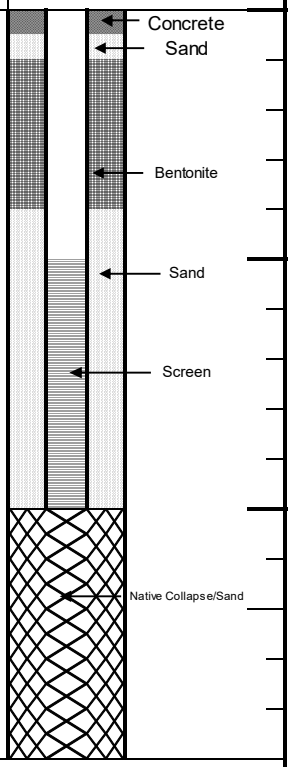
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-110 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Leaves/Topsoil	0.0
1	Soil	1-2'	1000	12"				0.1
2				12"				0.0
3				12"	SW		FILL SAND, brown, damp, fine grain	0.0
4				12"				0.0
5	Soil	4-5'	1005	12"				0.0
6				12"				0.0
7				12"				0.0
8				12"	SW		SAND, brown, saturated at 6', medium to fine grain	0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, grey, wet, medium to fine grain	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 6.00'
4/8/20 - Gauging Event: 5.76'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

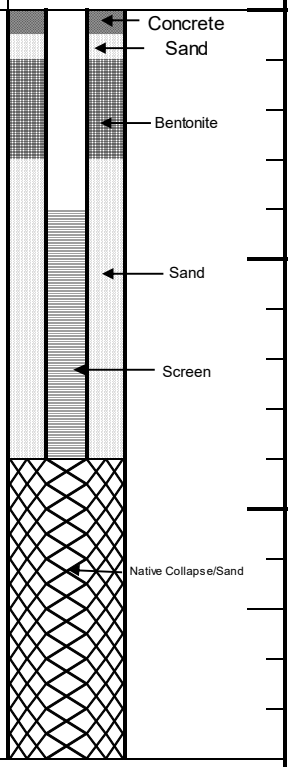
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-111 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 4'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1	Soil	3-4'	1030	12"			Leaves/Topsoil	0.0
2				12"				0.1
3				12"				0.1
4				12"	SW		FILL SAND, reddish brown, damp, medium to fine grain, trace roots	0.1
5				12"				0.1
6				12"				0.1
7				12"	SW		SAND, brown, saturated at 6', medium grain	0.0
8				12"				0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, grey, wet, fine grain	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 6.00'
4/8/20 - Gauging Event: 5.26'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

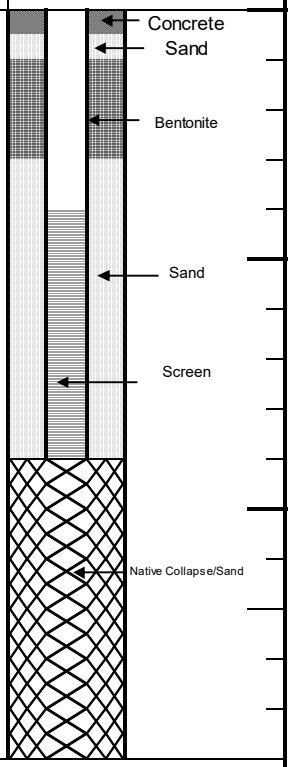
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-112 **Page:** 1 of 1
Start Date: 03/25/20 **End Date:** 03/25/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 4'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1	Soil	3-4'	1050	12"			Leaves/Topsoil	0.0
2				12"				0.1
3				12"				0.1
4				12"	SW		FILL SAND, brown, damp, medium to fine grain, trace roots	0.1
5				12"				0.1
6				12"				0.1
7				12"				0.0
8				12"				0.0
9				12"				0.0
10				12"				0.0
11				12"	SW		SAND, brown to grey, saturated at 6', medium to fine grain	0.0
12				12"				0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 6.00'
4/8/20 - Gauging Event: 4.51'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

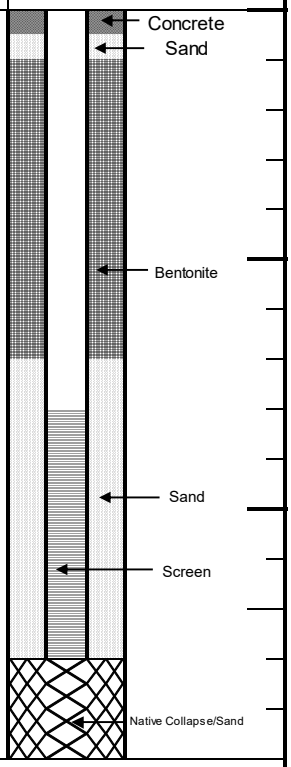
Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001 **Boring ID:** MW-113 **Page:** 1 of 1
Project Name: Detroit Axle **Start Date:** 03/23/20 **End Date:** 03/24/20
Site Location: 1600 W. 8 Mile Rd. **Casing:** Schedule 40 PVC
City: Ferndale, MI 48220 **Casing Diameter:** 2" **Length:** 8'
Boring Diameter: 4" HA / 2.25" Macrocore **Screen Slot Size:** 0.010"
Drilling Method: Hand Auger / Macrocore/Hollow Auger **Screen Diameter:** 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0–1				12"			Topsoil	0.0
1–2				12"				0.0
2–3	Soil	2-3'	1550	12"	SW		FILL SAND, dark brown, damp, fine grain, roots	0.0
3–4				12"				0.0
4–5				12"	SW		FILL SAND, brown, damp, fine grain	0.0
5–6				12"				0.0
6–7				12"				0.0
7–8	Soil	7-8'	0945	12"	SW		SAND, brown, damp, fine grained	0.0
8–9				12"				0.0
9–10				12"	SW		SAND, tan, saturated at 10', fine grain	0.0
10–11				12"				0.0
11–12				12"				0.0
12–13				12"	SW		SAND, grey, wet, fine grain	0.0
13–14				12"				0.0
14–15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 7.77'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services **Driller:** Ian
Drill Rig Type: Geoprobe 7720DT **Assistant:** Trevor

Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001 | **Boring ID:** MW-114 | **Page:** 1 of 1
Project Name: Detroit Axle | **Start Date:** 03/23/20 | **End Date:** 03/24/20
Site Location: 1600 W. 8 Mile Rd. | **Casing:** Schedule 40 PVC
City: Ferndale, MI 48220 | **Casing Diameter:** 2" | **Length:** 8'
Boring Diameter: 4" HA / 2.25" Macrocore | **Screen Slot Size:** 0.010"
Drilling Method: Hand Auger / Macrocore/Hollow Auger | **Screen Diameter:** 2" | **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0							Grass	0.0
1				12"	ML		SANDY CLAY, brown, damp, soft, high plasticity, brick and concrete pieces	0.0
2				12"				0.0
3	Soil	3-4'	1100	12"	OH		SILTY CLAY, brown, damp, soft, high plasticity, brick and concrete pieces	0.0
4				12"				0.0
5				12"				0.0
6				12"				0.0
7				12"				0.0
8				12"	OH		CLAY, dark brown, damp, hard, oil staining, high plasticity, brick and concrete pieces size 1/2"-1", sand lens at 8-9', wet at 10'	0.0
9	Soil	8-9'	1110	12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	ML		SANDY CLAY, brown, damp, soft, high plasticity, debris (brick and concrete pieces size 1/2"-1")	0.0
13				12"				0.0
14				12"				0.0
15				12"	ML		SANDY CLAY, brown/black, moist, soft, light oil staining, high plasticity	0.0

EOB 15'

Well Construction: Concrete; Sand; Bentonite; Sand; Screen; Native Collapse/Sand

(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 7.70'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services | **Driller:** Ian
Drill Rig Type: Geoprobe 7720DT | **Assistant:** Trevor

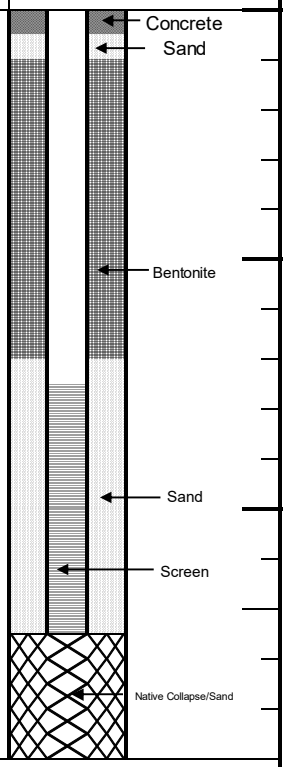
Monitoring Well Boring Log

ATC
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001 | **Boring ID:** MW-115 | **Page:** 1 of 1
Project Name: Detroit Axle | **Start Date:** 03/23/20 | **End Date:** 03/24/20
Site Location: 1600 W. 8 Mile Rd. | **Casing:** Schedule 40 PVC
City: Ferndale, MI 48220 | **Casing Diameter:** 2" | **Length:** 7.5'
Boring Diameter: 4" HA / 2.25" Macrocore | **Screen Slot Size:** 0.010"
Drilling Method: Hand Auger / Macrocore/Hollow Auger | **Screen Diameter:** 2" | **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Topsoil	0.0
2	Soil	2-3'	1215	12"	CH		CLAY, brown, damp, stiff, high plasticity, debris (brick size 1/2"-1")	0.0
3				12"				0.0
4				12"	CL		SILTY CLAY, brown, damp, soft, high plasticity, debris (brick size 1/2" - 1")	0.0
5				12"				0.0
6				12"	CH		CLAY, brown with light grey mottling, hard, damp, low plasticity, trace gravel	7.1
7				12"				7.1
8	Soil	7-8'	1220	12"	SW		SAND, black, damp, light odor, medium grain	20.6
9				12"				20.6
10				12"	ML		SANDY CLAY, grey, damp, soft, black oil staining, light odor, high plasticity, trace gravel	19.9
11				12"			PEASTONE, black, saturated at 10', brick and concrete pieces size 1/2" - 1", strong odor	65.7
12				12"				65.7
13				12"				65.7
14				12"	ML		SANDY CLAY, grey with black oil staining, moist, soft, high plasticity, trace gravel	5.7
15				12"				5.7

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/8/20 - Gauging Event: 4.80'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services | **Driller:** Ian
Drill Rig Type: Geoprobe 7720DT | **Assistant:** Trevor

Monitoring Well Boring Log

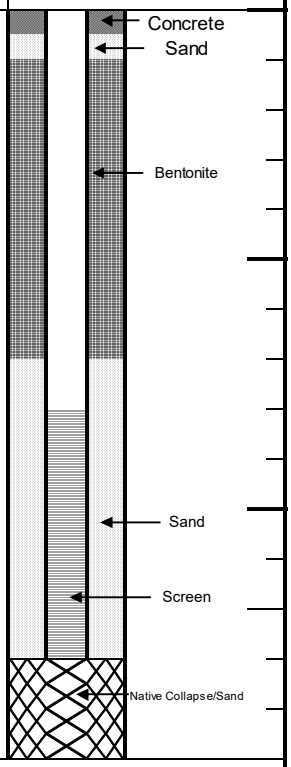
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-116 **Page:** 1 of 1
Start Date: 03/30/20 **End Date:** 03/30/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 8'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Grass/Topsoil	0.1
2				12"				0.1
3	Soil	2-3'	1030	12"	SW		FILL SAND, brown to tan, damp, medium to fine grain, trace roots/organic matter	0.1
4				12"				0.1
5				12"				0.1
6				12"				0.1
7	Soil	7-8'	1040	12"	SW		SAND, brown, damp, fine grain	0.0
8				12"				0.0
9				12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, light brown, wet at 9', fine grain	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 9.00'
4/8/20 - Gauging Event: 6.77'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-117 **Page:** 1 of 1
Start Date: 03/30/20 **End Date:** 03/30/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 7.5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0-1				12"			Grass/Topsoil	0.1
1-2				12"	SW		FILL SAND, brown, damp, medium to fine grain, trace roots/organic matter	0.1
2-3	Soil	2-3'	1110	12"				0.1
3-4				12"				0.1
4-5				12"	SW		FILL SAND, brown, damp, fine grain	0.1
5-6				12"				0.1
6-7	Soil	6-7'	1120	12"				0.0
7-8				12"	SW		SAND, brown, damp, medium to fine grain	0.0
8-9				12"				0.0
9-10				12"				0.0
10-11				12"				0.0
11-12				12"	SW		SAND, light brown, wet at 8', fine grain	0.0
12-13				12"				0.0
13-14				12"				0.0
14-15				12"				0.0

EOB 15'

Well Construction: Concrete; Sand; Bentonite; Sand; Screen; Native Collapse/Sand

(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 8.00'
4/8/20 - Gauging Event: 8.17'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore/Hollow Auger

Boring ID: MW-118 **Page:** 1 of 1
Start Date: 03/30/20 **End Date:** 03/30/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 11'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Grass/Topsoil	0.0
2				12"	SW		FILL SAND, brown, damp, roots/organic matter	0.0
3	Soil	2-3'	1200	12"				0.0
4				12"	SW		FILL SAND, reddish brown to tan, damp, fine grain, trace roots	0.0
5				12"				0.0
6				12"				0.0
7				12"				0.0
8				12"	SW		SAND, brown, damp, medium to fine grain	0.0
9				12"				0.0
10								
11	Soil	10-11'	1210	12"				0.0
12				12"				0.0
13				12"				0.0
14				12"	SW		SAND, grey, wet at 12', medium to fine grain	0.0
15				12"				0.0
16				12"				0.0

EOB 16'

Well Construction: Concrete; Sand; Bentonite; Screen; Sand

(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 12.00'
4/8/20 - Gauging Event: 11.56'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Ira Adolphues
Drawn by: Ira Adolphues
Checked by: Joshua Schyuler

Drilling Co.: Job Site Services
Drill Rig Type: Geoprobe 7720DT

Driller: Ian
Assistant: Trevor

Monitoring Well Boring Log

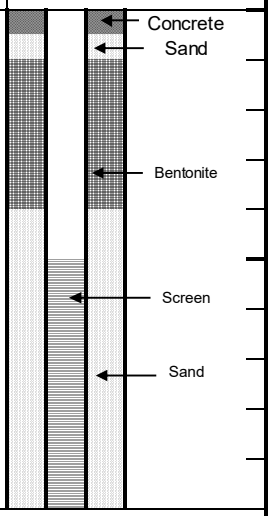
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore

Boring ID: MW-119 **Page:** 1 of 1
Start Date: 04/21/20 **End Date:** 04/21/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 5'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0								
1				12"			Topsoil	0.0
2				12"				0.0
3	Soil	2'- 3'	1305	12"	SW		FILL SAND, dark brown, damp, medium grained, abundant roots,	0.0
4				12"				35.1
5				12"				35.1
6				12"	SW		SAND, tan/brown, damp, medium grained,	35.1
7	Soil	6'- 7'	1315	12"				35.1
8				12"				0.0
9				12"	SW		SAND, tan/brown, saturated, medium- fine grained,	0.0
10				12"				0.0

EOB 10'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Logged by: Spencer Overbeck
Drawn by: Spencer Overbeck
Checked by: Josh Schuyler

Borehole Observations After Drilling
Immediately after: 7.00'
4/23/20 - Gauging Event: 6.42'
Backfill : Well materials

Drilling Co.: Alluvial Earth
Drill Rig Type: Geoprobe 66DT

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Driller: Ryan
Assistant: N/A

Monitoring Well Boring Log

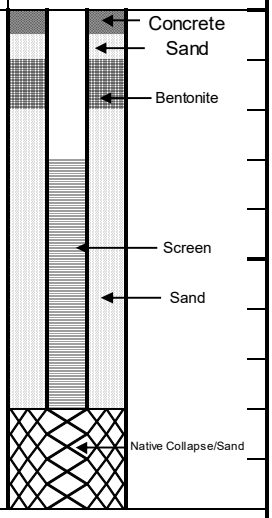
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore

Boring ID: MW-120 **Page:** 1 of 1
Start Date: 04/21/20 **End Date:** 04/21/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 3'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil	0.0
1				12"				0.0
2	Soil	2'- 3'	1215	12"	SW		FILL SAND, dark brown, damp, medium grained, abundant roots,	0.0
3				12"				0.0
4	Soil	4'- 5'	1220	12"				0.0
5				12"				0.0
6				12"				0.0
7				12"	SW		SAND, tan/brown, saturated, medium to fine grained,	0.0
8				12"				0.0
9				12"				0.0
10								

EOB 10'



(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Logged by: Spencer Overbeck
Drawn by: Spencer Overbeck
Checked by:

Borehole Observations After Drilling
Immediately after: 5.00'
4/23/20 - Gauging Event: 3.99'
Backfill : Well materials

Drilling Co.: Alluvial Earth
Drill Rig Type: Geoprobe 66DT

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Driller: Ryan
Assistant: N/A

Monitoring Well Boring Log

ATC
46555 Humboldt Drive
Suite 100
Novi, MI 48377
Phone: (248) 669-5140

Project Number: NPDAX19001
Project Name: Detroit Axle
Site Location: 1600 W. 8 Mile Rd.
City: Ferndale, MI 48220
Boring Diameter: 4" HA / 2.25" Macrocore
Drilling Method: Hand Auger / Macrocore

Boring ID: MW-121 **Page:** 1 of 1
Start Date: 04/21/20 **End Date:** 04/21/20
Casing: Schedule 40 PVC
Casing Diameter: 2" **Length:** 8'
Screen Slot Size: 0.010"
Screen Diameter: 2" **Length:** 5'

FEET (bgs)	SAMPLE TYPE	SAMPLE INTERVAL (bgs)	SAMPLE TIME	Recovery	USCS	Graphic	LITHOLOGY DESCRIPTION	PID (PPMV)
0				12"			Topsoil	0.0
1				12"				0.0
2	Soil	2'- 3'	1100	12"	SW		FILL SAND, dark brown, damp, medium grained, abundant roots,	0.0
3				12"				0.0
4				12"	SW		SAND, red-brown, damp, medium grained,	0.0
5				12"				0.0
6				12"				0.0
7				12"	SW		SAND, tan/brown, saturated, medium to fine grained,	0.0
8				12"				0.0
9	Soil	9'- 10'	1105	12"				0.0
10				12"				0.0
11				12"				0.0
12				12"	SW		SAND, tan/brown, saturated, medium to fine grained,	0.0
13				12"				0.0
14				12"				0.0
15				12"				0.0

EOB 15'

Well Construction: Concrete; Sand; Bentonite; Screen; Sand; Native Collapse/Sand

(HA) = HAND AUGER (DS) = DISTURBED SAMPLE
(AK) = AIR KNIFE (GS) = GeoSonic
(SS) = SPLIT SPOON bpf = blows per foot
(qP) = Penetrometer Unconfined Compressive Strength

Borehole Observations After Drilling
Immediately after: 10.00'
4/23/20 - Gauging Event: 9.67'
Backfill : Well materials

(Rec.) = RECOVERY (EOB) = END OF BORING
(bgs) = Below Ground Surface
(NR) = NO RECOVERY
(NA) = NOT APPLICABLE

Logged by: Spencer Overbeck
Drawn by: Spencer Overbeck
Checked by: Josh Schuyler

Drilling Co.: Alluvial Earth
Drill Rig Type: Geoprobe 66DT

Driller: Ryan
Assistant: N/A

LOG MW-122

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 6.5

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
0			0.0			SAND - FINE GRAINED WITH SOME BROKEN CONCRETE PIECES, DRY, BROWN	CAP	0
2			0.0			SAND - MEDIUM TO FINE GRAINED WITH TRACE GRAVEL AND ORGANICS, DAMP, DARK BROWN TO BROWN	BENTONITE	2
4	(4-5')		0.0	SP				4
6			0.0				SAND	6
			0.0	SP		SAND - MEDIUM TO FINE GRAINED, SATURATED AT 6.5', BROWN	0.010"	
8				SP		SAND - MEDIUM TO FINE GRAINED, SATURATED, GRAYISH-BROWN		8
				SC GC		SAND - COARSE GRAINED, SATURATED, GRAYISH-BROWN		
10				SP		SAND - MEDIUM TO FINE GRAINED, SATURATED, GRAYISH-BROWN		10
12			0.0	SC GC		SAND - COARSE GRAINED, SATURATED, GRAYISH-BROWN		12
14				SP		SAND - MEDIUM TO FINE GRAINED, SATURATED, GRAYISH-BROWN		14
			0.0			Bottom of hole at 15 feet		
16								16

ATC
46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (5-10')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001.GPJ LOG A EWNN05.GDT 7/27/20

LOG MW-123

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 7

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.5			SAND - FINE GRAINED, SOME GRAVEL AND TRACE ROOTS, CONCRETE AT 1', DRY, BROWN	CAP	
2			0.4	SP		SAND - MEDIUM TO FINE GRAINED, DAMP, GRAY	BENTONITE	2
4	(4-5')		0.2	SP		SAND - MEDIUM TO FINE GRAINED, DAMP, REDDISH BROWN		4
6							SAND	6
			0.1	SP		SAND - COARSE TO MEDIUM GRAINED, SATURATED AT 7', BROWN	0.010"	
8			0.1	SP		SAND - COARSE TO MEDIUM GRAINED, SATURATED, GRAY		8
10						SAND - FINE TO COARSE GRAINED, SATURATED, GRAYISH-BROWN		10
12			0.0	SP				12
14								14
				SC GC		SAND - COARSE GRAINED, SATURATED GRAYISH-BROWN		
			0.0			Bottom of hole at 15 feet		
16								16

ATC
46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (5-10')

See key sheet for symbols and abbreviations used above.

LOG MW-124

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 | Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
0			0.0			SAND - FINE GRAINED WITH TRACE GRAVEL, DRY, BROWN	CAP	0
2			0.1			SAND - MEDIUM TO FINE GRAINED WITH TRACE GRAVEL AND ORGANICS AT 2', DAMP, DARK TO LIGHT BROWN	BENTONITE	2
4	(4-5')		0.1	SP				4
6			0.1					6
7			0.0	SP		SAND - COARSE TO MEDIUM GRAINED, WET AT 7', LIGHT BROWN		
8			0.0	SP		SAND - MEDIUM TO FINE GRAINED, MOIST, LIGHT GRAY TO BROWN	SAND 0.010"	8
10						SAND - MEDIUM TO FINE GRAINED, SATURATED AT 10', LIGHT GRAYISH BROWN		10
12			0.0	SP				12
14								14
15			0.0			Bottom of hole at 15 feet		
16								16

ATC

46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (7-12')

See key sheet for symbols and abbreviations used above.

LOG MW-125

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/16/20 Ended 6/16/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
0			0.0			SAND - FINE GRAINED WITH TRACE GRAVEL, DRY, BROWN	CAP	0
2						SAND - MEDIUM TO FINE GRAINED WITH TRACE GRAVEL AND BROKEN CONCRETE AND BRICK PIECES, DAMP, DARK BROWN		2
4	(4-5')		0.3	SP			BENTONITE	4
6								6
8				SP		SAND - MEDIUM GRAINED, LARGE CONCRETE PIECES, WET AT 8', DARK BROWN TO BROWN		8
10			0.1	SP		SAND - COARSE TO MEDIUM GRAINED, SATURATED AT 10', GRAYISH BROWN	SAND 0.010"	10
12			0.0	SW		SAND - COARSE GRAINED, SATURATED, GRAYISH BROWN		12
			0.0	SP		SAND - MEDIUM TO FINE GRAINED, SATURATED, DARK GRAY		
14			0.0	SP		SAND - MEDIUM TO FINE GRAINED WITH SOME SILT, SATURATED, GRAYISH BROWN		14
16			0.0			Bottom of hole at 15 feet		16

ATC
46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (8-13')

See key sheet for symbols and abbreviations used above.

LOG MW-126

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.0			SAND - FINE GRAINED WITH TRACE GRAVEL, DRY, BROWN	CAP	
2			0.2	SP		SAND - MEDIUM GRAINED WITH TRACE GRAVEL AND ORGANICS, DAMP, DARK BROWN TO BROWN		2
4	(4-5')		0.5	SP		SAND - MEDIUM GRAINED WITH TRACE GRAVEL AND ORGANICS, DAMP, DARK BROWN	BENTONITE	4
			0.5	SP		SAND - MEDIUM TO FINE GRAINED, DAMP, DARK BROWN WITH SOME RED		
6			0.7	SP		SAND - MEDIUM GRAINED WITH TRACE GRAVEL, DAMP, LIGHT BROWN		6
8	(7.5-8.5')		0.7	SP		SAND - MEDIUM GRAINED WITH TRACE GRAVEL, MOIST, TAN		8
10			1.0	SP		SAND - MEDIUM TO FINE GRAINED, SATURATED AT 10', BROWN TO DARK GRAY WITH SOME BLACK, SLIGHT SULFUR ODOR	SAND 0.010"	10 ▽
12			0.1	SM		SAND - FINE GRAINED WITH SILT, SATURATED, GRAYISH BROWN		12
14			0.1			Bottom of hole at 15 feet		14
16								16

ATC

46555 Humboldt Dr. Ste. 100
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Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (8.5-13.5')

See key sheet for symbols and abbreviations used above.

LOG MW-127

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.2			SAND - MEDIUM TO FINE WITH CONCRETE AND BRICK PIECES, DRY, LIGHT BROWN	CAP	
2			1.1	SP		SAND - MEDIUM TO FINE GRAINED WITH SOME CONRETE AND BRICK PIECES, DRY, LIGHT BROWN		2
			1.0	SP		SAND - MEDIUM TO FINE GRAINED WITH SOME SILT, DAMP, GRAY		
4							BENTONITE	4
			1.0	SP		SAND - MEDIUM TO FINE GRAINED, DAMP, REDDISH BROWN		
6	(6-7')		1.0					6
				SP		SAND - MEDIUM GRAINED, MOIST AT 8', LIGHT GRAY		
8			1.0	SW		SAND - COARSE GRAINED, MOIST, LIGHT GRAY		8
				SP		SAND - MEDIUM GRAINED, LIGHT GRAY		
10							SAND	10
	(10-11')		49.6	SP		SAND - MEDIUM GRAINED, SATURATED AT 10', BLACK, PETROLEUM ODOR	0.010"	
				SP SM		SAND - MEDIUM TO FINE GRAINED WITH SOME SILT, SATURATED, LIGHT GRAY		
12								12
			1.7					
14								14
			0.2			Bottom of hole at 15 feet		
16								16

ATC
46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (8-13')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001.GPJ LOG A EWNN05.GDT 7/27/20

LOG MW-128

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.0			GRASS AND TOPSOIL	CAP	
				SP		SAND - FINE GRAINED WITH SOME SILT AND TRACE GRAVEL, DRY, LIGHT BROWN		
2			0.0					2
			0.5	SP		SAND - FINE GRAINED WITH SOME MEDIUM TO COARSE GRAINED, BROKEN CONCRETE AND BRICK (4-4.5'), DAMP, BROWN WITH SOME RED		
4							BENTONITE	4
	(4-5')		0.5					
			0.3	SP		SAND - MEDIUM GRAINED WITH SOME COARSE GRAINED, MOIST, WET AT 9.5', BROWN WITH SOME RED		
6								6
			0.3					
8	(8-9')		0.3					8
			0.0	SP		SAND - MEDIUM TO FINE GRAINED, WET, SATURATED AT 10', BROWN/GRAY		
10				SW		SAND - COARSE GRAINED, SATURATED, BROWN/GRAY	SAND 0.010"	10
				SM		SAND - FINE GRAINED WITH SILT, SATURATED, GRAY		
12			0.0					12
14								14
			0.0			Bottom of hole at 15 feet		
16								16

ATC

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Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (8-13')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001.GPJ LOG A EWNN05.GDT 7/27/20

LOG MW-129

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 10

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.2			SAND - FINE GRAINED WITH TRACE GRAVEL, DRY, BROWN	CAP	
2			0.4	SP		SAND - MEDIUM TO FINE GRAINED WITH SOME BROKEN CONCRETE AND BRICK PIECES, DAMP, BROWN		2
	(3-4')		0.4					
4				SP		SAND - MEDIUM TO FINE GRAINED WITH TRACE GRAVEL, SOME BROKEN CONCRETE AND BRICK PIECES, DAMP, BROWN	BENTONITE	4
6			0.4					6
8			0.7	SP		SAND - MEDIUM GRAINED WITH SOME CONCRETE AND BRICK PIECES, WET AT 8', DARK BROWN		8
10				SP		SAND - COARSE TO MEDIUM GRAINED WITH SOME GRAVEL, SATURATED AT 10', DARK GRAY	SAND 0.010"	10
12			0.2	SM		SAND - FINE GRAINED WITH SOME SILT AND TRACE ROOTS, SATURATED, GRAY		12
14			0.1					14
16			0.0			Bottom of hole at 15 feet		16

ATC
46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (8-13')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001.GPJ LOG A EWNN05.GDT 7/27/20

LOG MW-130

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 | Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 7

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION
0			0.0			SAND - FINE GRAINED WITH BROKEN CONCRETE AND BRICK PIECES, DRY, LIGHT BROWN
2			0.2	SP		SAND - FINE TO MEDIUM GRAINED WITH TRACE GRAVEL, SOME BROKEN ASPHALT AND BRICK PIECES, DAMP, BLACK
4	(4-5')		0.2	SP		SAND - MEDIUM TO FINE GRAINED, DAMP, TAN TO REDDISH BROWN
6			0.3			
8			0.3	SW		SAND - MEDIUM GRAINED, SATURATED AT 7', LIGHT BROWN
10			0.0	SM		SAND - COARSE TO FINE GRAINED WITH SOME SILT, SATURATED, GRAYISH BROWN
12						
14			0.0			Bottom of hole at 15 feet
16						

COMPLETION DETAILS: CAP; BENTONITE; SAND; 0.010"

DEPTH FEET: 0, 2, 4, 6, 8, 10, 12, 14, 16

ATC
46555 Humboldt Dr. Ste. 100
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Fax: 248-669-5147

Remarks: Screen set (5-10')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001.GPJ LOG A EWNN05.GDT 7/27/20

LOG MW-131

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 6/15/20 Ended 6/15/20 | Total Depth (ft) 15

Logged By I. ADOLPHUES | Drill Contractor JSS | Depth To Water (ft) ▽ ATD 5.5

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
			0.0			SAND - FINE GRAINED WITH SOME BROKEN CONCRETE PIECES, DRY, LIGHT BROWN	CAP	
2	(2-3')		0.2	SP		SAND - MEDIUM GRAINED WITH SOME CONCRETE PIECES AT 3', DAMP, REDDISH BROWN	BENTONITE	2
4			0.2 0.2	SP		SAND - MEDIUM GRAINED, DAMP, TAN		4
6			0.2	SP		SAND - MEDIUM GRAINED, SATURATED AT 5.5', BROWN	SAND 0.010"	6
8			0.9	SP		SAND - MEDIUM GRAINED WITH SOME ORGANICS, SATURATED, BLACK		8
			0.0	SW		SAND - MEDIUM GRAINED, SATURATED, LIGHT BROWN		
10			0.0	SW		SAND - MEDIUM GRAINED, SATURATED, LIGHT GRAY		10
12			0.0	SP		SAND - MEDIUM TO FINE GRAINED WITH TRACE GRAVEL, SATURATED, BROWN		12
14			0.0			Bottom of hole at 15 feet		14
16								16

ATC
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Fax: 248-669-5147

Remarks: Screen set (5-10')

See key sheet for symbols and abbreviations used above.

LOG MW-132

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 8/12/20 Ended 8/12/20 | Total Depth (ft) 16

Logged By R.SCOTT | Drill Contractor TERRAPROBE | Depth To Water (ft) ▽ ATD 12

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
						SAND - FINE GRAINED WITH SOME BROKEN CONCRETE PIECES, DRY, BROWN	CAP	
			0.0					
2				SP		SAND - FINE TO MEDIUM GRAINED WITH TRACE GRAVEL, MOIST, DARK BROWN		2
						CONCRETE - BROKEN		
			0.0			SAND - FINE TO MEDIUM GRAINED WITH TRACE GRAVEL AND TRACE CLAY, LITTLE CONCRETE FRAGMENTS, DENSE, MOIST		
4				SP				4
			0.2				BENTONITE	
						CONCRETE AND BRICK FRAGMENTS		
			0.3	CL		CLAY - SANDY MEDIUM TO FINE GRAINED WITH BRICK AND CONCRETE FRAGMENTS, MOIST, DARK BROWN TO BLACK, STRONG SULFURIC ODOR		
6	(5.5-6.5')			SW				6
						SAND - COARSE GRAINED, MOIST, LIGHT BROWN WITH BRICK FRAGMENTS		
			0.1			CONCRETE AND BRICK FRAGMENTS		
						SAND - FINE GRAINED, DRY, LIGHT BROWN		
8						CONCRETE - BROKEN		8
						CLAY - SANDY FINE TO MEDIUM GRAINED WITH SOME LARGE ROCKS AND SMALL GRAVEL, SOME BRICK AND CONCRETE FRAGMENTS, DAMP/WET, DARK BROWN		
			0.1	CL				
10								10
			0.0					
				SP		SAND - MEDIUM TO COARSE GRAINED WITH SOME BRICK AND CONCRETE FRAGMENTS, DAMP, LIGHT BROWN	SAND	
						CONCRETE AND BRICK FRAGMENTS		
12						SAND - MEDIUM TO COARSE GRAINED WITH SOME LARGE ROCKS, SMALL GRAVEL, GLASS AND BRICK PIECES, SATURATED, BROWN	▽ 0.010"	12
			0.1	SP				
14								14
			0.3					
			0.0	SP		SAND - FINE TO MEDIUM GRAINED WITH SOME SILT, WET, BROWN		
16						Bottom of hole at 16 feet		16

ATC

46555 Humboldt Dr. Ste. 100
Novi, Michigan 48377
Phone: 248-669-5140
Fax: 248-669-5147

Remarks: Screen set (10-15')

See key sheet for symbols and abbreviations used above.

LOG MW-133

SHEET 1 OF 1

Project 6 ACRE PARCEL | Location 1600 W. 8 MILE ROAD, FERNDALE, MI

Client DETROIT AXLE | Drill Method HSA | Elevation (ft amsl) --

Prj. No. NPDAX19001 | Drilling Started 8/12/20 Ended 8/12/20 | Total Depth (ft) 16

Logged By R. SCOTT | Drill Contractor TERRAPROBE | Depth To Water (ft) ▽ ATD 12

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	COMPLETION DETAILS	DEPTH FEET
						SAND - FINE GRAINED WITH SOME SILT AND ORGANICS, DRY, LIGHT BROWN	CAP	
			0.0			CONCRETE AND BRICK FRAGMENTS		
				SP		SAND - FINE TO MEDIUM GRAINED, DRY, LIGHT BROWN		
2						SAND - FINE TO MEDIUM GRAINED WITH SOME LARGE ROCKS AND CONCRETE/BRICK FRAGMENTS, MOIST, BROWN		2
	(3-4')		0.0					
4			0.3	CL		CLAY - SANDY FINE TO MEDIUM GRAINED WITH SOME GRAVEL, BRICKS/CONCRETE FRAGMENTS AND GLASS, MOIST, DARK BROWN	BENTONITE	4
			0.1			CONCRETE AND BRICK FRAGMENTS		
6								6
			0.1	CL		CLAY - SANDY FINE TO MEDIUM GRAINED WITH SOME GRAVEL, BRICKS/CONCRETE FRAGMENTS AND GLASS, DAMP, DARK BROWN		
8								8
			0.1	CL		CLAY - SANDY FINE TO MEDIUM GRAINED WITH SOME GRAVEL, BRICKS/CONCRETE FRAGMENTS AND GLASS, WET, DARK BROWN		
10				CL		CLAY - SANDY FINE TO MEDIUM GRAINED WITH SOME GRAVEL, BRICKS/CONCRETE FRAGMENTS AND GLASS, WET, DARK BROWN (GRAY/BLACK FROM 10-12')		10
	(10-11')		0.2				SAND	
12				SP		SAND - FINE TO MEDIUM GRAINED WITH SOME SILT, SATURATED AT 12', GRAY	0.010"	12
			0.1			SAND - FINE TO MEDIUM GRAINED WITH SOME SILT, WET, GRAY WITH SOME BLACK STAINING FROM 15-15.5'		
14				SP				14
			0.0					
			0.0					
16						Bottom of hole at 16 feet		16

ATC

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Fax: 248-669-5147

Remarks: Screen set (10-15')

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 NOVI NPDAX19001 - MW132_133.GPJ LOG A EWNN05.GDT 8/20/20

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-1

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" Asphalt and gravel base							
1		Coarse grained, medium brown dry SAND		1	SS	NA			
1 / 2			-4						
2		Moist, medium-grained, brown SAND		2	SS	NA			
2 / 3			-8						Bentonite chip seal
3		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA			
4				4	SS	NA			
5					SS				
6					SS				
7			-23						
		Silty gray dry CLAY, with trace of pebbles	-24						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-2

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" Asphalt and gravel base	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA			
1 / 2			-4						
2		Moist, medium-grained, brown SAND		2	SS	NA			
2 / 3			-8						Bentonite chip seal
3		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA			
3 / 4			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-3

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" Asphalt and gravel base	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						Bentonite chip seal
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-4

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" Asphalt and gravel base	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						Bentonite chip seal
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-5

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
4 / 1		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						Bentonite chip seal
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-6

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
4 / 1		Moist, medium-grained, brown SAND		2	SS	NA	1.6		
			-8						Bentonite chip seal
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	2.4		
			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-7

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft)	Depth (m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0	0		Ground Surface	0						
			4" asphalt cover							
			Coarse sand and peastone FILL		1	SS	NA	0		
3	1			-4						
			Coarse sand and peastone FILL		2	SS	NA	0		
				-8						Bentonite chip seal
			Coarse sand FILL, black at 10 feet and saturated at 11 feet		3	SS	NA	0		
12	3			-12						
			Saturated, medium-grained black SAND		4	SS		0		
16	4			-16						
			Saturated medium-grained gray SAND, with gray CLAY at 19.5 feet		4	SS		0		
20	6			-20						
			End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-8

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft)	Depth (m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0	0		Ground Surface	0						
			4" asphalt cover	-0.4						
			Coarse grained, medium brown dry SAND		1	SS	NA	0		
3	1			-4						
			Moist, medium-grained, brown SAND		2	SS	NA	0		
8	2			-8						Bentonite chip seal
			Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
12	3			-12						
			End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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34888 Garfield Rd,
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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-9

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration ppm 100 200 300 400	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery			
0 / 0		Ground Surface	0						
		4" asphalt cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
2 / 1			-4						
4		Moist, medium-grained, brown SAND							
5				2	SS	NA	0		
6 / 2			-8						Bentonite chip seal
7		Moist, brown, fine-grained SAND, saturated at 10'							
8									
9				3	SS	NA	0		
10 / 3									
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-10

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration ppm 100 200 300 400	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery			
0 / 0		Ground Surface	0						
		4" asphalt cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
2 / 1			-4						
4		Moist, medium-grained, brown SAND							
5				2	SS	NA	0		
6 / 2			-8						Bentonite chip seal
7		Moist, brown, fine-grained SAND, saturated at 10'							
8									
9				3	SS	NA	0		
10 / 3									
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-11

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" asphalt cover							
1 / 1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
2 / 1		Moist, medium-grained, brown SAND							
				2	SS	NA	0		
			-8						
3 / 2		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
4 / 3		Saturated, medium grained gray-brown SAND		4	SS		0		
			-16						
5 / 4		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-12

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" asphalt cover							
1 / 1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
2 / 1		Moist, medium-grained, brown SAND							
				2	SS	NA	0		
			-8						
3 / 2		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
4 / 3		Saturated, medium grained gray-brown SAND		4	SS		0		
			-16						
5 / 4		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-13

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" asphalt cover							
1 /		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
2 / 1		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
3 /		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
4 /		Saturated, medium grained gray-brown SAND		4	SS		0		
			-16						
5 /		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-14

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover							
1 /		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
2 / 1		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
3 /		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	3.8		
			-12						
4 /		Saturated, medium grained gray-brown SAND		4	SS		1.2		
			-16						
5 /		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-15

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover							
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		Saturated, medium grained gray-brown SAND		4	SS		0		
			-16						
		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-16

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/4/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-17

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft / m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1 /		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4 /		Moist, medium-grained, brown SAND		2	SS	NA	0		
6 / 2			-8						
8 /		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		Bentonite chip seal
10 / 3			-12						
12 /		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-18

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft / m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1 /		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4 /		Moist, medium-grained, brown SAND, saturated at 8'		2	SS	NA	0		
6 / 2			-8						
8 /		Moist, brown, fine-grained SAND, saturated at 8'		3	SS	NA	0		Bentonite chip seal
10 / 3			-12						
12 /		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-19

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft / m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0 / 0		Ground Surface	0						
		4" concrete cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND, saturated at 8'							
6 / 2				2	SS	NA	0		
7			-8						
8		Moist, brown, fine-grained SAND, saturated at 8'							
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-20

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

Depth (ft / m)	Symbol	Description	Elev.	Sample Number	Sample Type	Recovery	Volatile Organic Concentration (ppm)	Well Data	Remarks
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND, saturated at 8'							
6 / 2				2	SS	NA	0		
7			-8						
8		Moist, brown, fine-grained SAND, saturated at 8'							
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-21

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
4 / 1		Moist, medium-grained, brown SAND, saturated at 8'		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 8'		3	SS	NA	0		Bentonite chip seal
12 / 4			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-22

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
4 / 1		Moist, medium-grained, brown SAND, saturated at 8'		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 8'		3	SS	NA	0		Bentonite chip seal
12 / 4			-12						
		End of Borehole							

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-23

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/5/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-24

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
		Coarse grained, medium brown dry SAND		1	SS	NA	0		
			-4						
		Moist, medium-grained, brown SAND		2	SS	NA	0		
			-8						
		Moist, brown, fine-grained SAND, saturated at 10'		3	SS	NA	0		
			-12						
		End of Borehole							Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-25

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" asphalt cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND							
5				2	SS	NA	0		
6 / 2			-8						
7									
8		Moist, brown, fine-grained SAND, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-26

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND							
5				2	SS	NA	0		
6 / 2			-8						
7									
8		Moist, brown, fine-grained SAND, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-27

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" concrete cover	-0.4						
1		Coarse sand and peastone FILL		1	SS	NA	0		
3 / 1			-4						
4		Medium sand and peastone FILL							
5									
6 / 2				2	SS	NA	0		
7			-8						
8		Black sand and peastone FILL, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-28

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND							
5									
6 / 2				2	SS	NA	0		
7			-8						
8		Moist, brown, fine-grained SAND, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-29

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration ppm 100 200 300 400	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery			
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND							
6 / 2				2	SS	NA	0		
7			-8						
8		Moist, brown, fine-grained SAND, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: SB-30

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration ppm 100 200 300 400	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery			
0 / 0		Ground Surface	0						
		4" grass and topsoil cover	-0.4						
1		Coarse grained, medium brown dry SAND		1	SS	NA	0		
3 / 1			-4						
4		Moist, medium-grained, brown SAND							
6 / 2				2	SS	NA	0		
7			-8						
8		Moist, brown, fine-grained SAND, saturated at 10'							Bentonite chip seal
9									
10 / 3				3	SS	NA	0		
11			-12						
12		End of Borehole							
13 / 4									
14									

Drill Method: Geoprobe

Drill Date: 10/8/12

Hole Size: 2.25

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34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

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Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: HA-1

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover		1	SS	NA	0		
		Coarse grained, medium brown dry SAND		2	SS	NA	0		
				3	SS		0		
1				4	SS		0		
			-4						
4		Moist, medium-grained, brown SAND, saturated at 8'		5	SS		0		
5				6	SS		0		
6 / 2				7	SS		0		
7				8	SS		0		
8			-8						
		End of Borehole							
9									
10 / 3									
11									
12									
13 / 4									
14									

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/9/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: HA-2

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover		1	SS	NA	0		
		Coarse grained, medium brown dry SAND		2	SS	NA	0		
				3	SS		0		
1				4	SS		0		
			-4						
4		Moist, medium-grained, brown SAND, saturated at 8'		5	SS		0		
5				6	SS		0		
6 / 2				7	SS		0		
7				8	SS		0		
8			-8						
		End of Borehole							
9									
10 / 3									
11									
12									
13 / 4									
14									

Bentonite chip seal

Drill Method: Geoprobe

Drill Date: 10/9/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: HA-3

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover		1	SS	NA	0		
		Coarse grained, medium brown dry SAND		2	SS	NA	0		
				3	SS		0		
1 /				4	SS		0		
			-4						
		Moist, medium-grained, brown SAND, saturated at 8'		5	SS		0		
				6	SS		0		Bentonite chip seal
2 /				7	SS		0		
				8	SS		0		
			-8						
		End of Borehole							
3 /									
4 /									

Drill Method: Geoprobe

Drill Date: 10/9/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
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Datum: NA

Checked by: RJN

Sheet: 1 of 1

Project No: 010105.01

Project: Former Ethyl Corp

Client: Cedan Holdings VI, LLC

Location: Ferndale, Michigan

Log of Borehole: HA-4

Driller: Terra Probe

Geologist/Engineer: Robert Nowakowski

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration (ppm)	Well Data	Remarks
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	100 200 300 400		
0 / 0		Ground Surface	0						
		4" grass and topsoil cover		1	SS	NA	0		
		Coarse grained, medium brown dry SAND		2	SS	NA	0		
				3	SS		0		
1 /				4	SS		0		
			-4						
		Moist, medium-grained, brown SAND, saturated at 8'		5	SS		0		
				6	SS		0		Bentonite chip seal
2 /				7	SS		0		
				8	SS		0		
			-8						
		End of Borehole							
3 /									
4 /									

Drill Method: Geoprobe

Drill Date: 10/9/12

Hole Size: 2.25

RJN ENVIRONMENTAL, INC.
34888 Garfield Rd,
Fraser, MI 48026

Datum: NA

Checked by: RJN

Sheet: 1 of 1

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-1

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		CL- (Stiff) CLAY (moist) Brown, trace gravel and sand		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		CL- (Medium Stiff) CLAY (moist) Gray/Brown, trace brick debris	SS-1 5.0 ~ 6.0'	-	0.0	
6				-	0.0	
				-	0.0	
8		***CL- (Soft) CLAY (moist)*** Gray		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16				-	0.0	
				-	0.0	
18		***OH- (Soft) ORGANIC (moist)*** Gray		-	0.0	
				-	0.0	
20						

Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-2

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		GW- (Loose) GRAVELLY SAND (moist) Brown, medium coarse		-	0.0	
2				-	0.0	
			SS-1 3.0 ~ 4.0'	-	0.0	
4		***CL- (Stiff) CLAY (moist)*** Gray/Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		CL- (Medium Soft) SILTY CLAY (moist) Gray		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Well Log .

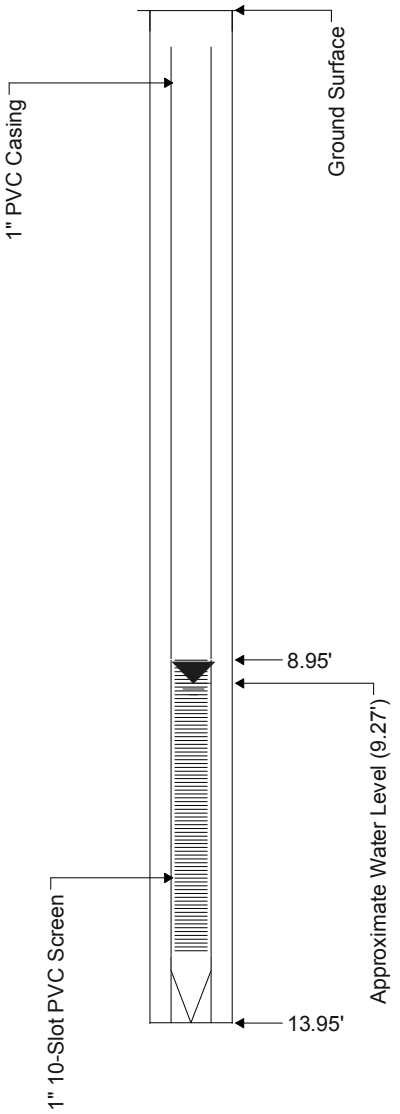
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-3

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Brown, fine, with brick debris and gravel		-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

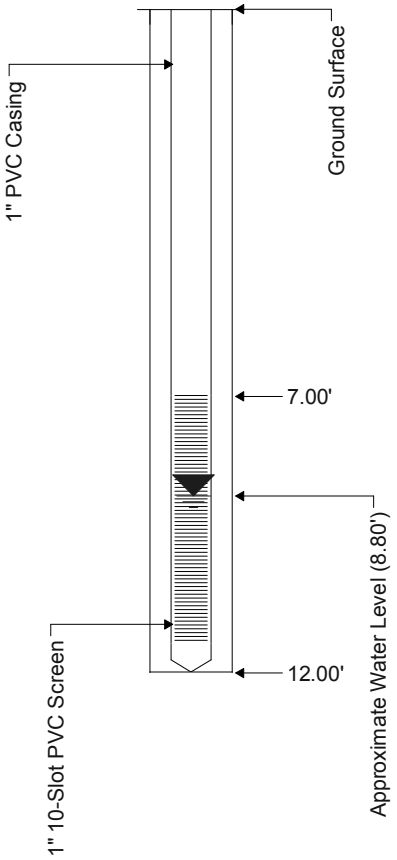
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-3R

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/TOP SOIL***		-	0.0
		SC- (Medium Dense) CLAYEY SAND (moist) Trace gravel and brick		-	0.0
2				-	0.0
			SS-1 3.0 - 4.0'	-	0.0
4		***SC- (Loose) SAND (saturated)*** Light Brown, fine		-	0.0
				-	0.0
6				-	0.0
				-	0.0
8				-	0.0
				-	0.0
10		***SP- (Medium Dense) SAND (saturated)*** Brown/Gray, fine		-	0.0
				-	0.0
12				-	0.0
				-	0.0
14				-	0.0
				-	0.0
16				-	0.0
				-	0.0
18				-	0.0
				-	0.0
20					



Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

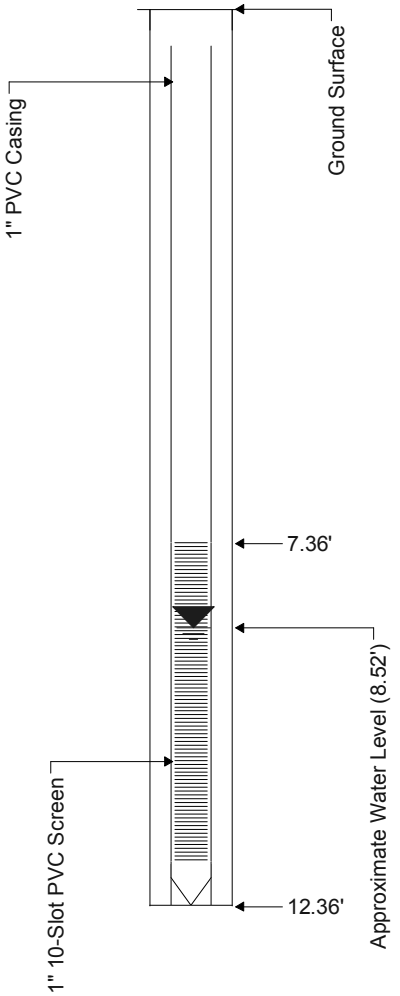
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-4

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/8/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Gray, fine	SS-1 1.0 ~ 2.0'	-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, fine		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

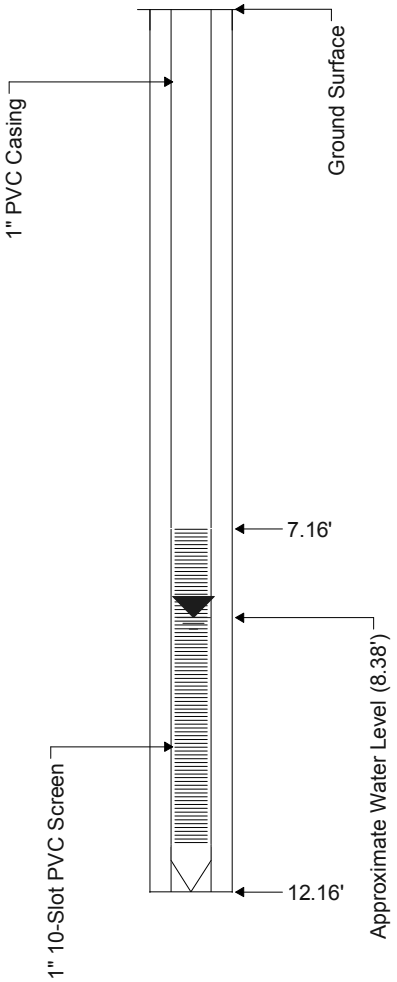
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-5

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Gray, fine	SS-1 1.0 ~ 2.0'	-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.3	
				-	0.7	
10				-	0.2	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

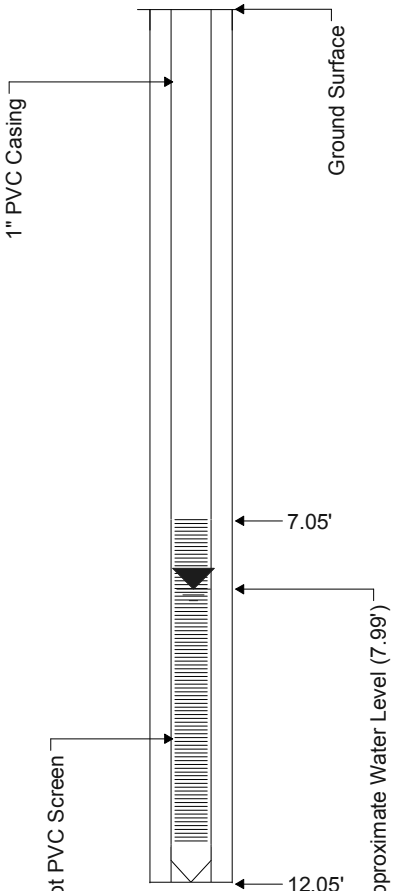
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-6

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/8/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
			SS-1 7.0 ~ 8.0'	-	0.3	
8		***SP- (Loose) SAND (saturated)*** Dark Gray, fine		-	0.7	
				-	0.2	
10				-	0.0	
				-	0.0	
12				-	0.0	
		SP- (Loose) SAND (saturated) Brown/Gray, fine		-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

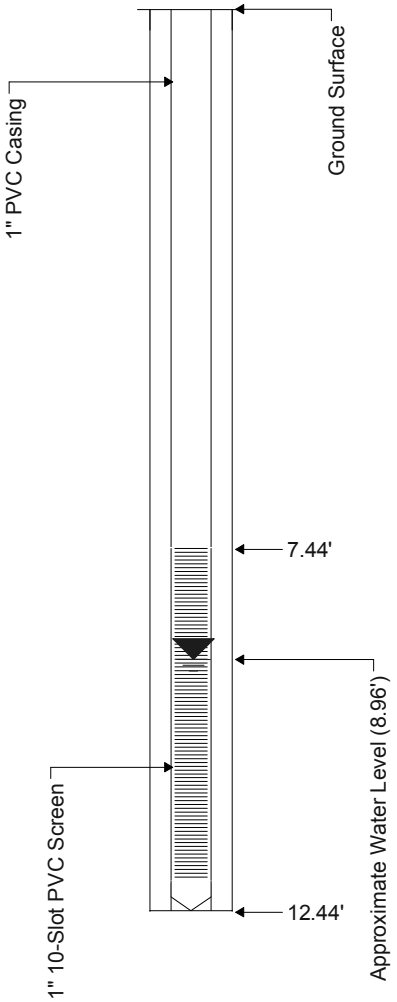
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-7

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/8/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.0 ~ 9.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown/Gray, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

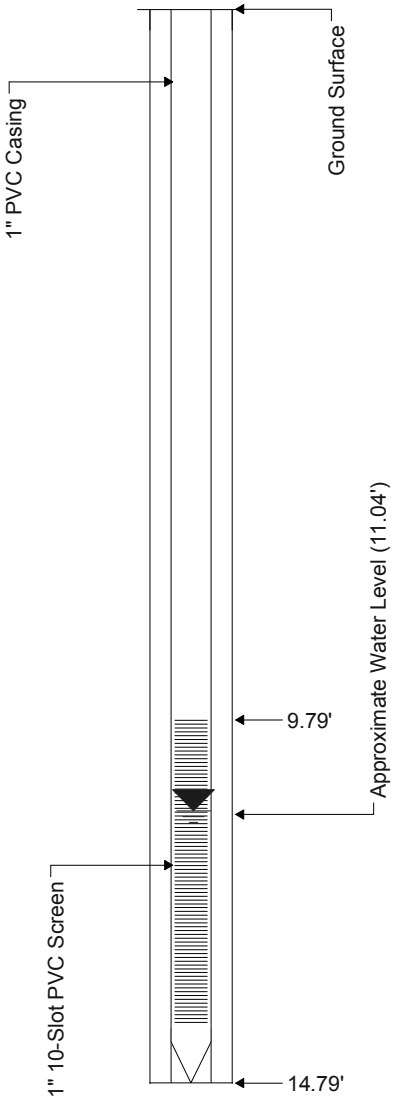
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-8

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 1.0 ~ 2.0'	-	6.0	
2				-	1.3	
				-	0.2	
4				-	0.1	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (moist) Gray, fine		-	0.0	
10				-	0.5	
		SP- (Loose) SAND (saturated) Gray, fine		-	1.1	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

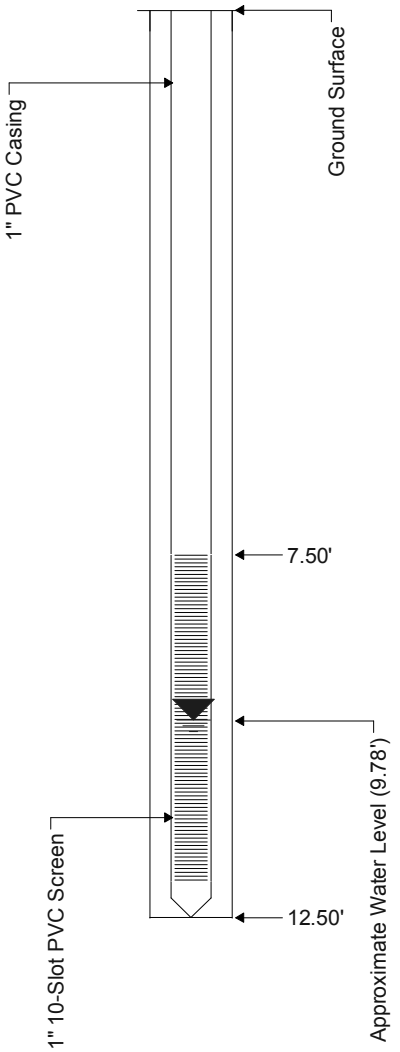
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-8R

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Medium Dense) SAND (saturated) Brown/Gray, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

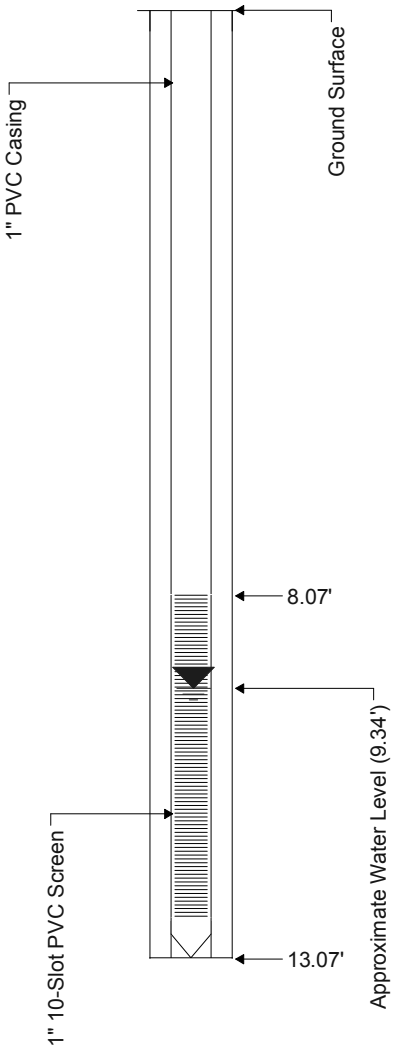
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-9

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Gray, fine	SS-1 1.0 ~ 2.0'	-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

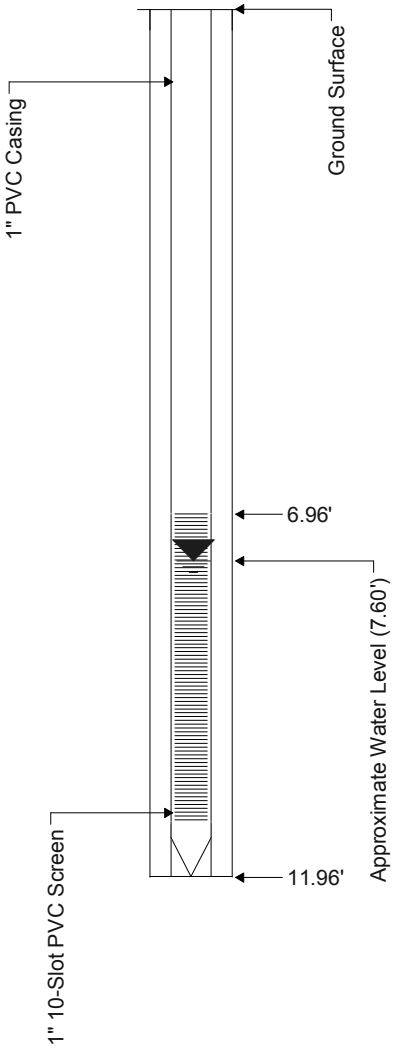
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-10

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



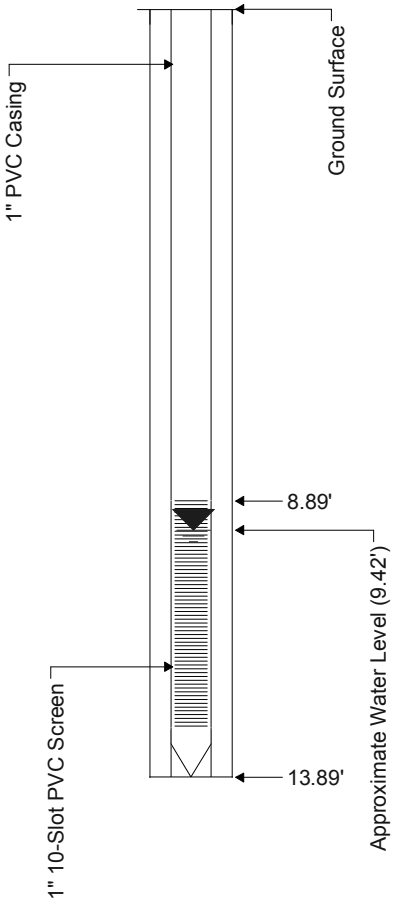
Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

Project No.: 01-6124-1-001
Well No.: SB/TMW-11
Project Name: COMMERCIAL PROPERTY
Date Drilled: 12/8/2015
Facility ID#:
Drill Rig: 6712-DT
Logged By: KL
Sampling Method: 2.125" MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/GRAVEL***		-	0.0
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Gray, fine	SS-1 1.0 ~ 2.0'	-	0.6
2				-	0.0
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0
4				-	0.0
				-	0.0
6				-	0.6
				-	10.3
8				-	16.9
		SP- (Loose) SAND (saturated) Gray, fine		-	132
10				-	1,030
				-	1,692
12				-	75.6
				-	21.7
14				-	8.3
				-	2.4
16				-	1.6
				-	0.9
18				-	0.4
				-	0.3
20					



Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

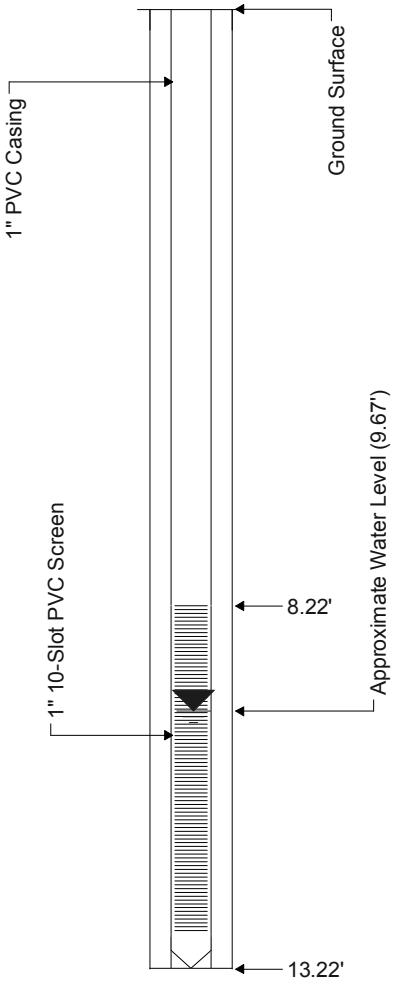
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-12

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/7/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Gray/Brown, medium fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

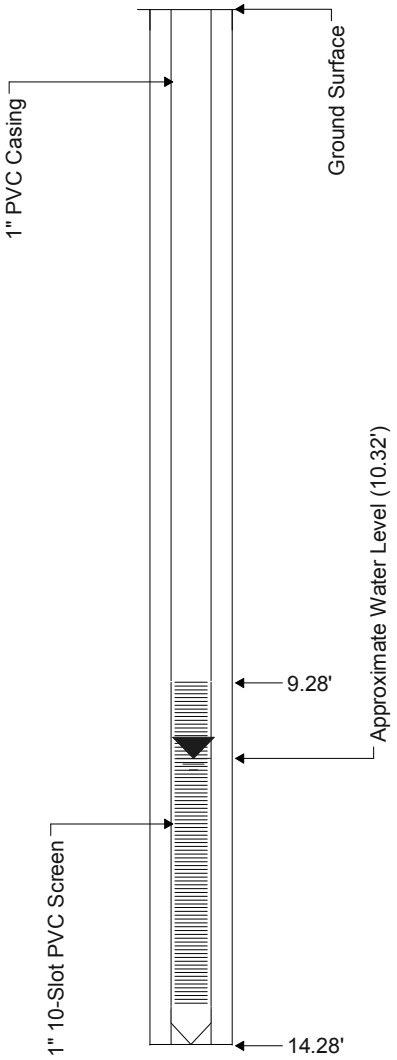
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-13

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/7/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Brown/Gray, fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

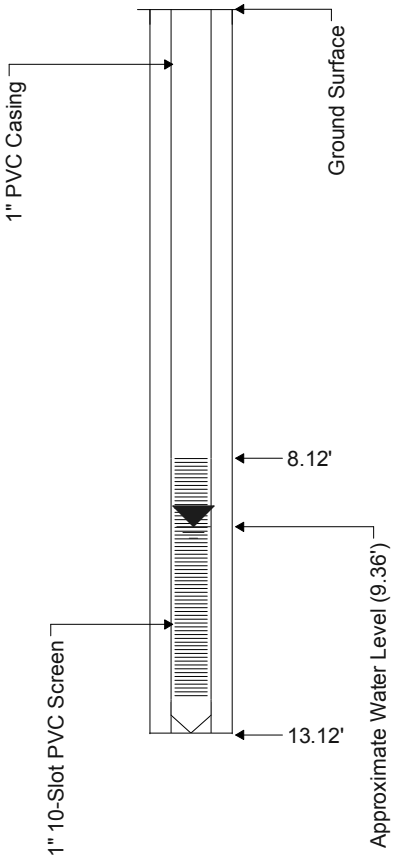
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-14

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/7/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, trace concrete debris	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Brown/Gray, medium fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16				-	0.0	
				-	0.0	
18				-	0.0	
				-	0.0	
20						



Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-15

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/7/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, trace brick and concrete debris	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Brown, medium fine, trace brick and concrete debris		-	0.0	
				-	0.0	
12		***SP- (Loose) SAND (saturated)*** Gray, medium fine		-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Well Log .

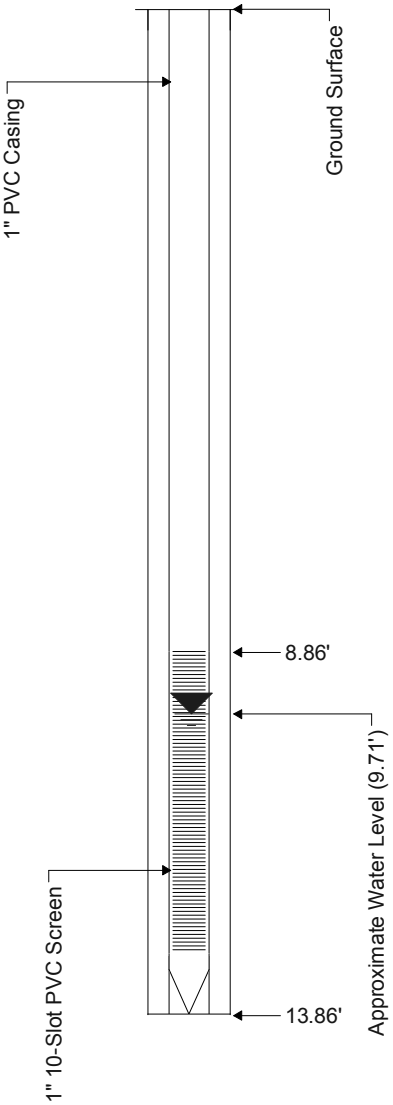
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-16

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/7/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, trace gravel and brick debris	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Brown/Gray, medium fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-17

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/7/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		GW- (Loose) GRAVELLY SAND (moist) Brown, medium fine, with brick debris	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10		***GW- (Loose) GRAVELLY SAND (saturated)*** Brown, medium fine, trace brick and concrete debris		-	0.0	
				-	0.0	
12		***SP- (Loose) SAND (moist)*** Brown/Gray, medium fine		-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Well Log .

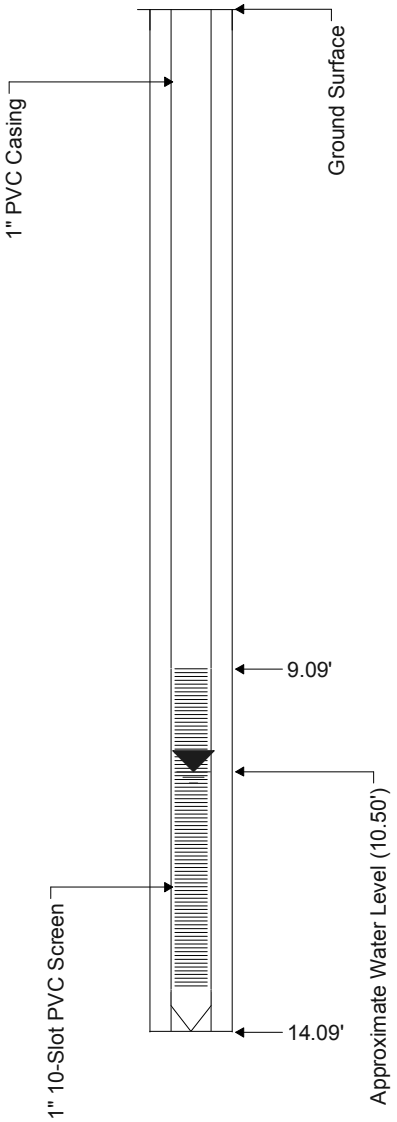
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-18

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/7/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, trace gravel		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6		***GW- (Loose) GRAVELLY SAND (moist)*** Gray, medium coarse, with brick and concrete debris		-	0.2	
			SS-1 7.0 ~ 8.0'	-	1.1	
8				-	0.8	
				-	0.4	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

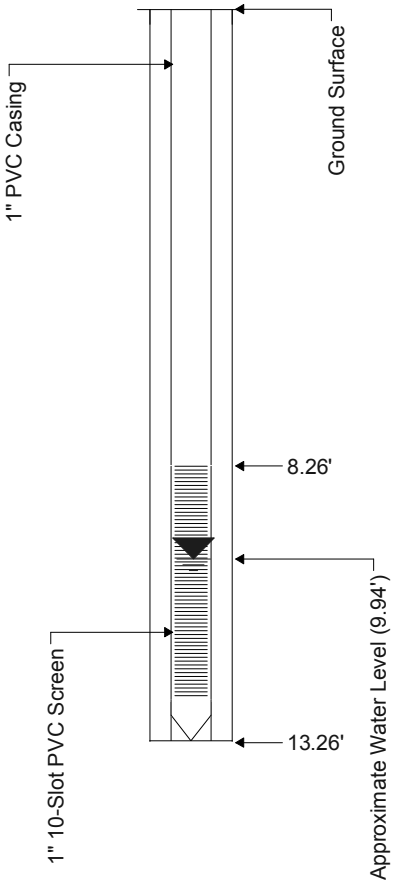
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-19

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/7/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) Sand (moist) Brown, medium fine	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***SP- (Loose) SAND (moist)*** Light Brown/Gray, fine		-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16				-	0.0	
				-	0.0	
18				-	0.0	
				-	0.0	
20						



Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

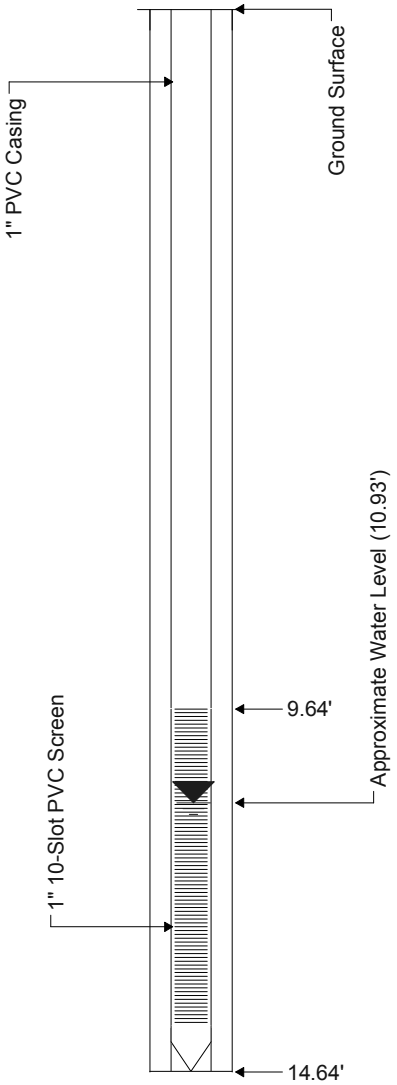
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-20

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 12/7/2015

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: KL ***Sampling Method:*** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/GRAVEL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, trace gravel	SS-1 1.0 ~ 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***SP- (Loose) SAND (moist)*** Light Brown/Gray, fine		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14		***SP- (Loose) SAND (saturated)*** Light Brown/Gray, fine		-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-21

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 12/8/2015

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** 2.125" MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS/TOPSOIL***		-	0.0	
		CL- (Medium Stiff) CLAY (moist) Brown/Gray, trace gravel		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***CL- (Medium Soft) SANDY CLAY (moist)*** Gray	SS-1 8.0 ~ 9.0'	-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Well Log .

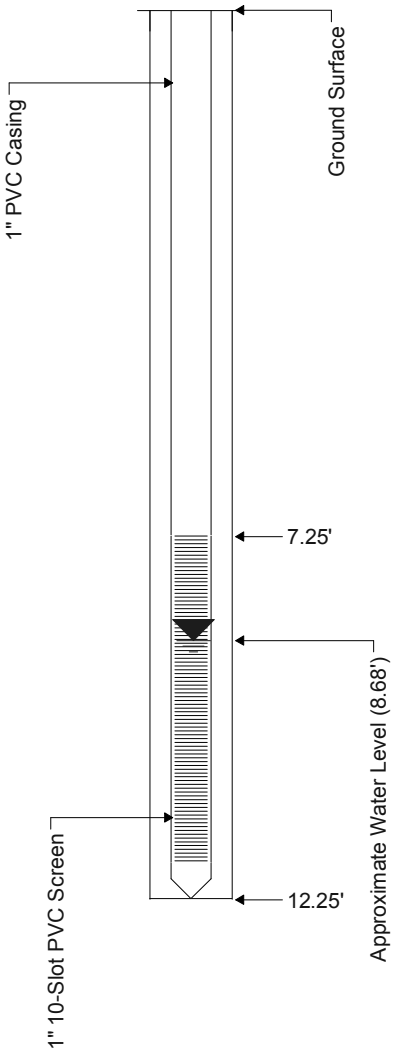
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-22

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/TOP SOIL***		-	0.0
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, trace gravel and debris		-	0.0
2				-	0.0
			SS-1 3.0 - 4.0'	-	0.0
4		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0
				-	0.0
6				-	0.0
				-	0.0
8				-	0.0
		SP- (Dense) SAND (saturated) Brown, fine		-	0.0
10				-	0.0
				-	0.0
12				-	0.0
				-	0.0
14				-	0.0
16					



Groundwater Well Completion Details

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

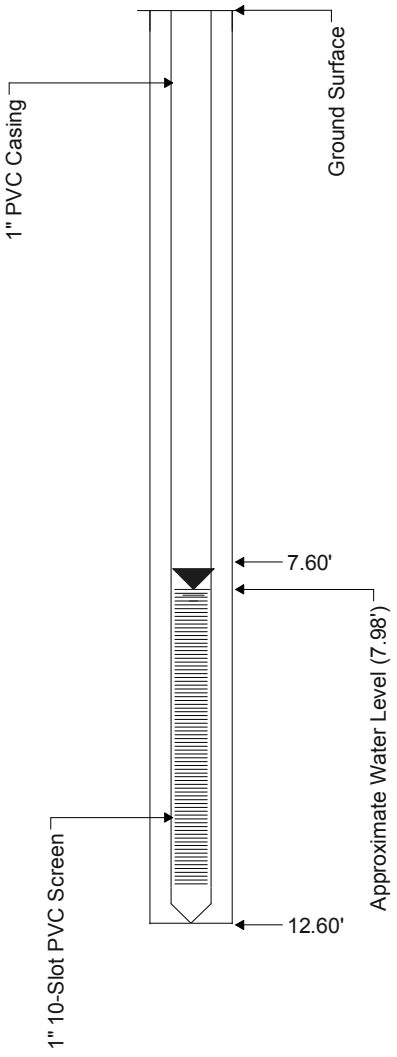
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-23

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOP SOIL***		-	0.0	
		CL- (Medium) CLAY (moist) Brown		-	0.0	
2				-	0.0	
		SP- (Loose) SAND (moist) Brown, fine, with brick debris		-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Dense) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

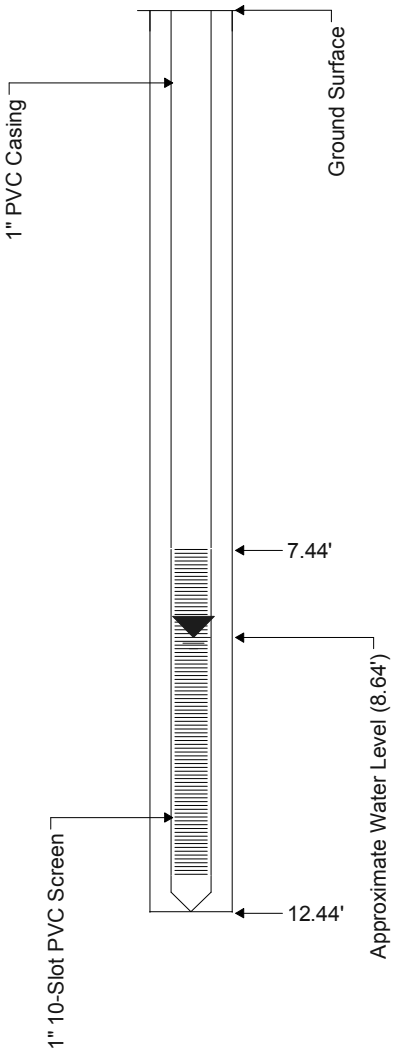
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-24

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOP SOIL***		-	0.0	
		GRAVEL		-	0.0	
		SP- (Loose) SAND (moist) Dark Brown/Black, fine		-	0.0	
2			SS-1 3.0 - 4.0'	-	0.0	
4		***SP- (Loose) SAND (moist)*** Light Brown, fine		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Dense) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

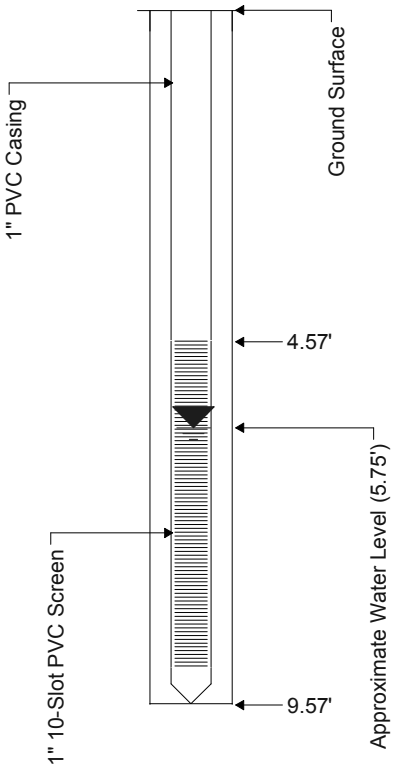
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-25

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 3/1/2016

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: BTL ***Sampling Method:*** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOP SOIL***		-	0.0	
		GP- (Loose) SAND Brown/Black, with gravel and debris		-	0.0	
2				-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Medium Dense) SAND (saturated) Brown/Gray, fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.4	
				-	0.6	
10				-	1.1	
				-	0.7	
12				-	0.2	
				-	0.0	
14				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

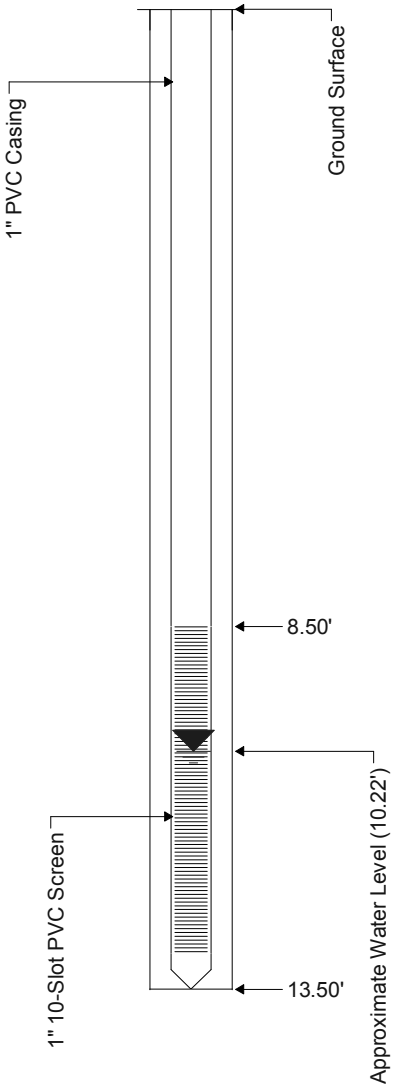
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-26

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
		Ground Surface				
0		***GRASS/TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Dense) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

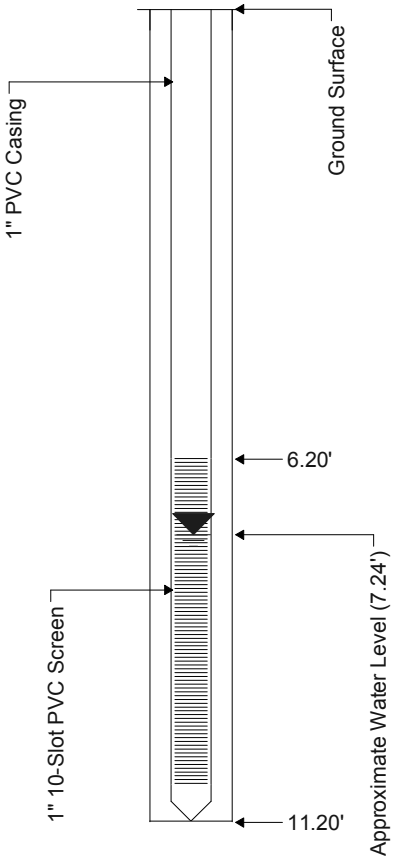
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-27

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/TOP SOIL***		-	0.0
		CL- (Medium) CLAY (moist) Brown		-	0.0
2				-	0.0
				-	0.0
4		***CL- (Medium) CLAY (moist)*** Brown, with brick debris	SS-1 4.0 - 5.0'	-	0.0
		CL- (Medium Soft) CLAY (moist) Brown		-	0.0
6				-	0.0
				-	0.0
8				-	0.0
				-	0.0
10		***SP- (Dense) SAND (saturated)*** Gray/Black, fine		-	0.0
				-	0.0
12				-	0.0
				-	0.0
14				-	0.0
16					



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-28

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS/TOPSOIL		-	0.0	
		CL- (Medium) CLAY (moist) Brown, trace brick debris		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4				-	0.0	
		CL- (Medium) CLAY (moist) Brown/Gray		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14			SS-2 14.0 - 15.0'	-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-1-001 **Boring No.:** SB-29

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: KL **Sampling Method:** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS/TOPSOIL		-	0.0	
		CL- (Medium) CLAY (moist) Brown	SS-1 1.0 - 2.0'	-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		CL- (Medium) CLAY (moist) Gray, trace gravel		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14			SS-2 14.0 - 15.0'	-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Well Log .

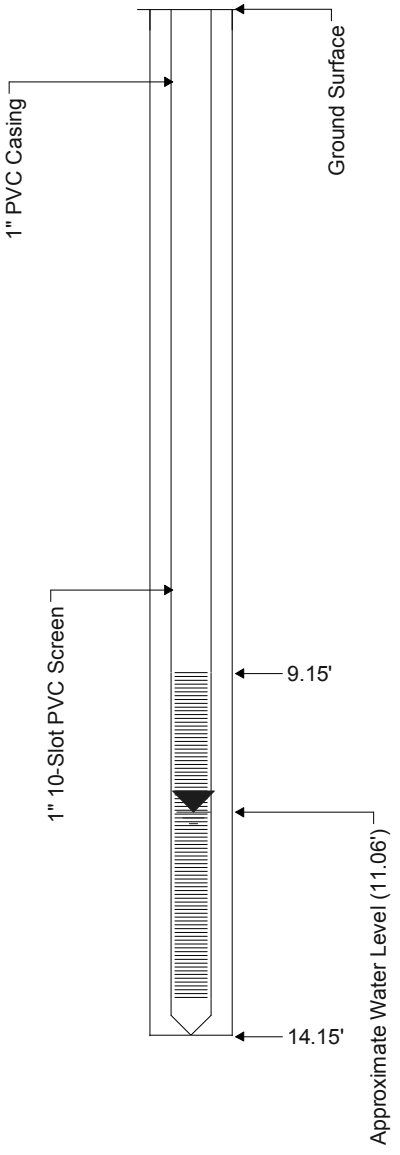
Project No.: 01-6124-1-001 ***Well No.:*** SB/TMW-30

Project Name: COMMERCIAL PROPERTY ***Date Drilled:*** 3/1/2016

Facility ID#: ***Drill Rig:*** 6712-DT

Logged By: BTL ***Sampling Method:*** GRAB/MC

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	Groundwater Well Completion Details
0		Ground Surface				
		GRASS/TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.0 - 9.0'	-	0.0	
				-	0.0	
10		***SP- (Medium Dense) SAND (saturated)*** Brown/Gray, fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						



Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

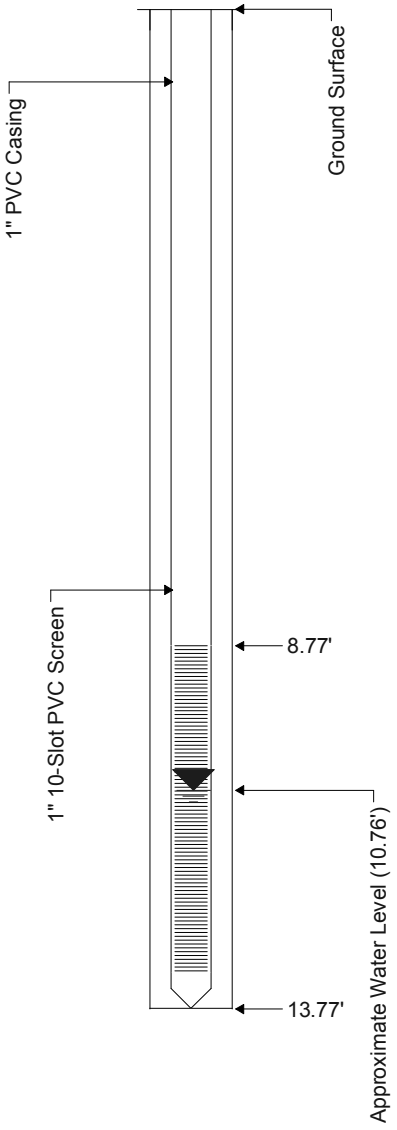
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-31

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/TOP SOIL***		-	0.0
		SP- (Loose) SAND (moist) Brown, fine		-	0.0
2				-	0.0
				-	0.0
4				-	0.0
				-	0.0
6				-	0.0
				-	0.0
			SS-1 7.0 - 8.0'	-	0.0
8				-	0.0
		SP- (Medium Dense) SAND (saturated) Brown/Gray, fine		-	0.0
10				-	0.0
				-	0.0
12				-	0.0
				-	0.0
14				-	0.0
				-	0.0
16					



Groundwater Well Completion Details

Completion Notes: EOB @ 15' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Well Log .

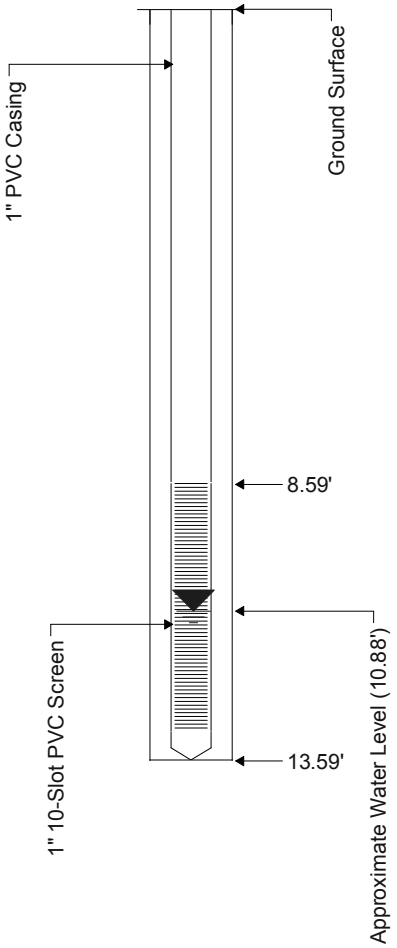
Project No.: 01-6124-1-001 **Well No.:** SB/TMW-32

Project Name: COMMERCIAL PROPERTY **Date Drilled:** 3/1/2016

Facility ID#: **Drill Rig:** 6712-DT

Logged By: BTL **Sampling Method:** GRAB/MC

Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)
		Ground Surface			
0		***GRASS/TOP SOIL***		-	0.0
		SP- (Loose) SAND (moist) Brown, fine		-	0.0
2				-	0.0
				-	0.0
4				-	0.0
				-	0.0
6				-	0.0
				-	0.0
8				-	0.0
			SS-1 8.0 - 9.0'	-	0.0
				-	0.0
10		***SP- (Medium Dense) SAND (saturated)*** Brown, fine		-	0.2
				-	0.4
12		***SP- (Medium Dense) SAND (saturated)*** Black, fine		-	8.9
				-	10.4
14		***SP- (Medium Dense) SAND (saturated)*** Gray, fine		-	0.3
				-	0.2
16				-	0.1
				-	0.0
18				-	0.0
				-	0.0
20					



Completion Notes: EOB @ 20' bgs. Hole filled with bentonite and soil cuttings.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-101

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		BRICK DEBRIS		-	0.0	
		CL- (Medium Soft) SANDY CLAY (moist) Dark Gray	SS-2 8.0 - 9.0'	-	0.0	
8		***CONCRETE DEBRIS***		-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Gray		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-102
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel and brick debris		-	0.0	
2				-	0.0	
			SS-1 2.5 - 3.5'	-	0.0	
		CONCRETE DEBRIS		-	0.0	
4		***CL- (Medium Soft) SANDY CLAY (moist)*** Brown		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-2 8.0 - 9.0'	-	0.0	
		CL- (Stiff) CLAY (moist) Gray, trace gravel		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-103

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CONCRETE DEBRIS				
		CL- (Medium Soft) SANDY CLAY (moist) Gray	SS-1 7.0 - 8.0'	-	2.3	
8				-	1.6	
				-	1.7	
10				-	2.6	
		CL- (Stiff) SANDY CLAY (moist) Gray, with gravel, plastic and glass debris		-	4.5	
12			SS-2 12.0 - 13.0'	-	22.8	
				-	4.9	
14				-	0.1	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-104

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		CL- (Soft) SANDY CLAY Dark Gray, trace gravel		-	0.0	
8				-	5.0	
			SS-1 9.0 - 10.0'	-	226	
10		***WOOD/FABRIC/DEBRIS***		-	17.6	
		OH- SILTY SAND (moist) Gray, fine, organic		-	0.3	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-105

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Soft) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		GW- (Loose) GRAVELLY SAND (moist) Gray, medium coarse		-	0.0	
8				-	0.0	
				-	0.0	
10			SS-2 10.0 - 11.0'	-	0.0	
		OH- SILTY CLAY (moist) Gray, organic		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-106

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CONCRETE DEBRIS		-	0.0	
8		***CL- (Medium Soft) SANDY CLAY (moist)*** Gray	SS-2 8.0 - 9.0'	-	0.0	
		CONCRETE DEBRIS		-	0.0	
10		***OH- (Soft) SANDY CLAY (moist)*** Gray		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-107

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CL- (Stiff) CLAY (moist) Gray, trace gravel		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
		OH- (Soft) SANDY CLAY (moist) Dark Gray, organic		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-108

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

PM ENVIRONMENTAL

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine, trace gravel		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
6		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
			SS-2 7.0 - 8.0'	-	0.0	
8		***CL- (Soft) SANDY CLAY (moist)*** Gray, with gravel		-	0.0	
		CL- (Medium Stiff) CLAY (moist) Gray, trace gravel		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14		***OH- SANDY CLAY (moist)*** Dark Gray, organic		-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-109
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		CL- (Medium Soft) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***CL- (Medium Stiff) CLAY (moist)*** Brown, trace gravel		-	0.0	
		SW- (Loose) SAND (moist) Brown/Gray, medium coarse		-	0.0	
10		***CL- (Medium Soft) SANDY CLAY (moist)*** Dark Gray		-	0.1	
				-	0.2	
12			SS-2 12.0 - 13.0'	-	1.2	
				-	0.9	
14				-	0.1	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-110
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel, trace glass		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***WOOD DEBRIS***		-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
6				-	0.0	
				-	0.0	
8			SS-2 8.0 - 9.0'	-	0.0	
		CONCRETE DEBRIS		-	0.0	
10		***GW- (Loose) GRAVELLY SAND (saturated)*** Gray, medium coarse		-	0.0	
				-	0.0	
12				-	0.0	
		CL- (Medium Soft) CLAY (moist) Gray		-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-111

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel		-	0.0	
2				-	0.0	
				-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.7	
6				-	0.2	
		CONCRETE/BRICK DEBRIS	SS-1	-	2.2	
		SC- CLAYEY SAND Dark Gray, with gravel	7.0 - 8.0'	-	1.7	
8				-	0.4	
				-	0.1	
10				-	0.0	
		CL- (Medium Soft) SANDY CLAY (moist) Dark Gray		-	0.0	
12				-	0.0	
				-	0.0	
14						
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-112

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine, trace gravel		-	0.0	
2				-	0.0	
		CONCRETE DEBRIS		-	0.0	
		CL- (Medium Soft) SANDY CLAY (moist) Brown/Gray, with brick debris		-	0.0	
4				-	0.0	
				-	0.1	
6				-	0.5	
		(Medium Soft) SANDY CLAY Dark Gray, with concrete debris	SS-1 8.0 - 9.0'	-	4.1	
8				-	0.2	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14			SS-2 14.0 - 15.0'	-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-113

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

ENVIRONMENTAL

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine, with gravel		-	0.0	
2				-	0.0	
		GW- GRAVELLY SAND Dark Gray, with brick debris		-	0.0	
4			SS-1 4.0 - 5.0'	-	0.3	
		CL- (Medium Stiff) SANDY CLAY (moist) Gray/Brown, trace gravel		-	0.6	
6				-	0.1	
				-	0.4	
8			SS-2 8.0 - 9.0'	-	32.6	
		CONCRETE DEBRIS		-	1.6	
10		***CL- (Medium Soft) SILTY CLAY (moist)*** Gray		-	0.7	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-114
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		CONCRETE DEBRIS		-	0.0	
2		***SC- (Dense) CLAYEY SAND (moist)*** Brown, with gravel		-	0.0	
		GC- (Loose) GRAVELLY SAND (moist) Medium coarse, with clay	SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) CLAY (moist)*** Brown/Gray, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CL- (Medium Stiff) SILTY CLAY (moist) Gray		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-115
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, trace gravel and brick debris		-	0.0	
2				-	0.0	
				-	0.0	
			SS-1			
4		***CL- (Medium Soft) SANDY CLAY (moist)*** Brown/Gray, trace gravel	3.5 - 4.5'	-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
		GW- (Loose) GRAVELLY SAND (saturated) Gray, medium coarse		-	0.0	
14		***CL- (Medium Soft) CLAY (moist)*** Gray		-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-116

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, fine, with gravel and brick debris		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, with gravel		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12		***GW- (Loose) GRAVELLY SAND (saturated)*** Gray, medium coarse		-	0.0	
		CL- (Medium Soft) SANDY CLAY (moist) Gray, with wood debris		-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-117

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Loose) CLAYEY SAND (moist) Brown/Gray, fine, with gravel and brick debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-2 7.5 - 8.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
10		***SP- (Loose) SAND (saturated)*** Light Gray, fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-118

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- CLAYEY SAND (moist) Dark Brown, fine, with gravel		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6				-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
8			SS-2 8.0 - 9.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12		***SP- (Loose) SAND (saturated)*** Light Gray, fine		-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-119

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Brown, fine		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
		SP- (Loose) SAND (saturated) Light Gray, fine		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-120

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Gray/Brown, fine, with gravel		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6				-	0.0	
			SS-2 6.5 - 7.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Light Gray, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-121

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
		SP- (Loose) SAND (saturated) Light Gray, fine		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-122

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown		-	0.0	
		BRICK DEBRIS	SS-1 5.0 - 6.0'	-	0.0	
6		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown/Gray		-	0.0	
				-	0.0	
8		***CONCRETE AND BRICK DEBRIS***		-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Gray, trace gravel	SS-2 9.0 - 10.0'	-	0.9	
10				-	0.2	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-123

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Gray, trace gravel		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-124
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		SC- CLAYEY SAND (moist) Dark Gray, with gravel	SS-1 6.5 - 7.5'	-	0.0	
8		***SC- CLAYEY SAND (saturated)*** Dark Gray, with gravel		-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Gray/Brown, trace gravel		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-125
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***CL- (Medium Stiff) SANDY CLAY (moist)*** Gray/Brown, trace gravel		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-126
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 5.0 - 6.0'	-	0.0	
6		***REFUSAL @ 6' bgs***				

Completion Notes: EOB @ 6' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-127
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6		***SP- (Loose) SAND (moist)*** Dark Brown, medium fine	SS-1 6.5 - 7.5'	-	0.0	
		SP- (Loose) SAND (saturated) Dark Brown, medium fine		-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Gray, medium fine		-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-128

Project Name: Vacant Land | **Date Drilled:** 6/21/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6		***SP- (Loose) SAND (moist)*** Gray, fine	SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
8				-	0.0	
		SW- (Loose) SAND (saturated) Gray, medium coarse		-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-129
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
4				-	0.0	
			SS-1 4.5 - 3.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-130
Project Name: Vacant Land
Date Drilled: 6/21/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
			SS-1 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-131

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Light Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
6				-	0.0	
			SS-1 6.5 - 7.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-132
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Light Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-133
Project Name: Vacant Land
Date Drilled: 6/28/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-134
Project Name: Vacant Land
Date Drilled: 6/28/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 ***Boring No.:*** PSB-135

Project Name: Vacant Land ***Date Drilled:*** 6/28/2016

Facility ID#: ***Drill Rig:*** 6712 DT/ HA

Logged By: KL ***Sampling Method:*** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-136

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-137

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1	-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	6.5 - 7.5'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-138

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine	SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-139
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1 6.5 - 7.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-140

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Gray, fine		-	0.0	
2				-	0.0	
		SP- (Loose) SAND (moist) Black/Purple, staining, fine	SS-1 3.0 - 4.0'	-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6			SS-2 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-141
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10				-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-142

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.0 - 9.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
10				-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-143
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine	8.5 - 9.5'	-	0.0	
10				-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-144
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.0 - 9.0'	-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-145
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		SW- (Loose) SAND (moist) Gray, medium coarse		-	0.0	
8			SS-2 7.5 - 8.5'	-	0.0	
		(Medium Stiff) SANDY CLAY (moist) Gray, with brick debris		-	0.0	
		CL- (Medium Stiff) CLAY (moist) Gray, trace gravel		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-146

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

PM ENVIRONMENTAL

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		CL- (Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***CL- (Stiff) CLAY (moist)*** Gray, trace gravel		-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14		***GW- (Loose) GRAVELLY SAND*** Gray, medium coarse		-	0.0	
		CL- (Stiff) CLAY (moist) Gray, trace gravel				
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-147

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
		CL- (Medium Stiff) SANDY CLAY (moist) Brown, trace gravel		-	0.0	
4				-	0.0	
			SS-1 5.0 - 6.0'	-	0.0	
6		***BRICK DEBRIS***		-	0.0	
		CL- (Medium Stiff) CLAY (moist) Brown, trace gravel		-	0.0	
8				-	0.0	
				-	0.0	
10		***CL- (Stiff) CLAY (moist)*** Gray, trace gravel and sand		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14		***SC- (Loose) CLAYEY SAND (saturated)*** Dark Gray, with gravel		-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-148
Project Name: Vacant Land
Date Drilled: 6/28/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Gray, fine, with glass and gravel		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-2 8.5 - 9.5'	-	0.0	
				-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine				
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-149

Project Name: Vacant Land | **Date Drilled:** 6/28/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-150
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.5 - 9.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine				
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-151

Project Name: Vacant Land | **Date Drilled:** 6/28/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Dark Brown, fine, with concrete debris		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 ***Boring No.:*** PSB-152

Project Name: Vacant Land ***Date Drilled:*** 6/28/2016

Facility ID#: ***Drill Rig:*** 6712 DT/ HA

Logged By: KL ***Sampling Method:*** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Dark Brown, fine		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		REFUSAL @ 7' bgs				
8						

Completion Notes: EOB @ 7' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-153
Project Name: Vacant Land
Date Drilled: 6/28/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
				-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.0	
14					0.0	
					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-154
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8			SS-1 8.0 - 9.0'	-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-155
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
6				-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-156
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-157
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		GW- (Loose) GRAVELLY SAND (moist) Dark Brown, medium coarse, with glass/brick debris		-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 ***Boring No.:*** PSB-158

Project Name: Vacant Land ***Date Drilled:*** 6/27/2016

Facility ID#: ***Drill Rig:*** 6712 DT/ HA

Logged By: KL ***Sampling Method:*** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
				-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-159

Project Name: Vacant Land | **Date Drilled:** 6/29/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6			SS-1 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
8				-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-160
Project Name: Vacant Land
Date Drilled: 6/29/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, fine, with concrete, wood, and brick debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
				-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
6			SS-2 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 ***Boring No.:*** PSB-161

Project Name: Vacant Land ***Date Drilled:*** 6/27/2016

Facility ID#: ***Drill Rig:*** 6712 DT/ HA

Logged By: KL ***Sampling Method:*** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
				-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-162

Project Name: Vacant Land | **Date Drilled:** 6/27/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Dark Brown/Gray, fine		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-163
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***				
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
				-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown/Gray, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8		***OH- SANDY CLAY*** Dark Gray, with wood debris, organic		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
		SC- CLAYEY SAND (moist) Dark Gray/Brown, with gravel	SS-2 13.0 - 14.0'		0.8	
14		***CL- (Medium Soft) SANDY CLAY (moist)*** Gray			0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-164

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
		CONCRETE DEBRIS		-	0.0	
		BRICK DEBRIS				
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel	SS-1 4.0 - 5.0'	-	0.0	
				-	0.0	
6		***SC- (Medium Dense) CLAYEY SAND (moist)*** Gray, fine		-	0.0	
			SS-2 7.0 - 8.0'	-	0.0	
8		***CL- (Stiff) CLAY (moist)*** Gray, trace gravel		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.8	
14		***OH- (Soft) SILTY CLAY*** Gray, organic			0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-165

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		BRICK DEBRIS		-	0.0	
6		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown, trace gravel	SS-1 6.0 - 7.0'	-	0.0	
				-	0.0	
8		***CL- (Medium Stiff) CLAY (moist)*** Gray, trace gravel		-	0.0	
				-	0.0	
10				-	0.0	
		CL- (Soft) SILTY CLAY (moist) Gray		-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-166

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6		***SC- (Medium Dense) CLAYEY SAND (moist)*** Gray, medium fine		-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Gray, medium fine		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-167

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, fine		-	0.0	
				-	0.0	
10		***SP- (Loose) SAND (saturated)*** Gray, fine			0.0	
					0.0	
12					0.0	
					0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-168
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Medium Dense) CLAYEY SAND (moist) Brown, fine		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8						

Completion Notes: EOB @ 8' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-169
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine, with glass, brick, and metal debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SC- CLAYEY SAND (moist) Dark Gray, fine, with glass debris		-	0.0	
4		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
			SS-2 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-170

Project Name: Vacant Land | **Date Drilled:** 6/27/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine, with wood, brick, and glass debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
4				-	0.0	
				-	0.0	
6			SS-2 6.0 - 7.0'	-	0.0	
		SP- (Loose) SAND (saturated) Gray, fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-171
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		GW- (Loose) GRAVELLY SAND Dark Brown, medium coarse, with glass and brick debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		REFUSAL @ 3' bgs				
4						

Completion Notes: EOB @ 3' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-172

Project Name: Vacant Land | **Date Drilled:** 6/27/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		GW- (Loose) GRAVELLY SAND (moist) Dark Brown/Gray, medium coarse, with glass debris	SS-1 1.0 - 2.0'	-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, fine		-	0.0	
				-	0.0	
4				-	0.0	
			SS-2 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-173
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
			SS-1 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Brown, fine		-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-174
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
			SS-1 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Brown, fine		-	0.0	
				-	0.0	
8				-	0.0	
		SP- (Loose) SAND (saturated) Brown/Gray, fine		-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-175
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		GW- (Loose) GRAVELLY SAND Dark Brown, medium coarse, with brick and concrete debris		-	0.0	
2			SS-1 2.0 - 3.0'	-	0.0	
		REFUSAL @ 3' bgs				
4						

Completion Notes: EOB @ 3' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-176
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6				-	0.0	
			SS-1 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
		SP- (Loose) SAND (saturated) Gray, medium fine			0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-177
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown/Gray, with gravel		-	0.0	
2		***SP- (Loose) SAND (moist)*** Brown, medium fine		-	0.0	
				-	0.0	
4				-	0.0	
				-	0.0	
6			SS-1 5.5 - 6.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	

Completion Notes: EOB @ 8' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-178

Project Name: Vacant Land | **Date Drilled:** 6/27/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- CLAYEY SAND (moist) Dark Brown/Gray, fine, with gravel		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***SP- (Loose) SAND (saturated)*** Brown, medium fine		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-179
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
			SS-1 5.0 - 6.0'	-	0.0	
6		***SP- (Loose) SAND (saturated)*** Brown, fine		-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-180
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
6			SS-1 5.5 - 6.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-181

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
4			SS-1 4.0 - 5.0'	-	0.0	
		CL- (Soft) SANDY CLAY (moist) Gray/Dark Brown, trace gravel		-	0.0	
6				-	0.0	
			SS-2 7.0 - 8.0'	-	0.0	
8		***SP- (Loose) SAND (saturated)*** Gray, fine		-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.8	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-182
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
				-	0.0	
		BRICK DEBRIS				
4		***CL- (Medium Stiff) SANDY CLAY (moist)*** Brown/Gray, trace gravel	SS-1 4.0 - 5.0'	-	0.0	
				-	0.0	
6				-	0.0	
		OH- (Soft) SILTY CLAY (saturated) Organic		-	0.0	
8				-	0.0	
				-	0.0	
10					0.0	
					0.0	
12					0.0	
		CL- (Medium Stiff) CLAY (moist) Gray, trace gravel			0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-183
Project Name: Vacant Land
Date Drilled: 6/22/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
0		Ground Surface				
		GRASS / TOP SOIL		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown, fine, trace brick debris		-	0.0	
2				-	0.0	
			SS-1 3.0 - 4.0'	-	0.0	
4		***CL- (Stiff) SANDY CLAY (moist)*** Brown, trace gravel		-	0.0	
				-	0.0	
6				-	0.0	
		CL- (Medium Stiff) SILTY CLAY (moist) Brown, trace gravel		-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	
				-	0.0	
14				-	0.0	
				-	0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001 | **Boring No.:** PSB-184

Project Name: Vacant Land | **Date Drilled:** 6/22/2016

Facility ID#: | **Drill Rig:** 6712 DT/ HA

Logged By: KL | **Sampling Method:** 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SC- (Dense) CLAYEY SAND (moist) Brown		-	0.0	
2				-	0.0	
		CONCRETE DEBRIS		-	0.0	
4		***SC- (Medium Dense) CLAYEY SAND (moist)*** Brown/Gray, with gravel	SS-1 4.0 - 5.0'	-	0.0	
		CL- (Stiff) CLAY (moist) Brown/Gray, trace gravel		-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
		CL- (Medium Soft) SILTY CLAY (moist) Gray/Brown, trace gravel		-	0.0	
10					0.0	
					0.0	
12					0.0	
					0.0	
14					0.0	
16						

Completion Notes: EOB @ 15' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

Boring Log .

Project No.: 01-6124-3-001
Boring No.: PSB-185
Project Name: Vacant Land
Date Drilled: 6/27/2016
Facility ID#:
Drill Rig: 6712 DT/ HA
Logged By: KL
Sampling Method: 2 1/8" MC / GRAB

SUBSURFACE PROFILE			SAMPLE			
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	No Well Installed
		Ground Surface				
0		***GRASS / TOP SOIL***		-	0.0	
		SP- (Loose) SAND (moist) Brown, fine		-	0.0	
2				-	0.0	
				-	0.0	
4				-	0.0	
		SP- (Loose) SAND (moist) Brown, medium fine		-	0.0	
6			SS-1 5.5 - 6.5'	-	0.0	
		SP- (Loose) SAND (saturated) Brown, medium fine		-	0.0	
8				-	0.0	
				-	0.0	
10						

Completion Notes: EOB @ 10' bgs. Hole filled with soil cuttings and bentonie.

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted.

APPENDIX D

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 24, 2019

ATC Group Services - Novi, MI

Sample Delivery Group:	L1120049
Samples Received:	07/17/2019
Project Number:	NPJBD19002
Description:	Donaldson/Ferndale Soil Gas

Report To:

Gerard DeBusschere
46555 Humboldt Drive Suite 100
Novi, MI 48377

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

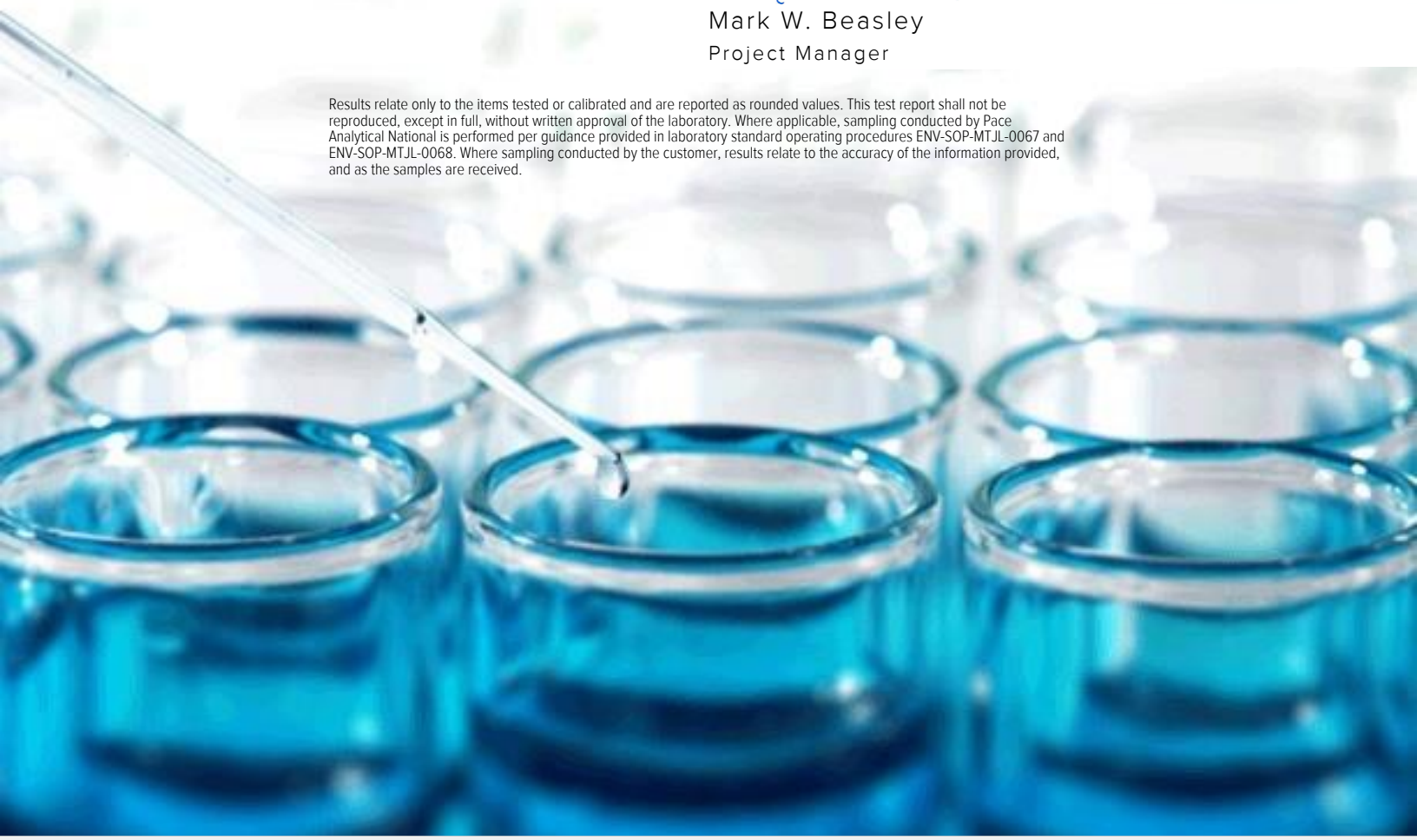


TABLE OF CONTENTS

E-2 4-5 L1120049-01 Solid

Collected by: IA | Collected date/time: 07/12/19 11:57 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:18	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	29.25	07/12/19 11:57	07/23/19 16:42	BMB	Mt. Juliet, TN

E-1 4-5 L1120049-02 Solid

Collected by: IA | Collected date/time: 07/12/19 12:00 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:20	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25	07/12/19 12:00	07/23/19 17:02	BMB	Mt. Juliet, TN

D-1 4-5 L1120049-03 Solid

Collected by: IA | Collected date/time: 07/12/19 12:02 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:22	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25	07/12/19 12:02	07/23/19 17:23	BMB	Mt. Juliet, TN

D-2 4-5 L1120049-04 Solid

Collected by: IA | Collected date/time: 07/12/19 12:05 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:24	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25	07/12/19 12:05	07/23/19 17:43	BMB	Mt. Juliet, TN

C-1 4-5 L1120049-05 Solid

Collected by: IA | Collected date/time: 07/12/19 12:15 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:27	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25.5	07/12/19 12:15	07/23/19 18:03	BMB	Mt. Juliet, TN

C-2 4-5 L1120049-06 Solid

Collected by: IA | Collected date/time: 07/12/19 12:20 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:29	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25	07/12/19 12:20	07/23/19 18:23	BMB	Mt. Juliet, TN

B-1 4-5 L1120049-07 Solid

Collected by: IA | Collected date/time: 07/12/19 12:42 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:31	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25.5	07/12/19 12:42	07/23/19 18:44	BMB	Mt. Juliet, TN

A-1 4-5 L1120049-08 Solid

Collected by: IA | Collected date/time: 07/12/19 12:47 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:33	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	27.25	07/12/19 12:47	07/23/19 19:04	BMB	Mt. Juliet, TN

A-2 4-5 L1120049-09 Solid

Collected by: IA | Collected date/time: 07/12/19 12:52 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315928	1	07/23/19 22:36	07/23/19 22:48	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:35	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	25	07/12/19 12:52	07/23/19 19:25	BMB	Mt. Juliet, TN

B-2 4-5 L1120049-10 Solid

Collected by: IA | Collected date/time: 07/12/19 14:10 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1315929	1	07/23/19 22:27	07/23/19 22:42	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1315509	1	07/22/19 15:53	07/22/19 20:38	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1315838	27.5	07/12/19 14:10	07/23/19 19:46	BMB	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.9		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	22.1	B	20.0	1	07/22/2019 20:18	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	731	29.25	07/23/2019 16:42	WG1315838
Acrylonitrile	ND		366	29.25	07/23/2019 16:42	WG1315838
Benzene	ND		29.3	29.25	07/23/2019 16:42	WG1315838
Bromobenzene	ND		366	29.25	07/23/2019 16:42	WG1315838
Bromodichloromethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Bromoform	ND		731	29.25	07/23/2019 16:42	WG1315838
Bromomethane	ND		366	29.25	07/23/2019 16:42	WG1315838
n-Butylbenzene	ND		366	29.25	07/23/2019 16:42	WG1315838
sec-Butylbenzene	ND		366	29.25	07/23/2019 16:42	WG1315838
tert-Butylbenzene	ND	J3	146	29.25	07/23/2019 16:42	WG1315838
Carbon tetrachloride	ND		146	29.25	07/23/2019 16:42	WG1315838
Chlorobenzene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Chlorodibromomethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Chloroethane	ND		146	29.25	07/23/2019 16:42	WG1315838
Chloroform	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Chloromethane	ND		366	29.25	07/23/2019 16:42	WG1315838
2-Chlorotoluene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
4-Chlorotoluene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,2-Dibromo-3-Chloropropane	ND		731	29.25	07/23/2019 16:42	WG1315838
1,2-Dibromoethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Dibromomethane	ND		146	29.25	07/23/2019 16:42	WG1315838
1,2-Dichlorobenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,3-Dichlorobenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,4-Dichlorobenzene	ND	J4	146	29.25	07/23/2019 16:42	WG1315838
Dichlorodifluoromethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,1-Dichloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,2-Dichloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,1-Dichloroethene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
cis-1,2-Dichloroethene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
trans-1,2-Dichloroethene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,2-Dichloropropane	ND		146	29.25	07/23/2019 16:42	WG1315838
1,1-Dichloropropene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,3-Dichloropropane	ND		146	29.25	07/23/2019 16:42	WG1315838
cis-1,3-Dichloropropene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
trans-1,3-Dichloropropene	ND		146	29.25	07/23/2019 16:42	WG1315838
2,2-Dichloropropane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Di-isopropyl ether	ND		29.3	29.25	07/23/2019 16:42	WG1315838
Ethylbenzene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Hexachloro-1,3-butadiene	ND		731	29.25	07/23/2019 16:42	WG1315838
Isopropylbenzene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
p-Isopropyltoluene	ND		146	29.25	07/23/2019 16:42	WG1315838
2-Butanone (MEK)	ND		731	29.25	07/23/2019 16:42	WG1315838
Methylene Chloride	ND		731	29.25	07/23/2019 16:42	WG1315838
1-Methylnaphthalene	ND	J3	731	29.25	07/23/2019 16:42	WG1315838
2-Methylnaphthalene	ND	J3	731	29.25	07/23/2019 16:42	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		731	29.25	07/23/2019 16:42	WG1315838
Methyl tert-butyl ether	ND		29.3	29.25	07/23/2019 16:42	WG1315838
Naphthalene	ND	J3	366	29.25	07/23/2019 16:42	WG1315838
n-Propylbenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
Styrene	ND		366	29.25	07/23/2019 16:42	WG1315838
1,1,1,2-Tetrachloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,1,2,2-Tetrachloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Tetrachloroethene	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Toluene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,2,3-Trichlorobenzene	ND	J3	73.1	29.25	07/23/2019 16:42	WG1315838
1,2,4-Trichlorobenzene	ND	J3	366	29.25	07/23/2019 16:42	WG1315838
1,1,1-Trichloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,1,2-Trichloroethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Trichloroethene	ND		29.3	29.25	07/23/2019 16:42	WG1315838
Trichlorofluoromethane	ND		73.1	29.25	07/23/2019 16:42	WG1315838
1,2,3-Trichloropropane	ND		366	29.25	07/23/2019 16:42	WG1315838
1,2,4-Trimethylbenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,2,3-Trimethylbenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
1,3,5-Trimethylbenzene	ND		146	29.25	07/23/2019 16:42	WG1315838
Vinyl chloride	ND		73.1	29.25	07/23/2019 16:42	WG1315838
Xylenes, Total	ND	J4	190	29.25	07/23/2019 16:42	WG1315838
(S) Toluene-d8	*109*		*75.0-131*		*07/23/2019 16:42*	WG1315838
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/23/2019 16:42*	WG1315838
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/23/2019 16:42*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.8		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:20	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	625	25	07/23/2019 17:02	WG1315838
Acrylonitrile	ND		313	25	07/23/2019 17:02	WG1315838
Benzene	ND		25.0	25	07/23/2019 17:02	WG1315838
Bromobenzene	ND		313	25	07/23/2019 17:02	WG1315838
Bromodichloromethane	ND		62.5	25	07/23/2019 17:02	WG1315838
Bromoform	ND		625	25	07/23/2019 17:02	WG1315838
Bromomethane	ND		313	25	07/23/2019 17:02	WG1315838
n-Butylbenzene	ND		313	25	07/23/2019 17:02	WG1315838
sec-Butylbenzene	ND		313	25	07/23/2019 17:02	WG1315838
tert-Butylbenzene	ND	J3	125	25	07/23/2019 17:02	WG1315838
Carbon tetrachloride	ND		125	25	07/23/2019 17:02	WG1315838
Chlorobenzene	ND		62.5	25	07/23/2019 17:02	WG1315838
Chlorodibromomethane	ND		62.5	25	07/23/2019 17:02	WG1315838
Chloroethane	ND		125	25	07/23/2019 17:02	WG1315838
Chloroform	ND		62.5	25	07/23/2019 17:02	WG1315838
Chloromethane	ND		313	25	07/23/2019 17:02	WG1315838
2-Chlorotoluene	ND		62.5	25	07/23/2019 17:02	WG1315838
4-Chlorotoluene	ND		125	25	07/23/2019 17:02	WG1315838
1,2-Dibromo-3-Chloropropane	ND		625	25	07/23/2019 17:02	WG1315838
1,2-Dibromoethane	ND		62.5	25	07/23/2019 17:02	WG1315838
Dibromomethane	ND		125	25	07/23/2019 17:02	WG1315838
1,2-Dichlorobenzene	ND		125	25	07/23/2019 17:02	WG1315838
1,3-Dichlorobenzene	ND		125	25	07/23/2019 17:02	WG1315838
1,4-Dichlorobenzene	ND	J4	125	25	07/23/2019 17:02	WG1315838
Dichlorodifluoromethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,1-Dichloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,2-Dichloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,1-Dichloroethene	ND		62.5	25	07/23/2019 17:02	WG1315838
cis-1,2-Dichloroethene	ND		62.5	25	07/23/2019 17:02	WG1315838
trans-1,2-Dichloroethene	ND		125	25	07/23/2019 17:02	WG1315838
1,2-Dichloropropane	ND		125	25	07/23/2019 17:02	WG1315838
1,1-Dichloropropene	ND		62.5	25	07/23/2019 17:02	WG1315838
1,3-Dichloropropane	ND		125	25	07/23/2019 17:02	WG1315838
cis-1,3-Dichloropropene	ND		62.5	25	07/23/2019 17:02	WG1315838
trans-1,3-Dichloropropene	ND		125	25	07/23/2019 17:02	WG1315838
2,2-Dichloropropane	ND		62.5	25	07/23/2019 17:02	WG1315838
Di-isopropyl ether	ND		25.0	25	07/23/2019 17:02	WG1315838
Ethylbenzene	ND		62.5	25	07/23/2019 17:02	WG1315838
Hexachloro-1,3-butadiene	ND		625	25	07/23/2019 17:02	WG1315838
Isopropylbenzene	ND		62.5	25	07/23/2019 17:02	WG1315838
p-Isopropyltoluene	ND		125	25	07/23/2019 17:02	WG1315838
2-Butanone (MEK)	ND		625	25	07/23/2019 17:02	WG1315838
Methylene Chloride	ND		625	25	07/23/2019 17:02	WG1315838
1-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:02	WG1315838
2-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:02	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		625	25	07/23/2019 17:02	WG1315838
Methyl tert-butyl ether	ND		25.0	25	07/23/2019 17:02	WG1315838
Naphthalene	ND	J3	313	25	07/23/2019 17:02	WG1315838
n-Propylbenzene	ND		125	25	07/23/2019 17:02	WG1315838
Styrene	ND		313	25	07/23/2019 17:02	WG1315838
1,1,1,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,1,2,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
Tetrachloroethene	ND		62.5	25	07/23/2019 17:02	WG1315838
Toluene	ND		125	25	07/23/2019 17:02	WG1315838
1,2,3-Trichlorobenzene	ND	J3	62.5	25	07/23/2019 17:02	WG1315838
1,2,4-Trichlorobenzene	ND	J3	313	25	07/23/2019 17:02	WG1315838
1,1,1-Trichloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,1,2-Trichloroethane	ND		62.5	25	07/23/2019 17:02	WG1315838
Trichloroethene	ND		25.0	25	07/23/2019 17:02	WG1315838
Trichlorofluoromethane	ND		62.5	25	07/23/2019 17:02	WG1315838
1,2,3-Trichloropropane	ND		313	25	07/23/2019 17:02	WG1315838
1,2,4-Trimethylbenzene	ND		125	25	07/23/2019 17:02	WG1315838
1,2,3-Trimethylbenzene	ND		125	25	07/23/2019 17:02	WG1315838
1,3,5-Trimethylbenzene	ND		125	25	07/23/2019 17:02	WG1315838
Vinyl chloride	ND		62.5	25	07/23/2019 17:02	WG1315838
Xylenes, Total	ND	J4	163	25	07/23/2019 17:02	WG1315838
(S) Toluene-d8	*108*		*75.0-131*		*07/23/2019 17:02*	WG1315838
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/23/2019 17:02*	WG1315838
(S) 1,2-Dichloroethane-d4	*99.7*		*70.0-130*		*07/23/2019 17:02*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.1		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:22	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	625	25	07/23/2019 17:23	WG1315838
Acrylonitrile	ND		313	25	07/23/2019 17:23	WG1315838
Benzene	ND		25.0	25	07/23/2019 17:23	WG1315838
Bromobenzene	ND		313	25	07/23/2019 17:23	WG1315838
Bromodichloromethane	ND		62.5	25	07/23/2019 17:23	WG1315838
Bromoform	ND		625	25	07/23/2019 17:23	WG1315838
Bromomethane	ND		313	25	07/23/2019 17:23	WG1315838
n-Butylbenzene	ND		313	25	07/23/2019 17:23	WG1315838
sec-Butylbenzene	ND		313	25	07/23/2019 17:23	WG1315838
tert-Butylbenzene	ND	J3	125	25	07/23/2019 17:23	WG1315838
Carbon tetrachloride	ND		125	25	07/23/2019 17:23	WG1315838
Chlorobenzene	ND		62.5	25	07/23/2019 17:23	WG1315838
Chlorodibromomethane	ND		62.5	25	07/23/2019 17:23	WG1315838
Chloroethane	ND		125	25	07/23/2019 17:23	WG1315838
Chloroform	ND		62.5	25	07/23/2019 17:23	WG1315838
Chloromethane	ND		313	25	07/23/2019 17:23	WG1315838
2-Chlorotoluene	ND		62.5	25	07/23/2019 17:23	WG1315838
4-Chlorotoluene	ND		125	25	07/23/2019 17:23	WG1315838
1,2-Dibromo-3-Chloropropane	ND		625	25	07/23/2019 17:23	WG1315838
1,2-Dibromoethane	ND		62.5	25	07/23/2019 17:23	WG1315838
Dibromomethane	ND		125	25	07/23/2019 17:23	WG1315838
1,2-Dichlorobenzene	ND		125	25	07/23/2019 17:23	WG1315838
1,3-Dichlorobenzene	ND		125	25	07/23/2019 17:23	WG1315838
1,4-Dichlorobenzene	ND	J4	125	25	07/23/2019 17:23	WG1315838
Dichlorodifluoromethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,1-Dichloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,2-Dichloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,1-Dichloroethene	ND		62.5	25	07/23/2019 17:23	WG1315838
cis-1,2-Dichloroethene	ND		62.5	25	07/23/2019 17:23	WG1315838
trans-1,2-Dichloroethene	ND		125	25	07/23/2019 17:23	WG1315838
1,2-Dichloropropane	ND		125	25	07/23/2019 17:23	WG1315838
1,1-Dichloropropene	ND		62.5	25	07/23/2019 17:23	WG1315838
1,3-Dichloropropane	ND		125	25	07/23/2019 17:23	WG1315838
cis-1,3-Dichloropropene	ND		62.5	25	07/23/2019 17:23	WG1315838
trans-1,3-Dichloropropene	ND		125	25	07/23/2019 17:23	WG1315838
2,2-Dichloropropane	ND		62.5	25	07/23/2019 17:23	WG1315838
Di-isopropyl ether	ND		25.0	25	07/23/2019 17:23	WG1315838
Ethylbenzene	ND		62.5	25	07/23/2019 17:23	WG1315838
Hexachloro-1,3-butadiene	ND		625	25	07/23/2019 17:23	WG1315838
Isopropylbenzene	ND		62.5	25	07/23/2019 17:23	WG1315838
p-Isopropyltoluene	ND		125	25	07/23/2019 17:23	WG1315838
2-Butanone (MEK)	ND		625	25	07/23/2019 17:23	WG1315838
Methylene Chloride	ND		625	25	07/23/2019 17:23	WG1315838
1-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:23	WG1315838
2-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:23	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		625	25	07/23/2019 17:23	WG1315838
Methyl tert-butyl ether	ND		25.0	25	07/23/2019 17:23	WG1315838
Naphthalene	ND	J3	313	25	07/23/2019 17:23	WG1315838
n-Propylbenzene	ND		125	25	07/23/2019 17:23	WG1315838
Styrene	ND		313	25	07/23/2019 17:23	WG1315838
1,1,1,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,1,2,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
Tetrachloroethene	ND		62.5	25	07/23/2019 17:23	WG1315838
Toluene	ND		125	25	07/23/2019 17:23	WG1315838
1,2,3-Trichlorobenzene	ND	J3	62.5	25	07/23/2019 17:23	WG1315838
1,2,4-Trichlorobenzene	ND	J3	313	25	07/23/2019 17:23	WG1315838
1,1,1-Trichloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,1,2-Trichloroethane	ND		62.5	25	07/23/2019 17:23	WG1315838
Trichloroethene	ND		25.0	25	07/23/2019 17:23	WG1315838
Trichlorofluoromethane	ND		62.5	25	07/23/2019 17:23	WG1315838
1,2,3-Trichloropropane	ND		313	25	07/23/2019 17:23	WG1315838
1,2,4-Trimethylbenzene	ND		125	25	07/23/2019 17:23	WG1315838
1,2,3-Trimethylbenzene	ND		125	25	07/23/2019 17:23	WG1315838
1,3,5-Trimethylbenzene	ND		125	25	07/23/2019 17:23	WG1315838
Vinyl chloride	ND		62.5	25	07/23/2019 17:23	WG1315838
Xylenes, Total	ND	J4	163	25	07/23/2019 17:23	WG1315838
(S) Toluene-d8	*108*		*75.0-131*		*07/23/2019 17:23*	WG1315838
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*07/23/2019 17:23*	WG1315838
(S) 1,2-Dichloroethane-d4	*99.2*		*70.0-130*		*07/23/2019 17:23*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	25.0	B	20.0	1	07/22/2019 20:24	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	625	25	07/23/2019 17:43	WG1315838
Acrylonitrile	ND		313	25	07/23/2019 17:43	WG1315838
Benzene	ND		25.0	25	07/23/2019 17:43	WG1315838
Bromobenzene	ND		313	25	07/23/2019 17:43	WG1315838
Bromodichloromethane	ND		62.5	25	07/23/2019 17:43	WG1315838
Bromoform	ND		625	25	07/23/2019 17:43	WG1315838
Bromomethane	ND		313	25	07/23/2019 17:43	WG1315838
n-Butylbenzene	ND		313	25	07/23/2019 17:43	WG1315838
sec-Butylbenzene	ND		313	25	07/23/2019 17:43	WG1315838
tert-Butylbenzene	ND	J3	125	25	07/23/2019 17:43	WG1315838
Carbon tetrachloride	ND		125	25	07/23/2019 17:43	WG1315838
Chlorobenzene	ND		62.5	25	07/23/2019 17:43	WG1315838
Chlorodibromomethane	ND		62.5	25	07/23/2019 17:43	WG1315838
Chloroethane	ND		125	25	07/23/2019 17:43	WG1315838
Chloroform	ND		62.5	25	07/23/2019 17:43	WG1315838
Chloromethane	ND		313	25	07/23/2019 17:43	WG1315838
2-Chlorotoluene	ND		62.5	25	07/23/2019 17:43	WG1315838
4-Chlorotoluene	ND		125	25	07/23/2019 17:43	WG1315838
1,2-Dibromo-3-Chloropropane	ND		625	25	07/23/2019 17:43	WG1315838
1,2-Dibromoethane	ND		62.5	25	07/23/2019 17:43	WG1315838
Dibromomethane	ND		125	25	07/23/2019 17:43	WG1315838
1,2-Dichlorobenzene	ND		125	25	07/23/2019 17:43	WG1315838
1,3-Dichlorobenzene	ND		125	25	07/23/2019 17:43	WG1315838
1,4-Dichlorobenzene	ND	J4	125	25	07/23/2019 17:43	WG1315838
Dichlorodifluoromethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,1-Dichloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,2-Dichloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,1-Dichloroethene	ND		62.5	25	07/23/2019 17:43	WG1315838
cis-1,2-Dichloroethene	ND		62.5	25	07/23/2019 17:43	WG1315838
trans-1,2-Dichloroethene	ND		125	25	07/23/2019 17:43	WG1315838
1,2-Dichloropropane	ND		125	25	07/23/2019 17:43	WG1315838
1,1-Dichloropropene	ND		62.5	25	07/23/2019 17:43	WG1315838
1,3-Dichloropropane	ND		125	25	07/23/2019 17:43	WG1315838
cis-1,3-Dichloropropene	ND		62.5	25	07/23/2019 17:43	WG1315838
trans-1,3-Dichloropropene	ND		125	25	07/23/2019 17:43	WG1315838
2,2-Dichloropropane	ND		62.5	25	07/23/2019 17:43	WG1315838
Di-isopropyl ether	ND		25.0	25	07/23/2019 17:43	WG1315838
Ethylbenzene	ND		62.5	25	07/23/2019 17:43	WG1315838
Hexachloro-1,3-butadiene	ND		625	25	07/23/2019 17:43	WG1315838
Isopropylbenzene	ND		62.5	25	07/23/2019 17:43	WG1315838
p-Isopropyltoluene	ND		125	25	07/23/2019 17:43	WG1315838
2-Butanone (MEK)	ND		625	25	07/23/2019 17:43	WG1315838
Methylene Chloride	ND		625	25	07/23/2019 17:43	WG1315838
1-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:43	WG1315838
2-Methylnaphthalene	ND	J3	625	25	07/23/2019 17:43	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		625	25	07/23/2019 17:43	WG1315838
Methyl tert-butyl ether	ND		25.0	25	07/23/2019 17:43	WG1315838
Naphthalene	ND	J3	313	25	07/23/2019 17:43	WG1315838
n-Propylbenzene	ND		125	25	07/23/2019 17:43	WG1315838
Styrene	ND		313	25	07/23/2019 17:43	WG1315838
1,1,1,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,1,2,2-Tetrachloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
Tetrachloroethene	ND		62.5	25	07/23/2019 17:43	WG1315838
Toluene	ND		125	25	07/23/2019 17:43	WG1315838
1,2,3-Trichlorobenzene	ND	J3	62.5	25	07/23/2019 17:43	WG1315838
1,2,4-Trichlorobenzene	ND	J3	313	25	07/23/2019 17:43	WG1315838
1,1,1-Trichloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,1,2-Trichloroethane	ND		62.5	25	07/23/2019 17:43	WG1315838
Trichloroethene	ND		25.0	25	07/23/2019 17:43	WG1315838
Trichlorofluoromethane	ND		62.5	25	07/23/2019 17:43	WG1315838
1,2,3-Trichloropropane	ND		313	25	07/23/2019 17:43	WG1315838
1,2,4-Trimethylbenzene	ND		125	25	07/23/2019 17:43	WG1315838
1,2,3-Trimethylbenzene	ND		125	25	07/23/2019 17:43	WG1315838
1,3,5-Trimethylbenzene	ND		125	25	07/23/2019 17:43	WG1315838
Vinyl chloride	ND		62.5	25	07/23/2019 17:43	WG1315838
Xylenes, Total	ND	J4	163	25	07/23/2019 17:43	WG1315838
(S) Toluene-d8	*106*		*75.0-131*		*07/23/2019 17:43*	WG1315838
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*07/23/2019 17:43*	WG1315838
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/23/2019 17:43*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.7		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:27	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	638	25.5	07/23/2019 18:03	WG1315838
Acrylonitrile	ND		319	25.5	07/23/2019 18:03	WG1315838
Benzene	ND		25.5	25.5	07/23/2019 18:03	WG1315838
Bromobenzene	ND		319	25.5	07/23/2019 18:03	WG1315838
Bromodichloromethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Bromoform	ND		638	25.5	07/23/2019 18:03	WG1315838
Bromomethane	ND		319	25.5	07/23/2019 18:03	WG1315838
n-Butylbenzene	ND		319	25.5	07/23/2019 18:03	WG1315838
sec-Butylbenzene	ND		319	25.5	07/23/2019 18:03	WG1315838
tert-Butylbenzene	ND	J3	128	25.5	07/23/2019 18:03	WG1315838
Carbon tetrachloride	ND		128	25.5	07/23/2019 18:03	WG1315838
Chlorobenzene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Chlorodibromomethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Chloroethane	ND		128	25.5	07/23/2019 18:03	WG1315838
Chloroform	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Chloromethane	ND		319	25.5	07/23/2019 18:03	WG1315838
2-Chlorotoluene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
4-Chlorotoluene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,2-Dibromo-3-Chloropropane	ND		638	25.5	07/23/2019 18:03	WG1315838
1,2-Dibromoethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Dibromomethane	ND		128	25.5	07/23/2019 18:03	WG1315838
1,2-Dichlorobenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,3-Dichlorobenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,4-Dichlorobenzene	ND	J4	128	25.5	07/23/2019 18:03	WG1315838
Dichlorodifluoromethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,1-Dichloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,2-Dichloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,1-Dichloroethene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
cis-1,2-Dichloroethene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
trans-1,2-Dichloroethene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,2-Dichloropropane	ND		128	25.5	07/23/2019 18:03	WG1315838
1,1-Dichloropropene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,3-Dichloropropane	ND		128	25.5	07/23/2019 18:03	WG1315838
cis-1,3-Dichloropropene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
trans-1,3-Dichloropropene	ND		128	25.5	07/23/2019 18:03	WG1315838
2,2-Dichloropropane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Di-isopropyl ether	ND		25.5	25.5	07/23/2019 18:03	WG1315838
Ethylbenzene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Hexachloro-1,3-butadiene	ND		638	25.5	07/23/2019 18:03	WG1315838
Isopropylbenzene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
p-Isopropyltoluene	ND		128	25.5	07/23/2019 18:03	WG1315838
2-Butanone (MEK)	ND		638	25.5	07/23/2019 18:03	WG1315838
Methylene Chloride	ND		638	25.5	07/23/2019 18:03	WG1315838
1-Methylnaphthalene	ND	J3	638	25.5	07/23/2019 18:03	WG1315838
2-Methylnaphthalene	ND	J3	638	25.5	07/23/2019 18:03	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		638	25.5	07/23/2019 18:03	WG1315838
Methyl tert-butyl ether	ND		25.5	25.5	07/23/2019 18:03	WG1315838
Naphthalene	ND	J3	319	25.5	07/23/2019 18:03	WG1315838
n-Propylbenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
Styrene	ND		319	25.5	07/23/2019 18:03	WG1315838
1,1,1,2-Tetrachloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,1,2,2-Tetrachloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Tetrachloroethene	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Toluene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,2,3-Trichlorobenzene	ND	J3	63.8	25.5	07/23/2019 18:03	WG1315838
1,2,4-Trichlorobenzene	ND	J3	319	25.5	07/23/2019 18:03	WG1315838
1,1,1-Trichloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,1,2-Trichloroethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Trichloroethene	ND		25.5	25.5	07/23/2019 18:03	WG1315838
Trichlorofluoromethane	ND		63.8	25.5	07/23/2019 18:03	WG1315838
1,2,3-Trichloropropane	ND		319	25.5	07/23/2019 18:03	WG1315838
1,2,4-Trimethylbenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,2,3-Trimethylbenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
1,3,5-Trimethylbenzene	ND		128	25.5	07/23/2019 18:03	WG1315838
Vinyl chloride	ND		63.8	25.5	07/23/2019 18:03	WG1315838
Xylenes, Total	ND	J4	166	25.5	07/23/2019 18:03	WG1315838
(S) Toluene-d8	*107*		*75.0-131*		*07/23/2019 18:03*	WG1315838
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*07/23/2019 18:03*	WG1315838
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/23/2019 18:03*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:29	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	625	25	07/23/2019 18:23	WG1315838
Acrylonitrile	ND		313	25	07/23/2019 18:23	WG1315838
Benzene	ND		25.0	25	07/23/2019 18:23	WG1315838
Bromobenzene	ND		313	25	07/23/2019 18:23	WG1315838
Bromodichloromethane	ND		62.5	25	07/23/2019 18:23	WG1315838
Bromoform	ND		625	25	07/23/2019 18:23	WG1315838
Bromomethane	ND		313	25	07/23/2019 18:23	WG1315838
n-Butylbenzene	ND		313	25	07/23/2019 18:23	WG1315838
sec-Butylbenzene	ND		313	25	07/23/2019 18:23	WG1315838
tert-Butylbenzene	ND	J3	125	25	07/23/2019 18:23	WG1315838
Carbon tetrachloride	ND		125	25	07/23/2019 18:23	WG1315838
Chlorobenzene	ND		62.5	25	07/23/2019 18:23	WG1315838
Chlorodibromomethane	ND		62.5	25	07/23/2019 18:23	WG1315838
Chloroethane	ND		125	25	07/23/2019 18:23	WG1315838
Chloroform	ND		62.5	25	07/23/2019 18:23	WG1315838
Chloromethane	ND		313	25	07/23/2019 18:23	WG1315838
2-Chlorotoluene	ND		62.5	25	07/23/2019 18:23	WG1315838
4-Chlorotoluene	ND		125	25	07/23/2019 18:23	WG1315838
1,2-Dibromo-3-Chloropropane	ND		625	25	07/23/2019 18:23	WG1315838
1,2-Dibromoethane	ND		62.5	25	07/23/2019 18:23	WG1315838
Dibromomethane	ND		125	25	07/23/2019 18:23	WG1315838
1,2-Dichlorobenzene	ND		125	25	07/23/2019 18:23	WG1315838
1,3-Dichlorobenzene	ND		125	25	07/23/2019 18:23	WG1315838
1,4-Dichlorobenzene	ND	J4	125	25	07/23/2019 18:23	WG1315838
Dichlorodifluoromethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,1-Dichloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,2-Dichloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,1-Dichloroethene	ND		62.5	25	07/23/2019 18:23	WG1315838
cis-1,2-Dichloroethene	ND		62.5	25	07/23/2019 18:23	WG1315838
trans-1,2-Dichloroethene	ND		125	25	07/23/2019 18:23	WG1315838
1,2-Dichloropropane	ND		125	25	07/23/2019 18:23	WG1315838
1,1-Dichloropropene	ND		62.5	25	07/23/2019 18:23	WG1315838
1,3-Dichloropropane	ND		125	25	07/23/2019 18:23	WG1315838
cis-1,3-Dichloropropene	ND		62.5	25	07/23/2019 18:23	WG1315838
trans-1,3-Dichloropropene	ND		125	25	07/23/2019 18:23	WG1315838
2,2-Dichloropropane	ND		62.5	25	07/23/2019 18:23	WG1315838
Di-isopropyl ether	ND		25.0	25	07/23/2019 18:23	WG1315838
Ethylbenzene	ND		62.5	25	07/23/2019 18:23	WG1315838
Hexachloro-1,3-butadiene	ND		625	25	07/23/2019 18:23	WG1315838
Isopropylbenzene	ND		62.5	25	07/23/2019 18:23	WG1315838
p-Isopropyltoluene	ND		125	25	07/23/2019 18:23	WG1315838
2-Butanone (MEK)	ND		625	25	07/23/2019 18:23	WG1315838
Methylene Chloride	ND		625	25	07/23/2019 18:23	WG1315838
1-Methylnaphthalene	ND	J3	625	25	07/23/2019 18:23	WG1315838
2-Methylnaphthalene	ND	J3	625	25	07/23/2019 18:23	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		625	25	07/23/2019 18:23	WG1315838
Methyl tert-butyl ether	ND		25.0	25	07/23/2019 18:23	WG1315838
Naphthalene	ND	J3	313	25	07/23/2019 18:23	WG1315838
n-Propylbenzene	ND		125	25	07/23/2019 18:23	WG1315838
Styrene	ND		313	25	07/23/2019 18:23	WG1315838
1,1,1,2-Tetrachloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,1,2,2-Tetrachloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
Tetrachloroethene	ND		62.5	25	07/23/2019 18:23	WG1315838
Toluene	ND		125	25	07/23/2019 18:23	WG1315838
1,2,3-Trichlorobenzene	ND	J3	62.5	25	07/23/2019 18:23	WG1315838
1,2,4-Trichlorobenzene	ND	J3	313	25	07/23/2019 18:23	WG1315838
1,1,1-Trichloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,1,2-Trichloroethane	ND		62.5	25	07/23/2019 18:23	WG1315838
Trichloroethene	ND		25.0	25	07/23/2019 18:23	WG1315838
Trichlorofluoromethane	ND		62.5	25	07/23/2019 18:23	WG1315838
1,2,3-Trichloropropane	ND		313	25	07/23/2019 18:23	WG1315838
1,2,4-Trimethylbenzene	ND		125	25	07/23/2019 18:23	WG1315838
1,2,3-Trimethylbenzene	ND		125	25	07/23/2019 18:23	WG1315838
1,3,5-Trimethylbenzene	ND		125	25	07/23/2019 18:23	WG1315838
Vinyl chloride	ND		62.5	25	07/23/2019 18:23	WG1315838
Xylenes, Total	ND	J4	163	25	07/23/2019 18:23	WG1315838
(S) Toluene-d8	*109*		*75.0-131*		*07/23/2019 18:23*	WG1315838
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/23/2019 18:23*	WG1315838
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*07/23/2019 18:23*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.5		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:31	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	638	25.5	07/23/2019 18:44	WG1315838
Acrylonitrile	ND		319	25.5	07/23/2019 18:44	WG1315838
Benzene	ND		25.5	25.5	07/23/2019 18:44	WG1315838
Bromobenzene	ND		319	25.5	07/23/2019 18:44	WG1315838
Bromodichloromethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Bromoform	ND		638	25.5	07/23/2019 18:44	WG1315838
Bromomethane	ND		319	25.5	07/23/2019 18:44	WG1315838
n-Butylbenzene	ND		319	25.5	07/23/2019 18:44	WG1315838
sec-Butylbenzene	ND		319	25.5	07/23/2019 18:44	WG1315838
tert-Butylbenzene	ND	J3	128	25.5	07/23/2019 18:44	WG1315838
Carbon tetrachloride	ND		128	25.5	07/23/2019 18:44	WG1315838
Chlorobenzene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Chlorodibromomethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Chloroethane	ND		128	25.5	07/23/2019 18:44	WG1315838
Chloroform	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Chloromethane	ND		319	25.5	07/23/2019 18:44	WG1315838
2-Chlorotoluene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
4-Chlorotoluene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,2-Dibromo-3-Chloropropane	ND		638	25.5	07/23/2019 18:44	WG1315838
1,2-Dibromoethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Dibromomethane	ND		128	25.5	07/23/2019 18:44	WG1315838
1,2-Dichlorobenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,3-Dichlorobenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,4-Dichlorobenzene	ND	J4	128	25.5	07/23/2019 18:44	WG1315838
Dichlorodifluoromethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,1-Dichloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,2-Dichloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,1-Dichloroethene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
cis-1,2-Dichloroethene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
trans-1,2-Dichloroethene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,2-Dichloropropane	ND		128	25.5	07/23/2019 18:44	WG1315838
1,1-Dichloropropene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,3-Dichloropropane	ND		128	25.5	07/23/2019 18:44	WG1315838
cis-1,3-Dichloropropene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
trans-1,3-Dichloropropene	ND		128	25.5	07/23/2019 18:44	WG1315838
2,2-Dichloropropane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Di-isopropyl ether	ND		25.5	25.5	07/23/2019 18:44	WG1315838
Ethylbenzene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Hexachloro-1,3-butadiene	ND		638	25.5	07/23/2019 18:44	WG1315838
Isopropylbenzene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
p-Isopropyltoluene	ND		128	25.5	07/23/2019 18:44	WG1315838
2-Butanone (MEK)	ND		638	25.5	07/23/2019 18:44	WG1315838
Methylene Chloride	ND		638	25.5	07/23/2019 18:44	WG1315838
1-Methylnaphthalene	ND	J3	638	25.5	07/23/2019 18:44	WG1315838
2-Methylnaphthalene	ND	J3	638	25.5	07/23/2019 18:44	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		638	25.5	07/23/2019 18:44	WG1315838
Methyl tert-butyl ether	ND		25.5	25.5	07/23/2019 18:44	WG1315838
Naphthalene	ND	J3	319	25.5	07/23/2019 18:44	WG1315838
n-Propylbenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
Styrene	ND		319	25.5	07/23/2019 18:44	WG1315838
1,1,1,2-Tetrachloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,1,2,2-Tetrachloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Tetrachloroethene	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Toluene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,2,3-Trichlorobenzene	ND	J3	63.8	25.5	07/23/2019 18:44	WG1315838
1,2,4-Trichlorobenzene	ND	J3	319	25.5	07/23/2019 18:44	WG1315838
1,1,1-Trichloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,1,2-Trichloroethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Trichloroethene	ND		25.5	25.5	07/23/2019 18:44	WG1315838
Trichlorofluoromethane	ND		63.8	25.5	07/23/2019 18:44	WG1315838
1,2,3-Trichloropropane	ND		319	25.5	07/23/2019 18:44	WG1315838
1,2,4-Trimethylbenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,2,3-Trimethylbenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
1,3,5-Trimethylbenzene	ND		128	25.5	07/23/2019 18:44	WG1315838
Vinyl chloride	ND		63.8	25.5	07/23/2019 18:44	WG1315838
Xylenes, Total	ND	J4	166	25.5	07/23/2019 18:44	WG1315838
(S) Toluene-d8	*108*		*75.0-131*		*07/23/2019 18:44*	WG1315838
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/23/2019 18:44*	WG1315838
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*07/23/2019 18:44*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:33	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	681	27.25	07/23/2019 19:04	WG1315838
Acrylonitrile	ND		341	27.25	07/23/2019 19:04	WG1315838
Benzene	ND		27.3	27.25	07/23/2019 19:04	WG1315838
Bromobenzene	ND		341	27.25	07/23/2019 19:04	WG1315838
Bromodichloromethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Bromoform	ND		681	27.25	07/23/2019 19:04	WG1315838
Bromomethane	ND		341	27.25	07/23/2019 19:04	WG1315838
n-Butylbenzene	ND		341	27.25	07/23/2019 19:04	WG1315838
sec-Butylbenzene	ND		341	27.25	07/23/2019 19:04	WG1315838
tert-Butylbenzene	ND	J3	136	27.25	07/23/2019 19:04	WG1315838
Carbon tetrachloride	ND		136	27.25	07/23/2019 19:04	WG1315838
Chlorobenzene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Chlorodibromomethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Chloroethane	ND		136	27.25	07/23/2019 19:04	WG1315838
Chloroform	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Chloromethane	ND		341	27.25	07/23/2019 19:04	WG1315838
2-Chlorotoluene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
4-Chlorotoluene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,2-Dibromo-3-Chloropropane	ND		681	27.25	07/23/2019 19:04	WG1315838
1,2-Dibromoethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Dibromomethane	ND		136	27.25	07/23/2019 19:04	WG1315838
1,2-Dichlorobenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,3-Dichlorobenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,4-Dichlorobenzene	ND	J4	136	27.25	07/23/2019 19:04	WG1315838
Dichlorodifluoromethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,1-Dichloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,2-Dichloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,1-Dichloroethene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
cis-1,2-Dichloroethene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
trans-1,2-Dichloroethene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,2-Dichloropropane	ND		136	27.25	07/23/2019 19:04	WG1315838
1,1-Dichloropropene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,3-Dichloropropane	ND		136	27.25	07/23/2019 19:04	WG1315838
cis-1,3-Dichloropropene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
trans-1,3-Dichloropropene	ND		136	27.25	07/23/2019 19:04	WG1315838
2,2-Dichloropropane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Di-isopropyl ether	ND		27.3	27.25	07/23/2019 19:04	WG1315838
Ethylbenzene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Hexachloro-1,3-butadiene	ND		681	27.25	07/23/2019 19:04	WG1315838
Isopropylbenzene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
p-Isopropyltoluene	ND		136	27.25	07/23/2019 19:04	WG1315838
2-Butanone (MEK)	ND		681	27.25	07/23/2019 19:04	WG1315838
Methylene Chloride	ND		681	27.25	07/23/2019 19:04	WG1315838
1-Methylnaphthalene	ND	J3	681	27.25	07/23/2019 19:04	WG1315838
2-Methylnaphthalene	ND	J3	681	27.25	07/23/2019 19:04	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		681	27.25	07/23/2019 19:04	WG1315838
Methyl tert-butyl ether	ND		27.3	27.25	07/23/2019 19:04	WG1315838
Naphthalene	ND	J3	341	27.25	07/23/2019 19:04	WG1315838
n-Propylbenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
Styrene	ND		341	27.25	07/23/2019 19:04	WG1315838
1,1,1,2-Tetrachloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,1,2,2-Tetrachloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Tetrachloroethene	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Toluene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,2,3-Trichlorobenzene	ND	J3	68.1	27.25	07/23/2019 19:04	WG1315838
1,2,4-Trichlorobenzene	ND	J3	341	27.25	07/23/2019 19:04	WG1315838
1,1,1-Trichloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,1,2-Trichloroethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Trichloroethene	ND		27.3	27.25	07/23/2019 19:04	WG1315838
Trichlorofluoromethane	ND		68.1	27.25	07/23/2019 19:04	WG1315838
1,2,3-Trichloropropane	ND		341	27.25	07/23/2019 19:04	WG1315838
1,2,4-Trimethylbenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,2,3-Trimethylbenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
1,3,5-Trimethylbenzene	ND		136	27.25	07/23/2019 19:04	WG1315838
Vinyl chloride	ND		68.1	27.25	07/23/2019 19:04	WG1315838
Xylenes, Total	ND	J4	177	27.25	07/23/2019 19:04	WG1315838
(S) Toluene-d8	*108*		*75.0-131*		*07/23/2019 19:04*	WG1315838
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*07/23/2019 19:04*	WG1315838
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*07/23/2019 19:04*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	07/23/2019 22:48	WG1315928

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		20.0	1	07/22/2019 20:35	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	625	25	07/23/2019 19:25	WG1315838
Acrylonitrile	ND		313	25	07/23/2019 19:25	WG1315838
Benzene	ND		25.0	25	07/23/2019 19:25	WG1315838
Bromobenzene	ND		313	25	07/23/2019 19:25	WG1315838
Bromodichloromethane	ND		62.5	25	07/23/2019 19:25	WG1315838
Bromoform	ND		625	25	07/23/2019 19:25	WG1315838
Bromomethane	ND		313	25	07/23/2019 19:25	WG1315838
n-Butylbenzene	ND		313	25	07/23/2019 19:25	WG1315838
sec-Butylbenzene	ND		313	25	07/23/2019 19:25	WG1315838
tert-Butylbenzene	ND	J3	125	25	07/23/2019 19:25	WG1315838
Carbon tetrachloride	ND		125	25	07/23/2019 19:25	WG1315838
Chlorobenzene	ND		62.5	25	07/23/2019 19:25	WG1315838
Chlorodibromomethane	ND		62.5	25	07/23/2019 19:25	WG1315838
Chloroethane	ND		125	25	07/23/2019 19:25	WG1315838
Chloroform	ND		62.5	25	07/23/2019 19:25	WG1315838
Chloromethane	ND		313	25	07/23/2019 19:25	WG1315838
2-Chlorotoluene	ND		62.5	25	07/23/2019 19:25	WG1315838
4-Chlorotoluene	ND		125	25	07/23/2019 19:25	WG1315838
1,2-Dibromo-3-Chloropropane	ND		625	25	07/23/2019 19:25	WG1315838
1,2-Dibromoethane	ND		62.5	25	07/23/2019 19:25	WG1315838
Dibromomethane	ND		125	25	07/23/2019 19:25	WG1315838
1,2-Dichlorobenzene	ND		125	25	07/23/2019 19:25	WG1315838
1,3-Dichlorobenzene	ND		125	25	07/23/2019 19:25	WG1315838
1,4-Dichlorobenzene	ND	J4	125	25	07/23/2019 19:25	WG1315838
Dichlorodifluoromethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,1-Dichloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,2-Dichloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,1-Dichloroethene	ND		62.5	25	07/23/2019 19:25	WG1315838
cis-1,2-Dichloroethene	ND		62.5	25	07/23/2019 19:25	WG1315838
trans-1,2-Dichloroethene	ND		125	25	07/23/2019 19:25	WG1315838
1,2-Dichloropropane	ND		125	25	07/23/2019 19:25	WG1315838
1,1-Dichloropropene	ND		62.5	25	07/23/2019 19:25	WG1315838
1,3-Dichloropropane	ND		125	25	07/23/2019 19:25	WG1315838
cis-1,3-Dichloropropene	ND		62.5	25	07/23/2019 19:25	WG1315838
trans-1,3-Dichloropropene	ND		125	25	07/23/2019 19:25	WG1315838
2,2-Dichloropropane	ND		62.5	25	07/23/2019 19:25	WG1315838
Di-isopropyl ether	ND		25.0	25	07/23/2019 19:25	WG1315838
Ethylbenzene	ND		62.5	25	07/23/2019 19:25	WG1315838
Hexachloro-1,3-butadiene	ND		625	25	07/23/2019 19:25	WG1315838
Isopropylbenzene	ND		62.5	25	07/23/2019 19:25	WG1315838
p-Isopropyltoluene	ND		125	25	07/23/2019 19:25	WG1315838
2-Butanone (MEK)	ND		625	25	07/23/2019 19:25	WG1315838
Methylene Chloride	ND		625	25	07/23/2019 19:25	WG1315838
1-Methylnaphthalene	ND	J3	625	25	07/23/2019 19:25	WG1315838
2-Methylnaphthalene	ND	J3	625	25	07/23/2019 19:25	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		625	25	07/23/2019 19:25	WG1315838
Methyl tert-butyl ether	ND		25.0	25	07/23/2019 19:25	WG1315838
Naphthalene	ND	J3	313	25	07/23/2019 19:25	WG1315838
n-Propylbenzene	ND		125	25	07/23/2019 19:25	WG1315838
Styrene	ND		313	25	07/23/2019 19:25	WG1315838
1,1,1,2-Tetrachloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,1,2,2-Tetrachloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
Tetrachloroethene	ND		62.5	25	07/23/2019 19:25	WG1315838
Toluene	ND		125	25	07/23/2019 19:25	WG1315838
1,2,3-Trichlorobenzene	ND	J3	62.5	25	07/23/2019 19:25	WG1315838
1,2,4-Trichlorobenzene	ND	J3	313	25	07/23/2019 19:25	WG1315838
1,1,1-Trichloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,1,2-Trichloroethane	ND		62.5	25	07/23/2019 19:25	WG1315838
Trichloroethene	ND		25.0	25	07/23/2019 19:25	WG1315838
Trichlorofluoromethane	ND		62.5	25	07/23/2019 19:25	WG1315838
1,2,3-Trichloropropane	ND		313	25	07/23/2019 19:25	WG1315838
1,2,4-Trimethylbenzene	ND		125	25	07/23/2019 19:25	WG1315838
1,2,3-Trimethylbenzene	ND		125	25	07/23/2019 19:25	WG1315838
1,3,5-Trimethylbenzene	ND		125	25	07/23/2019 19:25	WG1315838
Vinyl chloride	ND		62.5	25	07/23/2019 19:25	WG1315838
Xylenes, Total	ND	J4	163	25	07/23/2019 19:25	WG1315838
(S) Toluene-d8	*107*		*75.0-131*		*07/23/2019 19:25*	WG1315838
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*07/23/2019 19:25*	WG1315838
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*07/23/2019 19:25*	WG1315838

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	07/23/2019 22:42	WG1315929

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	28.0	B	20.0	1	07/22/2019 20:38	WG1315509

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND	J3	688	27.5	07/23/2019 19:46	WG1315838
Acrylonitrile	ND		344	27.5	07/23/2019 19:46	WG1315838
Benzene	ND		27.5	27.5	07/23/2019 19:46	WG1315838
Bromobenzene	ND		344	27.5	07/23/2019 19:46	WG1315838
Bromodichloromethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Bromoform	ND		688	27.5	07/23/2019 19:46	WG1315838
Bromomethane	ND		344	27.5	07/23/2019 19:46	WG1315838
n-Butylbenzene	ND		344	27.5	07/23/2019 19:46	WG1315838
sec-Butylbenzene	ND		344	27.5	07/23/2019 19:46	WG1315838
tert-Butylbenzene	ND	J3	138	27.5	07/23/2019 19:46	WG1315838
Carbon tetrachloride	ND		138	27.5	07/23/2019 19:46	WG1315838
Chlorobenzene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Chlorodibromomethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Chloroethane	ND		138	27.5	07/23/2019 19:46	WG1315838
Chloroform	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Chloromethane	ND		344	27.5	07/23/2019 19:46	WG1315838
2-Chlorotoluene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
4-Chlorotoluene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,2-Dibromo-3-Chloropropane	ND		688	27.5	07/23/2019 19:46	WG1315838
1,2-Dibromoethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Dibromomethane	ND		138	27.5	07/23/2019 19:46	WG1315838
1,2-Dichlorobenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,3-Dichlorobenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,4-Dichlorobenzene	ND	J4	138	27.5	07/23/2019 19:46	WG1315838
Dichlorodifluoromethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,1-Dichloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,2-Dichloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,1-Dichloroethene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
cis-1,2-Dichloroethene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
trans-1,2-Dichloroethene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,2-Dichloropropane	ND		138	27.5	07/23/2019 19:46	WG1315838
1,1-Dichloropropene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,3-Dichloropropane	ND		138	27.5	07/23/2019 19:46	WG1315838
cis-1,3-Dichloropropene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
trans-1,3-Dichloropropene	ND		138	27.5	07/23/2019 19:46	WG1315838
2,2-Dichloropropane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Di-isopropyl ether	ND		27.5	27.5	07/23/2019 19:46	WG1315838
Ethylbenzene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Hexachloro-1,3-butadiene	ND		688	27.5	07/23/2019 19:46	WG1315838
Isopropylbenzene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
p-Isopropyltoluene	ND		138	27.5	07/23/2019 19:46	WG1315838
2-Butanone (MEK)	ND		688	27.5	07/23/2019 19:46	WG1315838
Methylene Chloride	ND		688	27.5	07/23/2019 19:46	WG1315838
1-Methylnaphthalene	ND	J3	688	27.5	07/23/2019 19:46	WG1315838
2-Methylnaphthalene	ND	J3	688	27.5	07/23/2019 19:46	WG1315838

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		688	27.5	07/23/2019 19:46	WG1315838
Methyl tert-butyl ether	ND		27.5	27.5	07/23/2019 19:46	WG1315838
Naphthalene	ND	J3	344	27.5	07/23/2019 19:46	WG1315838
n-Propylbenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
Styrene	ND		344	27.5	07/23/2019 19:46	WG1315838
1,1,1,2-Tetrachloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,1,2,2-Tetrachloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,1,2-Trichlorotrifluoroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Tetrachloroethene	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Toluene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,2,3-Trichlorobenzene	ND	J3	68.8	27.5	07/23/2019 19:46	WG1315838
1,2,4-Trichlorobenzene	ND	J3	344	27.5	07/23/2019 19:46	WG1315838
1,1,1-Trichloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,1,2-Trichloroethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Trichloroethene	ND		27.5	27.5	07/23/2019 19:46	WG1315838
Trichlorofluoromethane	ND		68.8	27.5	07/23/2019 19:46	WG1315838
1,2,3-Trichloropropane	ND		344	27.5	07/23/2019 19:46	WG1315838
1,2,4-Trimethylbenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,2,3-Trimethylbenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
1,3,5-Trimethylbenzene	ND		138	27.5	07/23/2019 19:46	WG1315838
Vinyl chloride	ND		68.8	27.5	07/23/2019 19:46	WG1315838
Xylenes, Total	ND	J4	179	27.5	07/23/2019 19:46	WG1315838
(S) Toluene-d8	*109*		*75.0-131*		*07/23/2019 19:46*	WG1315838
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*07/23/2019 19:46*	WG1315838
(S) 1,2-Dichloroethane-d4	*104*		*70.0-130*		*07/23/2019 19:46*	WG1315838

Method Blank (MB)

(MB) R3433837-1 07/23/19 22:48

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1120049-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120049-01 07/23/19 22:48 • (DUP) R3433837-3 07/23/19 22:48

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.9	82.1	1	0.861		10

Laboratory Control Sample (LCS)

(LCS) R3433837-2 07/23/19 22:48

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3433846-1 07/23/19 22:42

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1120374-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1120374-02 07/23/19 22:42 • (DUP) R3433846-3 07/23/19 22:42

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.3	84.1	1	0.132		10

Laboratory Control Sample (LCS)

(LCS) R3433846-2 07/23/19 22:42

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3433072-1 07/22/19 19:40

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Mercury	13.0	J	2.80	20.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433072-2 07/22/19 19:43 • (LCSD) R3433072-3 07/22/19 19:45

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	500	447	478	89.3	95.7	80.0-120			6.85	20

L1120041-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120041-03 07/22/19 19:51 • (MS) R3433072-4 07/22/19 19:54 • (MSD) R3433072-5 07/22/19 19:56

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	500	25.2	298	331	54.7	61.2	1	75.0-125	J6	J6	10.4	20

Method Blank (MB)

(MB) R3433408-3 07/23/19 11:01

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acetone	U		13.7	25.0
Acrylonitrile	U		1.90	12.5
Benzene	U		0.400	1.00
Bromobenzene	U		1.05	12.5
Bromodichloromethane	U		0.788	2.50
Bromoform	U		5.98	25.0
Bromomethane	U		3.70	12.5
n-Butylbenzene	U		3.84	12.5
sec-Butylbenzene	U		2.53	12.5
tert-Butylbenzene	U		1.55	5.00
Carbon tetrachloride	U		1.08	5.00
Chlorobenzene	U		0.573	2.50
Chlorodibromomethane	U		0.450	2.50
Chloroethane	U		1.08	5.00
Chloroform	U		0.415	2.50
Chloromethane	U		1.39	12.5
2-Chlorotoluene	U		0.920	2.50
4-Chlorotoluene	U		1.13	5.00
1,2-Dibromo-3-Chloropropane	U		5.10	25.0
1,2-Dibromoethane	U		0.525	2.50
Dibromomethane	U		1.00	5.00
1,2-Dichlorobenzene	U		1.45	5.00
1,3-Dichlorobenzene	U		1.70	5.00
1,4-Dichlorobenzene	U		1.97	5.00
Dichlorodifluoromethane	U		0.818	2.50
1,1-Dichloroethane	U		0.575	2.50
1,2-Dichloroethane	U		0.475	2.50
1,1-Dichloroethene	U		0.500	2.50
cis-1,2-Dichloroethene	U		0.690	2.50
trans-1,2-Dichloroethene	U		1.43	5.00
1,2-Dichloropropane	U		1.27	5.00
1,1-Dichloropropene	U		0.700	2.50
1,3-Dichloropropane	U		1.75	5.00
cis-1,3-Dichloropropene	U		0.678	2.50
trans-1,3-Dichloropropene	U		1.53	5.00
2,2-Dichloropropane	U		0.793	2.50
Di-isopropyl ether	U		0.350	1.00
Ethylbenzene	U		0.530	2.50
Hexachloro-1,3-butadiene	U		12.7	25.0
Isopropylbenzene	U		0.863	2.50

Method Blank (MB)

(MB) R3433408-3 07/23/19 11:01

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
p-Isopropyltoluene	U		2.33	5.00
2-Butanone (MEK)	U		12.5	25.0
Methylene Chloride	U		6.64	25.0
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0
Methyl tert-butyl ether	U		0.295	1.00
1-Methylnaphthalene	U		8.12	25.0
2-Methylnaphthalene	U		7.60	25.0
Naphthalene	U		3.12	12.5
n-Propylbenzene	U		1.18	5.00
Styrene	U		2.73	12.5
1,1,1,2-Tetrachloroethane	U		0.500	2.50
1,1,2,2-Tetrachloroethane	U		0.390	2.50
Tetrachloroethene	U		0.700	2.50
Toluene	U		1.25	5.00
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50
1,2,3-Trichlorobenzene	U		0.625	2.50
1,2,4-Trichlorobenzene	U		4.82	12.5
1,1,1-Trichloroethane	U		0.275	2.50
1,1,2-Trichloroethane	U		0.883	2.50
Trichloroethene	U		0.400	1.00
Trichlorofluoromethane	U		0.500	2.50
1,2,3-Trichloropropane	U		5.10	12.5
1,2,3-Trimethylbenzene	U		1.15	5.00
1,2,4-Trimethylbenzene	U		1.16	5.00
1,3,5-Trimethylbenzene	U		1.08	5.00
Vinyl chloride	U		0.683	2.50
Xylenes, Total	U		4.78	6.50
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433408-1 07/23/19 09:38 • (LCSD) R3433408-2 07/23/19 09:58

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	625	435	874	69.6	140	10.0-160		J3	67.2	31
Acrylonitrile	625	656	678	105	109	45.0-153			3.28	22
Benzene	125	98.1	99.5	78.5	79.6	70.0-123			1.43	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433408-1 07/23/19 09:38 • (LCSD) R3433408-2 07/23/19 09:58

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	125	130	139	104	111	73.0-121			6.57	20
Bromodichloromethane	125	120	125	95.9	99.9	73.0-121			4.06	20
Bromoform	125	98.8	107	79.0	85.3	64.0-132			7.61	20
Bromomethane	125	120	131	95.8	105	56.0-147			9.13	20
n-Butylbenzene	125	117	125	93.3	100	68.0-135			6.95	20
sec-Butylbenzene	125	117	125	93.5	100	74.0-130			7.03	20
tert-Butylbenzene	125	96.7	121	77.4	96.9	75.0-127		J3	22.5	20
Carbon tetrachloride	125	121	119	96.5	95.2	66.0-128			1.33	20
Chlorobenzene	125	106	108	84.4	86.3	76.0-128			2.17	20
Chlorodibromomethane	125	118	125	94.3	100	74.0-127			5.88	20
Chloroethane	125	101	106	81.0	85.0	61.0-134			4.79	20
Chloroform	125	113	116	90.2	92.8	72.0-123			2.82	20
Chloromethane	125	126	134	101	108	51.0-138			6.77	20
2-Chlorotoluene	125	114	116	91.4	92.9	75.0-124			1.71	20
4-Chlorotoluene	125	112	118	89.7	94.3	75.0-124			5.07	20
1,2-Dibromo-3-Chloropropane	125	114	126	90.9	101	59.0-130			10.5	20
1,2-Dibromoethane	125	103	108	82.2	86.3	74.0-128			4.88	20
Dibromomethane	125	107	113	85.9	90.4	75.0-122			5.17	20
1,2-Dichlorobenzene	125	109	119	87.2	95.0	76.0-124			8.62	20
1,3-Dichlorobenzene	125	119	128	95.3	102	76.0-125			7.12	20
1,4-Dichlorobenzene	125	95.4	103	76.3	82.4	77.0-121	J4		7.62	20
Dichlorodifluoromethane	125	123	129	98.0	103	43.0-156			5.36	20
1,1-Dichloroethane	125	132	138	106	110	70.0-127			4.15	20
1,2-Dichloroethane	125	131	130	104	104	65.0-131			0.214	20
1,1-Dichloroethene	125	114	120	91.4	96.1	65.0-131			5.00	20
cis-1,2-Dichloroethene	125	117	118	93.8	94.3	73.0-125			0.572	20
trans-1,2-Dichloroethene	125	111	113	88.6	90.1	71.0-125			1.64	20
1,2-Dichloropropane	125	126	129	101	103	74.0-125			1.84	20
1,1-Dichloropropene	125	102	99.4	81.4	79.5	73.0-125			2.26	20
1,3-Dichloropropane	125	121	127	96.5	101	80.0-125			4.80	20
cis-1,3-Dichloropropene	125	111	113	88.8	90.6	76.0-127			2.04	20
trans-1,3-Dichloropropene	125	119	122	95.3	97.4	73.0-127			2.20	20
2,2-Dichloropropane	125	152	147	122	117	59.0-135			3.70	20
Di-isopropyl ether	125	118	121	94.1	96.9	60.0-136			2.92	20
Ethylbenzene	125	110	116	88.0	93.1	74.0-126			5.59	20
Hexachloro-1,3-butadiene	125	102	123	81.4	98.1	57.0-150			18.7	20
Isopropylbenzene	125	100	103	80.2	82.5	72.0-127			2.80	20
p-Isopropyltoluene	125	111	121	88.8	96.5	72.0-133			8.31	20
2-Butanone (MEK)	625	710	723	114	116	30.0-160			1.85	24
Methylene Chloride	125	105	110	84.4	87.9	68.0-123			4.04	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433408-1 07/23/19 09:38 • (LCSD) R3433408-2 07/23/19 09:58

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	625	616	637	98.5	102	56.0-143			3.31	20
Methyl tert-butyl ether	125	117	121	93.6	96.7	66.0-132			3.21	20
1-Methylnaphthalene	125	130	171	104	137	47.0-145		J3	27.3	25
2-Methylnaphthalene	125	133	175	106	140	32.0-149		J3	27.4	26
Naphthalene	125	106	136	84.5	109	59.0-130		J3	25.3	20
n-Propylbenzene	125	109	128	86.9	103	74.0-126			16.6	20
Styrene	125	103	110	82.6	88.2	72.0-127			6.52	20
1,1,1,2-Tetrachloroethane	125	120	124	96.3	99.2	74.0-129			2.94	20
1,1,2,2-Tetrachloroethane	125	108	113	86.7	90.7	68.0-128			4.52	20
Tetrachloroethene	125	115	122	91.6	97.7	70.0-136			6.38	20
Toluene	125	111	115	88.5	92.0	75.0-121			3.78	20
1,1,2-Trichlorotrifluoroethane	125	105	102	83.8	81.8	61.0-139			2.33	20
1,2,3-Trichlorobenzene	125	113	151	90.2	120	59.0-139		J3	28.8	20
1,2,4-Trichlorobenzene	125	101	127	80.9	101	62.0-137		J3	22.5	20
1,1,1-Trichloroethane	125	115	122	91.7	97.9	69.0-126			6.50	20
1,1,2-Trichloroethane	125	107	119	85.6	95.4	78.0-123			10.9	20
Trichloroethene	125	133	139	107	111	76.0-126			4.12	20
Trichlorofluoromethane	125	112	115	89.7	92.2	61.0-142			2.68	20
1,2,3-Trichloropropane	125	116	125	92.8	100	67.0-129			7.50	20
1,2,3-Trimethylbenzene	125	107	118	85.9	94.5	74.0-124			9.55	20
1,2,4-Trimethylbenzene	125	104	111	83.4	88.9	70.0-126			6.31	20
1,3,5-Trimethylbenzene	125	119	126	95.1	101	73.0-127			5.54	20
Vinyl chloride	125	108	112	86.3	89.9	63.0-134			4.01	20
Xylenes, Total	375	298	339	79.5	90.4	72.0-127	J4		12.9	20
(S) Toluene-d8				*105*	*105*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*110*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

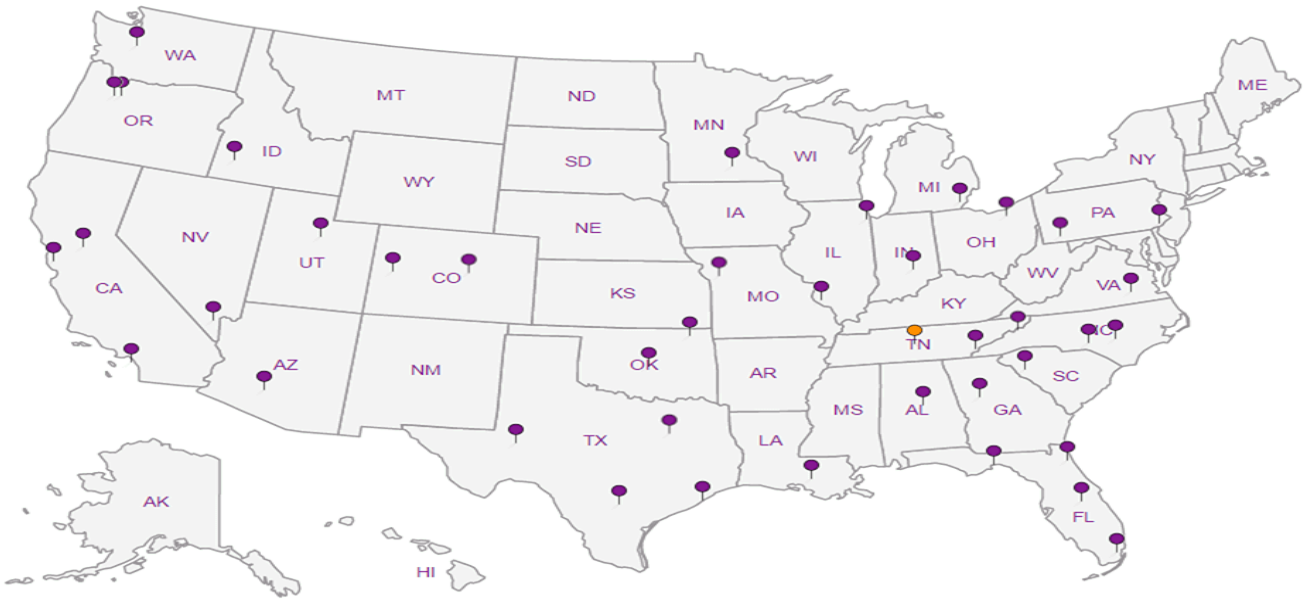
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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MN: 612-607-1700 WI: 920-469-2436

L1120049

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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	ATC GROUP SVCS
Branch/Location:	NOVI
Project Contact:	D. Blaschke
Phone:	248 563 2563
Project Number:	NPJBD 19002
Project Name:	Donaldson/Ferndale
Project State:	MI
Sampled By (Print):	I. A.
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOCs (8260)	Analyses Requested: Mercury	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	F3 4-5	7/12	11:50	S					HOLD		
	E3 4-5		11:54	S					HOLD		
	D3 4-5		11:55	S					HOLD		
	E2 4-5		11:57	S			X	X	~~HOLD~~ Released		-01
	F4 4-5		12:00	S			X	X	~~HOLD~~ Released		-02
	D-1 4-5		12:02	S			X	X	~~HOLD~~ Released		-03
	D-2 4-5		12:05	S			X	X	~~HOLD~~ Released		-04
	D-4 4-5		12:10	S					HOLD		
	C-1 4-5		12:15	S			X	X	~~HOLD~~ Released		-05
	C-2 4-5		12:20	S			X	X	~~HOLD~~		-06
	B-1 4-5		12:42	S			X	X	~~HOLD~~		-07
	A-1 4-5		12:47	S			X	X	~~HOLD~~		-08
	A-2 4-5		12:52	S			X	X	~~HOLD~~		-09

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	7/12 17:00	ATC Storage	7/12 17:00
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.

Receipt Temp = °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	ATC Group Svcs
Branch/Location:	Novi
Project Contact:	DeBuyschere
Phone:	248 863 2563
Project Number:	NPSBD 19002
Project Name:	Dearborn - Ferndale
Project State:	MI
Sampled By (Print):	J.A
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

FILTERED? (YES/NO) — Y / N
PRESERVATION (CODE)* — Pick Letter

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: VOCs	Mercury	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	A-3 4-5	7/12	12:56	S			Hold		
	A-4 4-5	7/12	13:00	S			Hold		
	B-4 4-5		13:55	S			Hold		
	B-3 4-5		14:00	S			HOLD		
	B-2 4-5		14:10	S	X	X	~~HOLD~~ Released		-10
	C-3 4-5		14:13	S			HOLD		
	C-4 4-5		14:18	S			HOLD		
	E-4 4-5		14:40	S			HOLD		
	E-4 4-5		14:45	S			HOLD		
	DUP 1						Hold		
	DUP 2						Hold		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7/12 17:00	ATC Storage	7/12 17:00

PACE Project No.
Receipt Temp = °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

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CHAIN OF CUSTODY

(Please Print Clearly)

Company Name:	ATC GROUP SVCS
Branch/Location:	NOVI
Project Contact:	DeBusschere
Phone:	248 863 2563
Project Number:	NPJBD19002
Project Name:	Donaldson/Ferndale
Project State:	MI
Sampled By (Print):	I. A.
Sampled By (Sign):	
PO #:	
Regulatory Program:	

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED? (YES/NO) — Y / N
PRESERVATION (CODE)* — Pick Letter

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

Analyses Requested: VOCs (8260), Mercury

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	F3 4-5	7/12	11:50	S	HOLD		
	E3 4-5		11:54	S	HOLD	D235	
	D3 4-5		11:55	S	HOLD		
	E2 4-5		11:57	S	HOLD		-01
	E1 4-5		12:00	S	HOLD		-02
	D-1 4-5		12:02	S	HOLD	7-103	-03
	D-2 4-5		12:05	S	HOLD		-04
	D-4 4-5		12:10	S	HOLD		
	C-1 4-5		12:15	S	HOLD		-05
	C-2 4-5		12:20	S	HOLD		-06
	B-1 4-5		12:42	S	HOLD		-07
	A-1 4-5		12:47	S	HOLD		-08
	A-2 4-5		12:5?	S	HOLD		-09

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7/12 17:00	ATC Storage	7/12 17:00
[signature]	10:41	Tommy Deane [signature]	7/16/19 1041
		[signature]	7/17/19 8:45

PACE Project No.

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

RAD SCREEN: <0.5 mR/hr

2.0-0.1=2.3 IR02

ORIGINAL

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(Please Print Clearly)	
Company Name:	ATC Group Svcs
Branch/Location:	Novi
Project Contact:	DeBlasschare
Phone:	248 863 2563
Project Number:	NPSBD 19002
Project Name:	Donaldson - Ferndale
Project State:	MI
Sampled By (Print):	I.A
Sampled By (Sign):	
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, Sl = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOCs	Mercury	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	A-3 4-5	7/12	12:56	S					Hold		
	A-4 4-5	7/12	13:00	S					Hold		
	B-4 4-5		13:55	S					Hold		
	B-3 4-5		14:00	S					Hold		
	B-2 4-5		14:10	S					Hold	-10	
	C-3 4-5		14:13	S					Hold		
	C-4 4-5		14:18	S					Hold		
	E-4 4-5		14:40	S					Hold		
	F-4 4-5		14:45	S					Hold		
	Dup-1								Hold		
	Dup-2								Hold		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	7/12 17:00	ATC Storage	7/12 17:00
	10:41	Tammy Quinn	7/13/19 1041
			7/17/19 845

RAD SCREEN: <0.5 mR/hr

PACE Project No.

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

2.40.1 : 2.3 Inno2

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: ATCNMI	SDG#:	L1120049
Cooler Received/Opened On: 7/17/19	Temp	2.0
Received By: Paul Minnich		
Signature:		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?			
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

L1120049

Katie Ingram

From: Mark Beasley
Sent: Thursday, July 18, 2019 8:11 AM
To: Troy Dunlap; Project Service
Subject: RE: ATCNMI HOLD COC

Log hold samples per email.

Thanks
Mark

From: Troy Dunlap
Sent: Thursday, July 18, 2019 7:57 AM
To: Mark Beasley; Project Service
Subject: ATCNMI HOLD COC

Troy Dunlap
Team Lead for Project Service

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
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tdunlap@pacenational.com | pacenational.com

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 29, 2019

ATC Group Services - Novi, MI

Sample Delivery Group:	L1121885
Samples Received:	07/17/2019
Project Number:	NPJBD19002
Description:	Donaldson/Ferndale Soil Gas

Report To: Gerard DeBusschere
46555 Humboldt Drive Suite 100
Novi, MI 48377

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

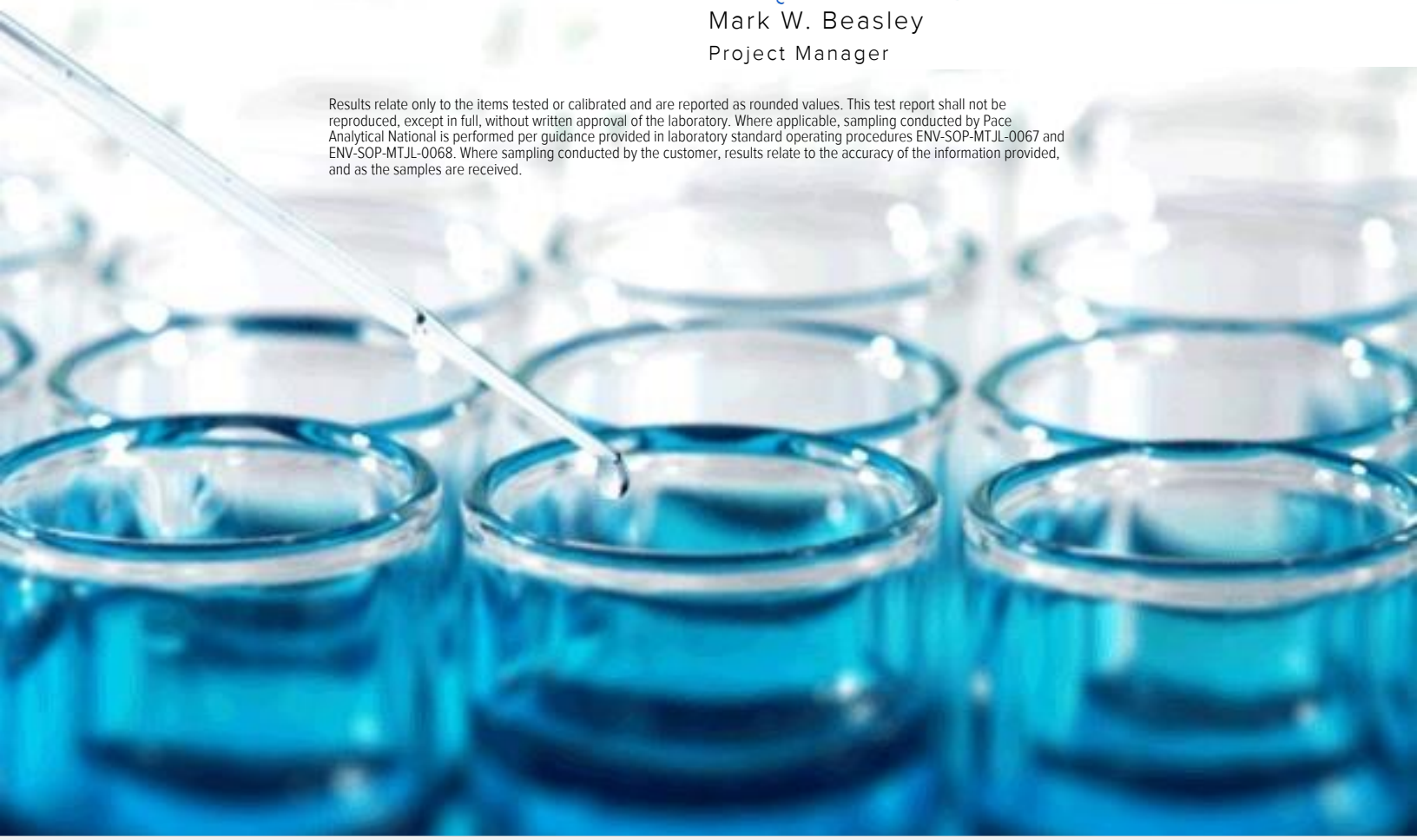


TABLE OF CONTENTS

B-3 4-5 L1121885-01 Solid

Collected by: IA | Collected date/time: 07/12/19 14:00 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1318327	1	07/29/19 08:32	07/29/19 08:43	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1318698	1	07/28/19 16:18	07/28/19 19:20	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318178	1.07	07/12/19 14:00	07/26/19 17:47	ADM	Mt. Juliet, TN

C-3 4-5 L1121885-02 Solid

Collected by: IA | Collected date/time: 07/12/19 14:13 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1318327	1	07/29/19 08:32	07/29/19 08:43	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1318698	1	07/28/19 16:18	07/28/19 19:27	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318178	1	07/12/19 14:13	07/26/19 18:07	ADM	Mt. Juliet, TN

C-4 4-5 L1121885-03 Solid

Collected by: IA | Collected date/time: 07/12/19 14:18 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1318327	1	07/29/19 08:32	07/29/19 08:43	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1318092	1	07/26/19 11:21	07/28/19 16:20	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318178	1	07/12/19 14:18	07/26/19 18:27	ADM	Mt. Juliet, TN

E-4 4-5 L1121885-04 Solid

Collected by: IA | Collected date/time: 07/12/19 14:40 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1318327	1	07/29/19 08:32	07/29/19 08:43	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1318092	1	07/26/19 11:21	07/28/19 16:23	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318178	1	07/12/19 14:40	07/26/19 18:48	ADM	Mt. Juliet, TN

F-4 4-5 L1121885-05 Solid

Collected by: IA | Collected date/time: 07/12/19 14:45 | Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1318327	1	07/29/19 08:32	07/29/19 08:43	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1318092	1	07/26/19 11:21	07/28/19 16:30	TCT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1318178	1	07/12/19 14:45	07/26/19 19:08	ADM	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.5		1	07/29/2019 08:43	WG1318327

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		30.0	1	07/28/2019 19:20	WG1318698

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		26.8	1.07	07/26/2019 17:47	WG1318178
Acrylonitrile	ND		13.4	1.07	07/26/2019 17:47	WG1318178
Benzene	ND		1.07	1.07	07/26/2019 17:47	WG1318178
Bromobenzene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
Bromodichloromethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Bromoform	ND		26.8	1.07	07/26/2019 17:47	WG1318178
Bromomethane	ND		13.4	1.07	07/26/2019 17:47	WG1318178
n-Butylbenzene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
sec-Butylbenzene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
tert-Butylbenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
Carbon tetrachloride	ND		5.35	1.07	07/26/2019 17:47	WG1318178
Chlorobenzene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Chlorodibromomethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Chloroethane	ND		5.35	1.07	07/26/2019 17:47	WG1318178
Chloroform	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Chloromethane	ND		13.4	1.07	07/26/2019 17:47	WG1318178
2-Chlorotoluene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
4-Chlorotoluene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,2-Dibromo-3-Chloropropane	ND		26.8	1.07	07/26/2019 17:47	WG1318178
1,2-Dibromoethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Dibromomethane	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,2-Dichlorobenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,3-Dichlorobenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,4-Dichlorobenzene	ND	J4	5.35	1.07	07/26/2019 17:47	WG1318178
Dichlorodifluoromethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,1-Dichloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,2-Dichloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,1-Dichloroethene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
cis-1,2-Dichloroethene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
trans-1,2-Dichloroethene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,2-Dichloropropane	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,1-Dichloropropene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,3-Dichloropropane	ND		5.35	1.07	07/26/2019 17:47	WG1318178
cis-1,3-Dichloropropene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
trans-1,3-Dichloropropene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
2,2-Dichloropropane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Di-isopropyl ether	ND		1.07	1.07	07/26/2019 17:47	WG1318178
Ethylbenzene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Hexachloro-1,3-butadiene	ND		26.8	1.07	07/26/2019 17:47	WG1318178
Isopropylbenzene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
p-Isopropyltoluene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
2-Butanone (MEK)	ND		26.8	1.07	07/26/2019 17:47	WG1318178
Methylene Chloride	ND		26.8	1.07	07/26/2019 17:47	WG1318178
1-Methylnaphthalene	ND		26.8	1.07	07/26/2019 17:47	WG1318178
2-Methylnaphthalene	ND		26.8	1.07	07/26/2019 17:47	WG1318178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		26.8	1.07	07/26/2019 17:47	WG1318178
Methyl tert-butyl ether	ND		1.07	1.07	07/26/2019 17:47	WG1318178
Naphthalene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
n-Propylbenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
Styrene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
1,1,1,2-Tetrachloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,1,2,2-Tetrachloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,1,2-Trichlorotrifluoroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Tetrachloroethene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Toluene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,2,3-Trichlorobenzene	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,2,4-Trichlorobenzene	ND		13.4	1.07	07/26/2019 17:47	WG1318178
1,1,1-Trichloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,1,2-Trichloroethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Trichloroethene	ND		1.07	1.07	07/26/2019 17:47	WG1318178
Trichlorofluoromethane	ND		2.68	1.07	07/26/2019 17:47	WG1318178
1,2,3-Trichloropropane	ND		13.4	1.07	07/26/2019 17:47	WG1318178
1,2,4-Trimethylbenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,2,3-Trimethylbenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
1,3,5-Trimethylbenzene	ND		5.35	1.07	07/26/2019 17:47	WG1318178
Vinyl chloride	ND		2.68	1.07	07/26/2019 17:47	WG1318178
Xylenes, Total	ND		6.96	1.07	07/26/2019 17:47	WG1318178
(S) Toluene-d8	*107*		*75.0-131*		*07/26/2019 17:47*	WG1318178
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*07/26/2019 17:47*	WG1318178
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*07/26/2019 17:47*	WG1318178

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	07/29/2019 08:43	WG1318327

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	584		30.0	1	07/28/2019 19:27	WG1318698

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		25.0	1	07/26/2019 18:07	WG1318178
Acrylonitrile	ND		12.5	1	07/26/2019 18:07	WG1318178
Benzene	ND		1.00	1	07/26/2019 18:07	WG1318178
Bromobenzene	ND		12.5	1	07/26/2019 18:07	WG1318178
Bromodichloromethane	ND		2.50	1	07/26/2019 18:07	WG1318178
Bromoform	ND		25.0	1	07/26/2019 18:07	WG1318178
Bromomethane	ND		12.5	1	07/26/2019 18:07	WG1318178
n-Butylbenzene	ND		12.5	1	07/26/2019 18:07	WG1318178
sec-Butylbenzene	ND		12.5	1	07/26/2019 18:07	WG1318178
tert-Butylbenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
Carbon tetrachloride	ND		5.00	1	07/26/2019 18:07	WG1318178
Chlorobenzene	ND		2.50	1	07/26/2019 18:07	WG1318178
Chlorodibromomethane	ND		2.50	1	07/26/2019 18:07	WG1318178
Chloroethane	ND		5.00	1	07/26/2019 18:07	WG1318178
Chloroform	ND		2.50	1	07/26/2019 18:07	WG1318178
Chloromethane	ND		12.5	1	07/26/2019 18:07	WG1318178
2-Chlorotoluene	ND		2.50	1	07/26/2019 18:07	WG1318178
4-Chlorotoluene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,2-Dibromo-3-Chloropropane	ND		25.0	1	07/26/2019 18:07	WG1318178
1,2-Dibromoethane	ND		2.50	1	07/26/2019 18:07	WG1318178
Dibromomethane	ND		5.00	1	07/26/2019 18:07	WG1318178
1,2-Dichlorobenzene	14.4		5.00	1	07/26/2019 18:07	WG1318178
1,3-Dichlorobenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,4-Dichlorobenzene	ND	J4	5.00	1	07/26/2019 18:07	WG1318178
Dichlorodifluoromethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,1-Dichloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,2-Dichloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,1-Dichloroethene	ND		2.50	1	07/26/2019 18:07	WG1318178
cis-1,2-Dichloroethene	ND		2.50	1	07/26/2019 18:07	WG1318178
trans-1,2-Dichloroethene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,2-Dichloropropane	ND		5.00	1	07/26/2019 18:07	WG1318178
1,1-Dichloropropene	ND		2.50	1	07/26/2019 18:07	WG1318178
1,3-Dichloropropane	ND		5.00	1	07/26/2019 18:07	WG1318178
cis-1,3-Dichloropropene	ND		2.50	1	07/26/2019 18:07	WG1318178
trans-1,3-Dichloropropene	ND		5.00	1	07/26/2019 18:07	WG1318178
2,2-Dichloropropane	ND		2.50	1	07/26/2019 18:07	WG1318178
Di-isopropyl ether	ND		1.00	1	07/26/2019 18:07	WG1318178
Ethylbenzene	18.3		2.50	1	07/26/2019 18:07	WG1318178
Hexachloro-1,3-butadiene	ND		25.0	1	07/26/2019 18:07	WG1318178
Isopropylbenzene	ND		2.50	1	07/26/2019 18:07	WG1318178
p-Isopropyltoluene	ND		5.00	1	07/26/2019 18:07	WG1318178
2-Butanone (MEK)	ND		25.0	1	07/26/2019 18:07	WG1318178
Methylene Chloride	ND		25.0	1	07/26/2019 18:07	WG1318178
1-Methylnaphthalene	44.5		25.0	1	07/26/2019 18:07	WG1318178
2-Methylnaphthalene	31.5		25.0	1	07/26/2019 18:07	WG1318178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		25.0	1	07/26/2019 18:07	WG1318178
Methyl tert-butyl ether	ND		1.00	1	07/26/2019 18:07	WG1318178
Naphthalene	48.0		12.5	1	07/26/2019 18:07	WG1318178
n-Propylbenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
Styrene	ND		12.5	1	07/26/2019 18:07	WG1318178
1,1,1,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,1,2,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,1,2-Trichlorotrifluoroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
Tetrachloroethene	ND		2.50	1	07/26/2019 18:07	WG1318178
Toluene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,2,3-Trichlorobenzene	ND		2.50	1	07/26/2019 18:07	WG1318178
1,2,4-Trichlorobenzene	ND		12.5	1	07/26/2019 18:07	WG1318178
1,1,1-Trichloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
1,1,2-Trichloroethane	ND		2.50	1	07/26/2019 18:07	WG1318178
Trichloroethene	6.28		1.00	1	07/26/2019 18:07	WG1318178
Trichlorofluoromethane	18.9		2.50	1	07/26/2019 18:07	WG1318178
1,2,3-Trichloropropane	ND		12.5	1	07/26/2019 18:07	WG1318178
1,2,4-Trimethylbenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,2,3-Trimethylbenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
1,3,5-Trimethylbenzene	ND		5.00	1	07/26/2019 18:07	WG1318178
Vinyl chloride	ND		2.50	1	07/26/2019 18:07	WG1318178
Xylenes, Total	97.5		6.50	1	07/26/2019 18:07	WG1318178
(S) Toluene-d8	*107*		*75.0-131*		*07/26/2019 18:07*	WG1318178
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/26/2019 18:07*	WG1318178
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*07/26/2019 18:07*	WG1318178

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.3		1	07/29/2019 08:43	WG1318327

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	481		30.0	1	07/28/2019 16:20	WG1318092

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		25.0	1	07/26/2019 18:27	WG1318178
Acrylonitrile	ND		12.5	1	07/26/2019 18:27	WG1318178
Benzene	ND		1.00	1	07/26/2019 18:27	WG1318178
Bromobenzene	ND		12.5	1	07/26/2019 18:27	WG1318178
Bromodichloromethane	ND		2.50	1	07/26/2019 18:27	WG1318178
Bromoform	ND		25.0	1	07/26/2019 18:27	WG1318178
Bromomethane	ND		12.5	1	07/26/2019 18:27	WG1318178
n-Butylbenzene	ND		12.5	1	07/26/2019 18:27	WG1318178
sec-Butylbenzene	ND		12.5	1	07/26/2019 18:27	WG1318178
tert-Butylbenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
Carbon tetrachloride	ND		5.00	1	07/26/2019 18:27	WG1318178
Chlorobenzene	ND		2.50	1	07/26/2019 18:27	WG1318178
Chlorodibromomethane	ND		2.50	1	07/26/2019 18:27	WG1318178
Chloroethane	ND		5.00	1	07/26/2019 18:27	WG1318178
Chloroform	ND		2.50	1	07/26/2019 18:27	WG1318178
Chloromethane	ND		12.5	1	07/26/2019 18:27	WG1318178
2-Chlorotoluene	ND		2.50	1	07/26/2019 18:27	WG1318178
4-Chlorotoluene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,2-Dibromo-3-Chloropropane	ND		25.0	1	07/26/2019 18:27	WG1318178
1,2-Dibromoethane	ND		2.50	1	07/26/2019 18:27	WG1318178
Dibromomethane	ND		5.00	1	07/26/2019 18:27	WG1318178
1,2-Dichlorobenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,3-Dichlorobenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,4-Dichlorobenzene	ND	J4	5.00	1	07/26/2019 18:27	WG1318178
Dichlorodifluoromethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,1-Dichloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,2-Dichloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,1-Dichloroethene	ND		2.50	1	07/26/2019 18:27	WG1318178
cis-1,2-Dichloroethene	ND		2.50	1	07/26/2019 18:27	WG1318178
trans-1,2-Dichloroethene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,2-Dichloropropane	ND		5.00	1	07/26/2019 18:27	WG1318178
1,1-Dichloropropene	ND		2.50	1	07/26/2019 18:27	WG1318178
1,3-Dichloropropane	ND		5.00	1	07/26/2019 18:27	WG1318178
cis-1,3-Dichloropropene	ND		2.50	1	07/26/2019 18:27	WG1318178
trans-1,3-Dichloropropene	ND		5.00	1	07/26/2019 18:27	WG1318178
2,2-Dichloropropane	ND		2.50	1	07/26/2019 18:27	WG1318178
Di-isopropyl ether	ND		1.00	1	07/26/2019 18:27	WG1318178
Ethylbenzene	ND		2.50	1	07/26/2019 18:27	WG1318178
Hexachloro-1,3-butadiene	ND		25.0	1	07/26/2019 18:27	WG1318178
Isopropylbenzene	ND		2.50	1	07/26/2019 18:27	WG1318178
p-Isopropyltoluene	ND		5.00	1	07/26/2019 18:27	WG1318178
2-Butanone (MEK)	ND		25.0	1	07/26/2019 18:27	WG1318178
Methylene Chloride	ND		25.0	1	07/26/2019 18:27	WG1318178
1-Methylnaphthalene	41.9		25.0	1	07/26/2019 18:27	WG1318178
2-Methylnaphthalene	38.7		25.0	1	07/26/2019 18:27	WG1318178

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		25.0	1	07/26/2019 18:27	WG1318178
Methyl tert-butyl ether	ND		1.00	1	07/26/2019 18:27	WG1318178
Naphthalene	24.2		12.5	1	07/26/2019 18:27	WG1318178
n-Propylbenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
Styrene	ND		12.5	1	07/26/2019 18:27	WG1318178
1,1,1,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,1,2,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,1,2-Trichlorotrifluoroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
Tetrachloroethene	ND		2.50	1	07/26/2019 18:27	WG1318178
Toluene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,2,3-Trichlorobenzene	ND		2.50	1	07/26/2019 18:27	WG1318178
1,2,4-Trichlorobenzene	ND		12.5	1	07/26/2019 18:27	WG1318178
1,1,1-Trichloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
1,1,2-Trichloroethane	ND		2.50	1	07/26/2019 18:27	WG1318178
Trichloroethene	13.8		1.00	1	07/26/2019 18:27	WG1318178
Trichlorofluoromethane	7.58		2.50	1	07/26/2019 18:27	WG1318178
1,2,3-Trichloropropane	ND		12.5	1	07/26/2019 18:27	WG1318178
1,2,4-Trimethylbenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,2,3-Trimethylbenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
1,3,5-Trimethylbenzene	ND		5.00	1	07/26/2019 18:27	WG1318178
Vinyl chloride	ND		2.50	1	07/26/2019 18:27	WG1318178
Xylenes, Total	6.94		6.50	1	07/26/2019 18:27	WG1318178
(S) Toluene-d8	*108*		*75.0-131*		*07/26/2019 18:27*	WG1318178
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*07/26/2019 18:27*	WG1318178
(S) 1,2-Dichloroethane-d4	*99.8*		*70.0-130*		*07/26/2019 18:27*	WG1318178

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.4		1	07/29/2019 08:43	WG1318327

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	356		30.0	1	07/28/2019 16:23	WG1318092

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		25.0	1	07/26/2019 18:48	WG1318178
Acrylonitrile	ND		12.5	1	07/26/2019 18:48	WG1318178
Benzene	ND		1.00	1	07/26/2019 18:48	WG1318178
Bromobenzene	ND		12.5	1	07/26/2019 18:48	WG1318178
Bromodichloromethane	ND		2.50	1	07/26/2019 18:48	WG1318178
Bromoform	ND		25.0	1	07/26/2019 18:48	WG1318178
Bromomethane	ND		12.5	1	07/26/2019 18:48	WG1318178
n-Butylbenzene	ND		12.5	1	07/26/2019 18:48	WG1318178
sec-Butylbenzene	ND		12.5	1	07/26/2019 18:48	WG1318178
tert-Butylbenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
Carbon tetrachloride	ND		5.00	1	07/26/2019 18:48	WG1318178
Chlorobenzene	ND		2.50	1	07/26/2019 18:48	WG1318178
Chlorodibromomethane	ND		2.50	1	07/26/2019 18:48	WG1318178
Chloroethane	ND		5.00	1	07/26/2019 18:48	WG1318178
Chloroform	ND		2.50	1	07/26/2019 18:48	WG1318178
Chloromethane	ND		12.5	1	07/26/2019 18:48	WG1318178
2-Chlorotoluene	ND		2.50	1	07/26/2019 18:48	WG1318178
4-Chlorotoluene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,2-Dibromo-3-Chloropropane	ND		25.0	1	07/26/2019 18:48	WG1318178
1,2-Dibromoethane	ND		2.50	1	07/26/2019 18:48	WG1318178
Dibromomethane	ND		5.00	1	07/26/2019 18:48	WG1318178
1,2-Dichlorobenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,3-Dichlorobenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,4-Dichlorobenzene	ND	J4	5.00	1	07/26/2019 18:48	WG1318178
Dichlorodifluoromethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,1-Dichloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,2-Dichloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,1-Dichloroethene	ND		2.50	1	07/26/2019 18:48	WG1318178
cis-1,2-Dichloroethene	ND		2.50	1	07/26/2019 18:48	WG1318178
trans-1,2-Dichloroethene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,2-Dichloropropane	ND		5.00	1	07/26/2019 18:48	WG1318178
1,1-Dichloropropene	ND		2.50	1	07/26/2019 18:48	WG1318178
1,3-Dichloropropane	ND		5.00	1	07/26/2019 18:48	WG1318178
cis-1,3-Dichloropropene	ND		2.50	1	07/26/2019 18:48	WG1318178
trans-1,3-Dichloropropene	ND		5.00	1	07/26/2019 18:48	WG1318178
2,2-Dichloropropane	ND		2.50	1	07/26/2019 18:48	WG1318178
Di-isopropyl ether	ND		1.00	1	07/26/2019 18:48	WG1318178
Ethylbenzene	ND		2.50	1	07/26/2019 18:48	WG1318178
Hexachloro-1,3-butadiene	ND		25.0	1	07/26/2019 18:48	WG1318178
Isopropylbenzene	ND		2.50	1	07/26/2019 18:48	WG1318178
p-Isopropyltoluene	ND		5.00	1	07/26/2019 18:48	WG1318178
2-Butanone (MEK)	ND		25.0	1	07/26/2019 18:48	WG1318178
Methylene Chloride	ND		25.0	1	07/26/2019 18:48	WG1318178
1-Methylnaphthalene	ND		25.0	1	07/26/2019 18:48	WG1318178
2-Methylnaphthalene	26.5		25.0	1	07/26/2019 18:48	WG1318178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		25.0	1	07/26/2019 18:48	WG1318178
Methyl tert-butyl ether	ND		1.00	1	07/26/2019 18:48	WG1318178
Naphthalene	19.1		12.5	1	07/26/2019 18:48	WG1318178
n-Propylbenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
Styrene	ND		12.5	1	07/26/2019 18:48	WG1318178
1,1,1,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,1,2,2-Tetrachloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,1,2-Trichlorotrifluoroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
Tetrachloroethene	ND		2.50	1	07/26/2019 18:48	WG1318178
Toluene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,2,3-Trichlorobenzene	ND		2.50	1	07/26/2019 18:48	WG1318178
1,2,4-Trichlorobenzene	ND		12.5	1	07/26/2019 18:48	WG1318178
1,1,1-Trichloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
1,1,2-Trichloroethane	ND		2.50	1	07/26/2019 18:48	WG1318178
Trichloroethene	3.43		1.00	1	07/26/2019 18:48	WG1318178
Trichlorofluoromethane	7.62		2.50	1	07/26/2019 18:48	WG1318178
1,2,3-Trichloropropane	ND		12.5	1	07/26/2019 18:48	WG1318178
1,2,4-Trimethylbenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,2,3-Trimethylbenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
1,3,5-Trimethylbenzene	ND		5.00	1	07/26/2019 18:48	WG1318178
Vinyl chloride	ND		2.50	1	07/26/2019 18:48	WG1318178
Xylenes, Total	20.3		6.50	1	07/26/2019 18:48	WG1318178
(S) Toluene-d8	*109*		*75.0-131*		*07/26/2019 18:48*	WG1318178
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/26/2019 18:48*	WG1318178
(S) 1,2-Dichloroethane-d4	*101*		*70.0-130*		*07/26/2019 18:48*	WG1318178

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	07/29/2019 08:43	WG1318327

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	402		30.0	1	07/28/2019 16:30	WG1318092

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		25.0	1	07/26/2019 19:08	WG1318178
Acrylonitrile	ND		12.5	1	07/26/2019 19:08	WG1318178
Benzene	ND		1.00	1	07/26/2019 19:08	WG1318178
Bromobenzene	ND		12.5	1	07/26/2019 19:08	WG1318178
Bromodichloromethane	ND		2.50	1	07/26/2019 19:08	WG1318178
Bromoform	ND		25.0	1	07/26/2019 19:08	WG1318178
Bromomethane	ND		12.5	1	07/26/2019 19:08	WG1318178
n-Butylbenzene	ND		12.5	1	07/26/2019 19:08	WG1318178
sec-Butylbenzene	ND		12.5	1	07/26/2019 19:08	WG1318178
tert-Butylbenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
Carbon tetrachloride	ND		5.00	1	07/26/2019 19:08	WG1318178
Chlorobenzene	ND		2.50	1	07/26/2019 19:08	WG1318178
Chlorodibromomethane	ND		2.50	1	07/26/2019 19:08	WG1318178
Chloroethane	ND		5.00	1	07/26/2019 19:08	WG1318178
Chloroform	ND		2.50	1	07/26/2019 19:08	WG1318178
Chloromethane	ND		12.5	1	07/26/2019 19:08	WG1318178
2-Chlorotoluene	ND		2.50	1	07/26/2019 19:08	WG1318178
4-Chlorotoluene	ND		5.00	1	07/26/2019 19:08	WG1318178
1,2-Dibromo-3-Chloropropane	ND		25.0	1	07/26/2019 19:08	WG1318178
1,2-Dibromoethane	ND		2.50	1	07/26/2019 19:08	WG1318178
Dibromomethane	ND		5.00	1	07/26/2019 19:08	WG1318178
1,2-Dichlorobenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
1,3-Dichlorobenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
1,4-Dichlorobenzene	ND	J4	5.00	1	07/26/2019 19:08	WG1318178
Dichlorodifluoromethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,1-Dichloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,2-Dichloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,1-Dichloroethene	ND		2.50	1	07/26/2019 19:08	WG1318178
cis-1,2-Dichloroethene	ND		2.50	1	07/26/2019 19:08	WG1318178
trans-1,2-Dichloroethene	ND		5.00	1	07/26/2019 19:08	WG1318178
1,2-Dichloropropane	ND		5.00	1	07/26/2019 19:08	WG1318178
1,1-Dichloropropene	ND		2.50	1	07/26/2019 19:08	WG1318178
1,3-Dichloropropane	ND		5.00	1	07/26/2019 19:08	WG1318178
cis-1,3-Dichloropropene	ND		2.50	1	07/26/2019 19:08	WG1318178
trans-1,3-Dichloropropene	ND		5.00	1	07/26/2019 19:08	WG1318178
2,2-Dichloropropane	ND		2.50	1	07/26/2019 19:08	WG1318178
Di-isopropyl ether	ND		1.00	1	07/26/2019 19:08	WG1318178
Ethylbenzene	ND		2.50	1	07/26/2019 19:08	WG1318178
Hexachloro-1,3-butadiene	ND		25.0	1	07/26/2019 19:08	WG1318178
Isopropylbenzene	ND		2.50	1	07/26/2019 19:08	WG1318178
p-Isopropyltoluene	ND		5.00	1	07/26/2019 19:08	WG1318178
2-Butanone (MEK)	ND		25.0	1	07/26/2019 19:08	WG1318178
Methylene Chloride	ND		25.0	1	07/26/2019 19:08	WG1318178
1-Methylnaphthalene	28.4		25.0	1	07/26/2019 19:08	WG1318178
2-Methylnaphthalene	ND		25.0	1	07/26/2019 19:08	WG1318178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/kg	Qualifier	RDL ug/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	ND		25.0	1	07/26/2019 19:08	WG1318178
Methyl tert-butyl ether	ND		1.00	1	07/26/2019 19:08	WG1318178
Naphthalene	32.1		12.5	1	07/26/2019 19:08	WG1318178
n-Propylbenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
Styrene	ND		12.5	1	07/26/2019 19:08	WG1318178
1,1,1,2-Tetrachloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,1,2,2-Tetrachloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,1,2-Trichlorotrifluoroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
Tetrachloroethene	5.17		2.50	1	07/26/2019 19:08	WG1318178
Toluene	5.29		5.00	1	07/26/2019 19:08	WG1318178
1,2,3-Trichlorobenzene	ND		2.50	1	07/26/2019 19:08	WG1318178
1,2,4-Trichlorobenzene	ND		12.5	1	07/26/2019 19:08	WG1318178
1,1,1-Trichloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
1,1,2-Trichloroethane	ND		2.50	1	07/26/2019 19:08	WG1318178
Trichloroethene	ND		1.00	1	07/26/2019 19:08	WG1318178
Trichlorofluoromethane	26.0		2.50	1	07/26/2019 19:08	WG1318178
1,2,3-Trichloropropane	ND		12.5	1	07/26/2019 19:08	WG1318178
1,2,4-Trimethylbenzene	5.80		5.00	1	07/26/2019 19:08	WG1318178
1,2,3-Trimethylbenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
1,3,5-Trimethylbenzene	ND		5.00	1	07/26/2019 19:08	WG1318178
Vinyl chloride	ND		2.50	1	07/26/2019 19:08	WG1318178
Xylenes, Total	14.2		6.50	1	07/26/2019 19:08	WG1318178
(S) Toluene-d8	*109*		*75.0-131*		*07/26/2019 19:08*	WG1318178
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*07/26/2019 19:08*	WG1318178
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*07/26/2019 19:08*	WG1318178

Method Blank (MB)

(MB) R3435306-1 07/29/19 08:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1121885-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121885-01 07/29/19 08:43 • (DUP) R3435306-3 07/29/19 08:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.5	89.0	1	0.558		10

Laboratory Control Sample (LCS)

(LCS) R3435306-2 07/29/19 08:43

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3435094-1 07/28/19 15:33

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Mercury	U		2.80	30.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435094-2 07/28/19 15:35 • (LCSD) R3435094-3 07/28/19 15:38

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	500	447	462	89.4	92.4	80.0-120			3.30	20

L1121304-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121304-01 07/28/19 15:40 • (MS) R3435094-4 07/28/19 15:42 • (MSD) R3435094-5 07/28/19 15:45

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	500	U	402	451	80.5	90.1	1	75.0-125			11.3	20

Method Blank (MB)

(MB) R3435096-1 07/28/19 18:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/kg		ug/kg	ug/kg
Mercury	U		2.80	30.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435096-2 07/28/19 18:33 • (LCSD) R3435096-3 07/28/19 18:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	%	%	%			%	%
Mercury	500	450	456	89.9	91.2	80.0-120			1.36	20

L1121454-46 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121454-46 07/28/19 18:38 • (MS) R3435096-4 07/28/19 18:40 • (MSD) R3435096-5 07/28/19 18:42

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	ug/kg	%	%		%			%	%
Mercury	500	ND	509	460	100	90.1	1	75.0-125			10.2	20

Method Blank (MB)

(MB) R3434680-3 07/26/19 10:15

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acetone	U		13.7	25.0
Acrylonitrile	U		1.90	12.5
Benzene	U		0.400	1.00
Bromobenzene	U		1.05	12.5
Bromodichloromethane	U		0.788	2.50
Bromoform	U		5.98	25.0
Bromomethane	U		3.70	12.5
n-Butylbenzene	U		3.84	12.5
sec-Butylbenzene	U		2.53	12.5
tert-Butylbenzene	U		1.55	5.00
Carbon tetrachloride	U		1.08	5.00
Chlorobenzene	U		0.573	2.50
Chlorodibromomethane	U		0.450	2.50
Chloroethane	U		1.08	5.00
Chloroform	U		0.415	2.50
Chloromethane	U		1.39	12.5
2-Chlorotoluene	U		0.920	2.50
4-Chlorotoluene	U		1.13	5.00
1,2-Dibromo-3-Chloropropane	U		5.10	25.0
1,2-Dibromoethane	U		0.525	2.50
Dibromomethane	U		1.00	5.00
1,2-Dichlorobenzene	U		1.45	5.00
1,3-Dichlorobenzene	U		1.70	5.00
1,4-Dichlorobenzene	U		1.97	5.00
Dichlorodifluoromethane	U		0.818	2.50
1,1-Dichloroethane	U		0.575	2.50
1,2-Dichloroethane	U		0.475	2.50
1,1-Dichloroethene	U		0.500	2.50
cis-1,2-Dichloroethene	U		0.690	2.50
trans-1,2-Dichloroethene	U		1.43	5.00
1,2-Dichloropropane	U		1.27	5.00
1,1-Dichloropropene	U		0.700	2.50
1,3-Dichloropropane	U		1.75	5.00
cis-1,3-Dichloropropene	U		0.678	2.50
trans-1,3-Dichloropropene	U		1.53	5.00
2,2-Dichloropropane	U		0.793	2.50
Di-isopropyl ether	U		0.350	1.00
Ethylbenzene	U		0.530	2.50
Hexachloro-1,3-butadiene	U		12.7	25.0
Isopropylbenzene	U		0.863	2.50

Method Blank (MB)

(MB) R3434680-3 07/26/19 10:15

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
p-Isopropyltoluene	U		2.33	5.00
2-Butanone (MEK)	27.1		12.5	25.0
Methylene Chloride	U		6.64	25.0
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0
Methyl tert-butyl ether	U		0.295	1.00
1-Methylnaphthalene	U		8.12	25.0
2-Methylnaphthalene	U		7.60	25.0
Naphthalene	U		3.12	12.5
n-Propylbenzene	U		1.18	5.00
Styrene	U		2.73	12.5
1,1,1,2-Tetrachloroethane	U		0.500	2.50
1,1,2,2-Tetrachloroethane	U		0.390	2.50
Tetrachloroethene	U		0.700	2.50
Toluene	U		1.25	5.00
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50
1,2,3-Trichlorobenzene	U		0.625	2.50
1,2,4-Trichlorobenzene	U		4.82	12.5
1,1,1-Trichloroethane	U		0.275	2.50
1,1,2-Trichloroethane	U		0.883	2.50
Trichloroethene	U		0.400	1.00
Trichlorofluoromethane	U		0.500	2.50
1,2,3-Trichloropropane	U		5.10	12.5
1,2,3-Trimethylbenzene	U		1.15	5.00
1,2,4-Trimethylbenzene	U		1.16	5.00
1,3,5-Trimethylbenzene	U		1.08	5.00
Vinyl chloride	U		0.683	2.50
Xylenes, Total	U		4.78	6.50
(S) Toluene-d8	*109*			*75.0-131*
(S) 4-Bromofluorobenzene	*106*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434680-1 07/26/19 08:52 • (LCSD) R3434680-2 07/26/19 09:13

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	625	952	900	152	144	10.0-160			5.67	31
Acrylonitrile	625	693	665	111	106	45.0-153			4.15	22
Benzene	125	93.4	94.6	74.7	75.7	70.0-123			1.31	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434680-1 07/26/19 08:52 • (LCSD) R3434680-2 07/26/19 09:13

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	125	128	130	103	104	73.0-121			1.51	20
Bromodichloromethane	125	116	115	92.8	91.7	73.0-121			1.22	20
Bromoform	125	99.4	99.9	79.5	79.9	64.0-132			0.518	20
Bromomethane	125	111	121	88.8	96.5	56.0-147			8.35	20
n-Butylbenzene	125	117	117	93.4	93.3	68.0-135			0.129	20
sec-Butylbenzene	125	120	118	95.8	94.5	74.0-130			1.37	20
tert-Butylbenzene	125	113	103	90.2	82.6	75.0-127			8.85	20
Carbon tetrachloride	125	118	118	94.3	94.5	66.0-128			0.296	20
Chlorobenzene	125	97.4	98.7	77.9	79.0	76.0-128			1.38	20
Chlorodibromomethane	125	118	117	94.0	93.2	74.0-127			0.851	20
Chloroethane	125	87.4	96.6	69.9	77.3	61.0-134			9.99	20
Chloroform	125	104	109	83.3	87.3	72.0-123			4.66	20
Chloromethane	125	120	121	95.7	96.9	51.0-138			1.27	20
2-Chlorotoluene	125	101	114	81.0	91.3	75.0-124			12.0	20
4-Chlorotoluene	125	110	113	88.1	90.5	75.0-124			2.69	20
1,2-Dibromo-3-Chloropropane	125	110	113	88.2	90.2	59.0-130			2.26	20
1,2-Dibromoethane	125	103	98.0	82.5	78.4	74.0-128			5.14	20
Dibromomethane	125	106	108	84.8	86.1	75.0-122			1.45	20
1,2-Dichlorobenzene	125	106	109	84.5	86.9	76.0-124			2.74	20
1,3-Dichlorobenzene	125	113	116	90.4	93.1	76.0-125			2.93	20
1,4-Dichlorobenzene	125	95.7	96.1	76.5	76.9	77.0-121	J4	J4	0.448	20
Dichlorodifluoromethane	125	130	135	104	108	43.0-156			4.47	20
1,1-Dichloroethane	125	125	127	99.9	102	70.0-127			1.73	20
1,2-Dichloroethane	125	126	127	101	101	65.0-131			0.426	20
1,1-Dichloroethene	125	115	115	92.0	91.7	65.0-131			0.402	20
cis-1,2-Dichloroethene	125	107	114	85.5	90.9	73.0-125			6.14	20
trans-1,2-Dichloroethene	125	107	104	85.3	83.2	71.0-125			2.59	20
1,2-Dichloropropane	125	120	117	95.7	93.4	74.0-125			2.43	20
1,1-Dichloropropene	125	96.9	94.2	77.5	75.4	73.0-125			2.81	20
1,3-Dichloropropane	125	120	118	96.2	94.3	80.0-125			2.00	20
cis-1,3-Dichloropropene	125	102	105	81.8	83.6	76.0-127			2.15	20
trans-1,3-Dichloropropene	125	114	114	91.1	91.5	73.0-127			0.444	20
2,2-Dichloropropane	125	126	123	101	98.4	59.0-135			2.21	20
Di-isopropyl ether	125	113	112	90.2	89.3	60.0-136			1.02	20
Ethylbenzene	125	109	104	87.1	83.4	74.0-126			4.40	20
Hexachloro-1,3-butadiene	125	102	113	81.3	90.4	57.0-150			10.6	20
Isopropylbenzene	125	98.9	94.4	79.1	75.5	72.0-127			4.70	20
p-Isopropyltoluene	125	114	113	91.6	90.6	72.0-133			1.07	20
2-Butanone (MEK)	625	729	699	117	112	30.0-160			4.17	24
Methylene Chloride	125	115	111	92.1	89.0	68.0-123			3.37	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434680-1 07/26/19 08:52 • (LCSD) R3434680-2 07/26/19 09:13

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	625	627	604	100	96.6	56.0-143			3.76	20
Methyl tert-butyl ether	125	116	112	93.1	89.9	66.0-132			3.49	20
1-Methylnaphthalene	125	126	160	100	128	47.0-145			24.2	25
2-Methylnaphthalene	125	147	183	118	146	32.0-149			21.6	26
Naphthalene	125	105	119	84.4	95.5	59.0-130			12.3	20
n-Propylbenzene	125	119	118	95.4	94.6	74.0-126			0.883	20
Styrene	125	95.9	96.3	76.7	77.0	72.0-127			0.430	20
1,1,1,2-Tetrachloroethane	125	119	115	94.8	91.8	74.0-129			3.27	20
1,1,2,2-Tetrachloroethane	125	104	110	83.2	88.0	68.0-128			5.59	20
Tetrachloroethene	125	112	113	89.8	90.5	70.0-136			0.787	20
Toluene	125	108	106	86.4	84.5	75.0-121			2.25	20
1,1,2-Trichlorotrifluoroethane	125	109	117	87.0	93.4	61.0-139			7.08	20
1,2,3-Trichlorobenzene	125	115	129	91.6	104	59.0-139			12.2	20
1,2,4-Trichlorobenzene	125	103	109	82.3	87.2	62.0-137			5.76	20
1,1,1-Trichloroethane	125	111	117	88.6	93.5	69.0-126			5.34	20
1,1,2-Trichloroethane	125	108	107	86.0	85.5	78.0-123			0.605	20
Trichloroethene	125	122	124	97.7	99.2	76.0-126			1.60	20
Trichlorofluoromethane	125	115	119	92.2	95.2	61.0-142			3.21	20
1,2,3-Trichloropropane	125	123	121	98.6	96.6	67.0-129			1.97	20
1,2,3-Trimethylbenzene	125	106	108	84.9	86.4	74.0-124			1.68	20
1,2,4-Trimethylbenzene	125	103	105	82.0	83.8	70.0-126			2.12	20
1,3,5-Trimethylbenzene	125	119	116	94.9	92.8	73.0-127			2.18	20
Vinyl chloride	125	103	104	82.3	83.0	63.0-134			0.892	20
Xylenes, Total	375	313	285	83.5	76.0	72.0-127		J4	9.36	20
(S) Toluene-d8				*106*	*104*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*102*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*109*	*108*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J4	The associated batch QC was outside the established quality control range for accuracy.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

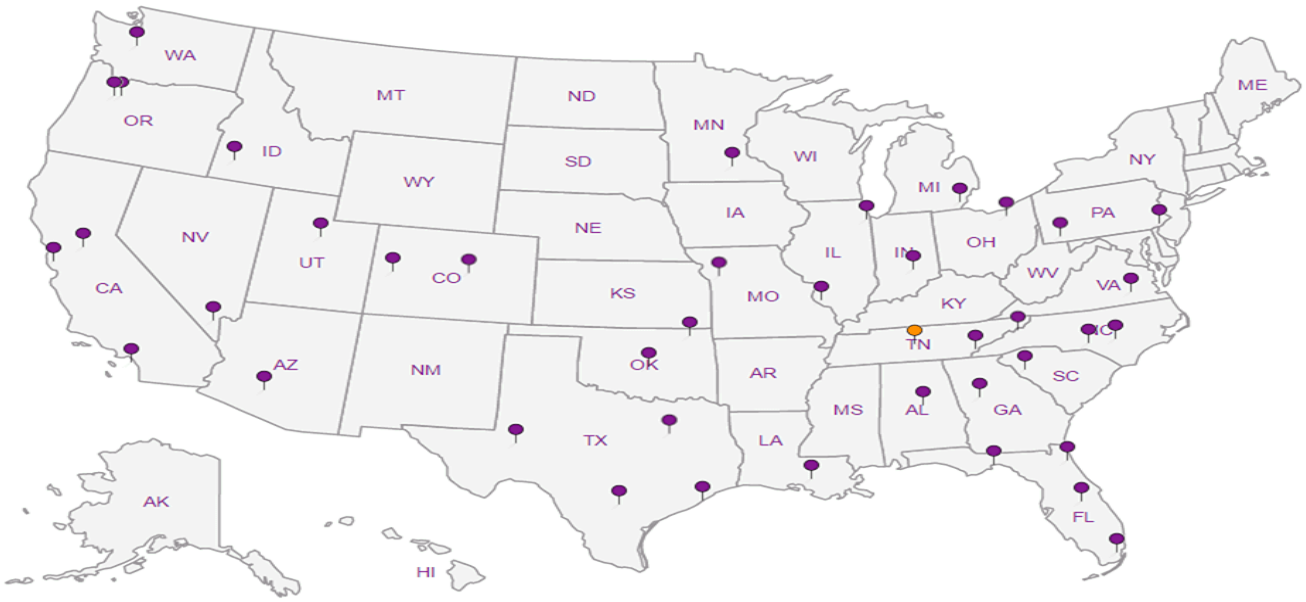
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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CHAIN OF CUSTODY

(Please Print Clearly)

Company Name:	ATC GROUP SVCS
Branch/Location:	NOVI
Project Contact:	DeBusschove
Phone:	248 863 2563
Project Number:	NPJBD19002
Project Name:	Donaldson/Ferndale
Project State:	MI
Sampled By (Print):	I. A.
Sampled By (Sign):	
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

FILTERED? (YES/NO) — Y/N
PRESERVATION (CODE)* — Pick Letter
Analyses Requested: VOCs (8260), Mercury

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	F-3 4-5	7/12	11:50	S	HOLD		
	E3 4-5		11:54	S	HOLD	D235	
	D-3 4-5		11:55	S	HOLD		
	E-2 4-5		11:57	S	HOLD		01
	F-1 4-5		12:00	S	HOLD		02
	D-1 4-5		12:02	S	HOLD	7-103	03
	D-2 4-5		12:05	S	HOLD		04
	D-4 4-5		12:10	S	HOLD		
	C-1 4-5		12:15	S	HOLD		05
	C-2 4-5		12:20	S	HOLD		06
	B-1 4-5		12:42	S	HOLD		07
	A-1 4-5		12:47	S	HOLD		08
	A-2 4-5		12:5?	S	HOLD		09

KO 7/24

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7/12 17:00	ATC Storage	7/12 17:00
[signature]	10:41	Tommy Deque	7/16/19 1041
		[signature]	7/17/19 8:45

PACE Project No.

Receipt Temp = 2.0 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

RAD SCREEN: <0.5 mR/hr

2.4-0.1=2.3 ?

ORIGINAL

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

L1121885
~~L1120046~~ KP

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	ATC Group Svcs
Branch/Location:	Novi
Project Contact:	DeBlasschare
Phone:	248 863 2563
Project Number:	NPSBD 19002
Project Name:	Dearborn - Ferndale
Project State:	MI
Sampled By (Print):	J.A
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOCs	Mercury	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	A-3 4-5	7/12	12:56	S					Hold		
	A-4 4-5	7/12	13:00	S					Hold		
	B-4 4-5		13:55	S					Hold		
	B-3 4-5		14:00	S					Hold		
	B-2 4-5		14:10	S					Hold	-01	
	C-3 4-5		14:13	S					~~Hold~~	~~-01~~ KP	
	C-4 4-5		14:16	S					Hold	-02	
	E-4 4-5		14:40	S					Hold		
	E-4 4-5		14:45	S					Hold		
	DUP-1								Hold		
	DUP-2								Hold		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	7/12 17:00	ATC Storage	7/12 17:00
	10:41		7/13/19 1044
			7/12/19 845

RAD SCREEN: <0.5 mR/hr

PACE Project No.

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

2401:2.3 Inn2

C019a(27Jun2006)

Version 6.0 06/14/06

ORIGINAL

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: ATCNMI	SDG#:	~~L1120414~~	Re L1121855
Cooler Received/Opened On: 7/17/19	Temp	2.0	
Received By: Paul Minnich			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?			
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

LI121885 LH20044

Katie Ingram

From: Mark Beasley
Sent: Thursday, July 18, 2019 8:11 AM
To: Troy Dunlap; Project Service
Subject: RE: ATCNMI HOLD COC

Log hold samples per email.

Thanks
Mark

From: Troy Dunlap
Sent: Thursday, July 18, 2019 7:57 AM
To: Mark Beasley; Project Service
Subject: ATCNMI HOLD COC

Troy Dunlap
Team Lead for Project Service

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9733
tdunlap@pacenational.com | pacenational.com

L1121885

M121

Katie Ingram

From: Mark Beasley
Sent: Wednesday, July 24, 2019 2:50 PM
To: Project Service
Subject: L1120049 *ATCNMI* hold samples

Log samples B-3 4-5 and C-3 4-5 previously on hold for V8260MI, HG, TERRACORE, & TS. Log as RX due 7/31.

Thanks

Mark Beasley
National Account Manager
Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9672 | Cell 615.330.1602
mbeasley@pacenational.com | pacenational.com

ESC Lab Sciences is now Pace Analytical National Center for Testing & Innovation! Please make note of my new email address and website.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 01, 2019

ATC Group Services - Novi, MI

Sample Delivery Group:	L1123577
Samples Received:	07/17/2019
Project Number:	NPJBD19002
Description:	Donaldson/Ferndale Soil Gas

Report To: Gerard DeBusschere
46555 Humboldt Drive Suite 100
Novi, MI 48377

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

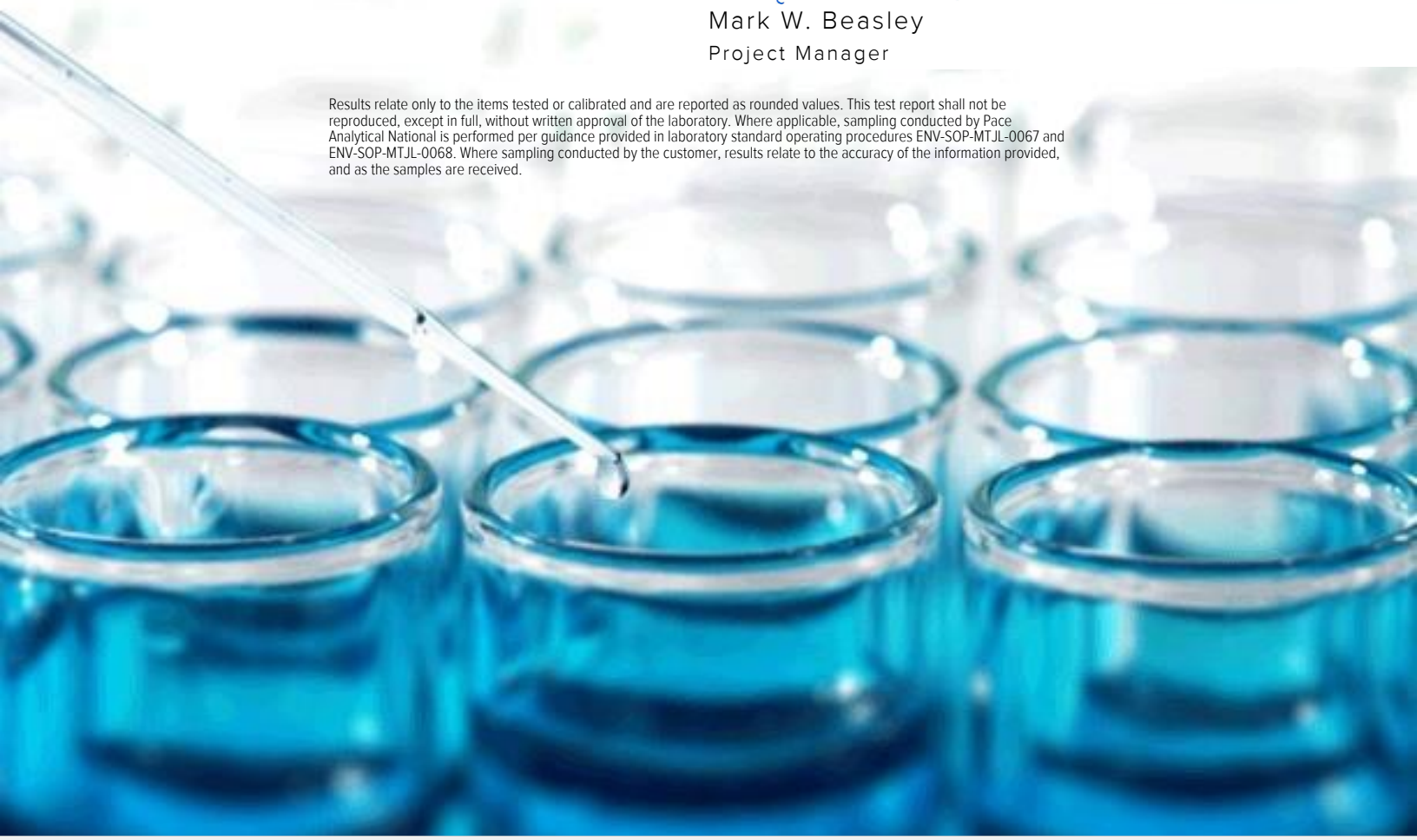


TABLE OF CONTENTS

C-3 4-5 L1123577-01 Waste

Collected by	Collected date/time	Received date/time
IA	07/12/19 14:13	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1320378	1	07/31/19 08:53	07/31/19 08:53	RT	Mt. Juliet, TN
Mercury by Method 7470A	WG1321105	1	08/01/19 08:44	08/01/19 11:38	TRB	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley
Project Manager

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		7/31/2019 8:53:00 AM	WG1320378
Fluid	1		7/31/2019 8:53:00 AM	WG1320378
Initial pH	8.91		7/31/2019 8:53:00 AM	WG1320378
Final pH	6.13		7/31/2019 8:53:00 AM	WG1320378

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Limit	Dilution	Analysis date / time	Batch
	mg/l		mg/l	mg/l			
Mercury	ND		0.0100	0.20	1	08/01/2019 11:38	WG1321105

Method Blank (MB)

(MB) R3436411-1 08/01/19 11:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.00330	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3436411-2 08/01/19 11:34 • (LCSD) R3436411-3 08/01/19 11:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	0.0319	0.0321	106	107	80.0-120			0.781	20

L1123577-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1123577-01 08/01/19 11:38 • (MS) R3436411-4 08/01/19 11:43 • (MSD) R3436411-5 08/01/19 11:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.0300	ND	0.0293	0.0302	97.5	101	1	75.0-125			3.35	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

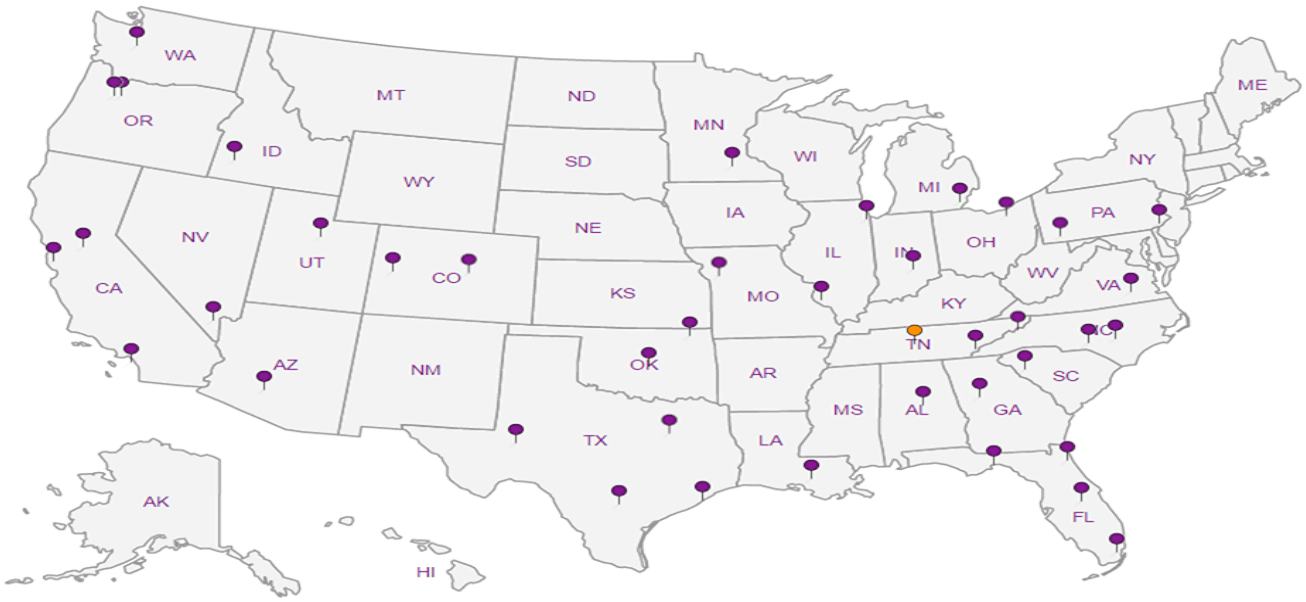
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



L1123577

(Please Print Clearly)

Company Name:	ATC GROUP SVCS
Branch/Location:	NOVI
Project Contact:	DeBusschere
Phone:	248 863 2583
Project Number:	NPJBD 19002
Project Name:	Donaldson-Ferndale
Project State:	MI
Sampled By (Print):	I.A
Sampled By (Sign):	
PO #:	
Regulatory Program:	

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www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 2 of 2

~~L1121885~~ ~~L1120046~~ KP 7/30/19

CHAIN OF COUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED? (YES/NO) — Y/N
PRESERVATION (CODE)* — Pick Letter

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

Analyses Requested: VOCs, Mercury

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	VOCs	Mercury	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	A-3 4-5	7/12	12:58	S			Hold		
	A-4 4-5	7/12	13:00	S			Hold		
	B-4 4-5		13:55	S			Hold		
	B-3 4-5		14:00	S			HOLD		~~-01~~
	B-2 4-5		14:10	S			HOLD		~~-10~~ KP
	C-3 4-5		14:13	S			HOLD		~~-02~~ -01
	C-4 4-5		14:18	S			HOLD		
	E-4 4-5		14:40	S			HOLD		
	E-4 4-5		14:44	S			HOLD		
	Dup-1						Hold		
	Dup-2						Hold		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	7/12 17:00	ATC Storage	7/12 17:00
[signature]	10:41	Tammy Oume	7/13/19 1041
		[signature]	7/17/19 0845

RAD SCREEN: <0.5 mR/hr

PACE Project No.

Receipt Temp = 2.0 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

240/:2.3 IR02

C019a(27Jun2006)

ORIGINAL

Andy Vann

From: Mark Beasley
Sent: Tuesday, July 30, 2019 12:44 PM
To: Project Service; Sample Storage; TCLP
Subject: L1121885 *ATCNMI* rush relog
Attachments: 20190730 Updated chain.pdf

Relog L1121885-02 for TCLP HG. Log as R2 due 8/1.

Thanks
Mark

From: Gerard DeBusschere [mailto:Gerard.DeBusschere@atcgs.com]
Sent: Tuesday, July 30, 2019 9:23 AM
To: Mark Beasley
Subject: Ferndale

Mark:
We would like TCLP-Mercury performed on the C-3 sample
See attached chain

Gerard DeBusschere | Senior Project Manager | **ATC Group Services LLC**
Direct: 248.863.2563 | Cell: 810.287.1679 | gerard.debusschere@atcgs.com

46555 Humboldt Drive, Suite 100 | Novi, MI 48377
Office: 248.669.5140 | Fax: 248.669.5147 | gerard.debusschere@atcassociates.com | www.atcgroupservices.com

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 24, 2019

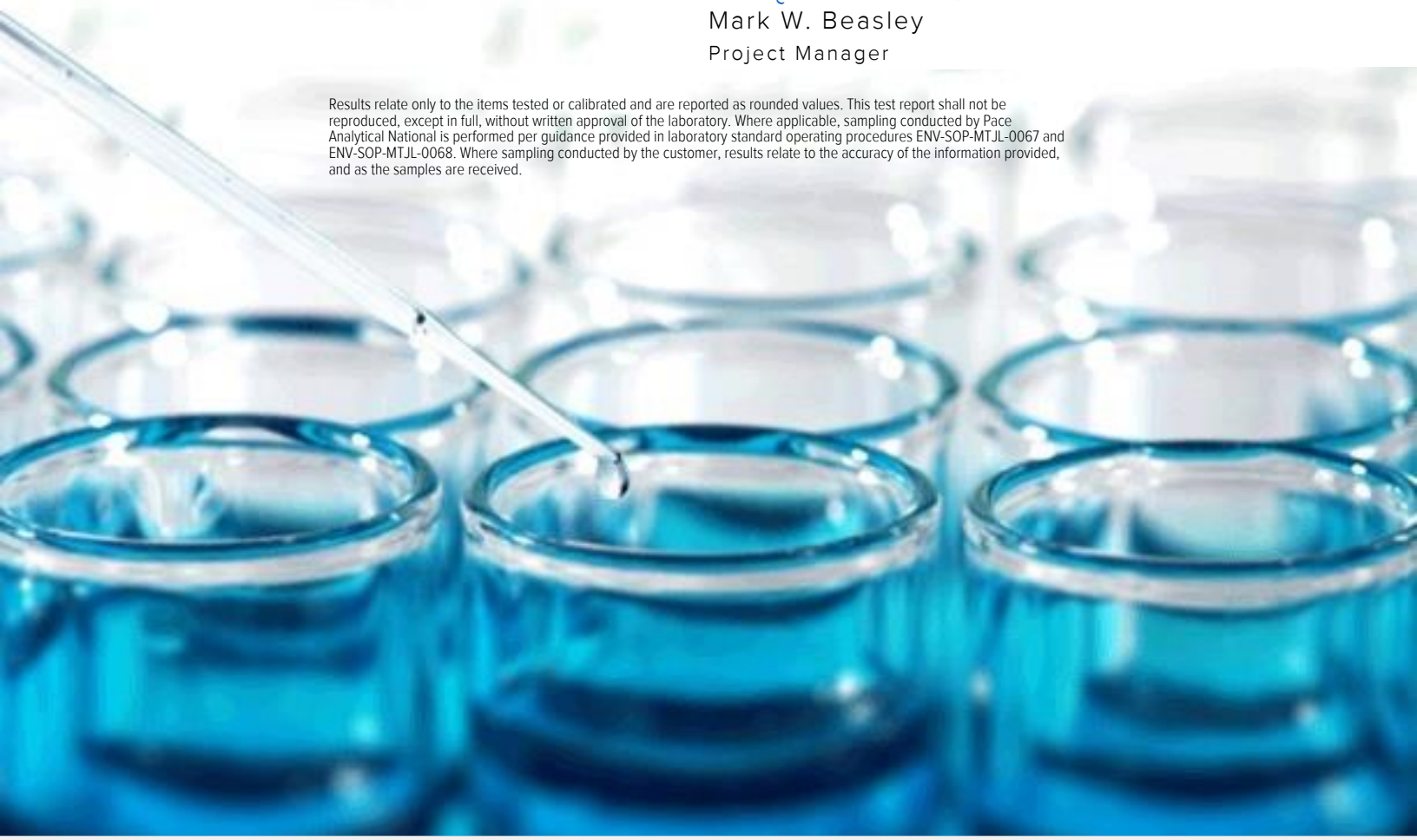
ATC Group Services - Novi, MI

Sample Delivery Group:	L1119489
Samples Received:	07/17/2019
Project Number:	NPJBD19002
Description:	Donaldson/Ferndale Soil Gas

Report To: Gerard DeBusschere
46555 Humboldt Drive Suite 100
Novi, MI 48377

Entire Report Reviewed By:

Mark W. Beasley
Project Manager



A1 L1119489-01 Air

Collected by	Collected date/time	Received date/time
	07/15/19 11:16	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 20:02	07/19/19 20:02	AMC	Mt. Juliet, TN

A2 L1119489-02 Air

Collected by	Collected date/time	Received date/time
	07/15/19 11:20	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 20:40	07/19/19 20:40	AMC	Mt. Juliet, TN

A3 L1119489-03 Air

Collected by	Collected date/time	Received date/time
	07/15/19 11:17	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 21:18	07/19/19 21:18	AMC	Mt. Juliet, TN

A4 L1119489-04 Air

Collected by	Collected date/time	Received date/time
	07/15/19 11:17	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 21:56	07/19/19 21:56	AMC	Mt. Juliet, TN

B1 L1119489-05 Air

Collected by	Collected date/time	Received date/time
	07/15/19 12:08	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 22:35	07/19/19 22:35	AMC	Mt. Juliet, TN

B2 L1119489-06 Air

Collected by	Collected date/time	Received date/time
	07/15/19 12:09	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314191	2	07/19/19 23:13	07/19/19 23:13	AMC	Mt. Juliet, TN

B3 L1119489-07 Air

Collected by	Collected date/time	Received date/time
	07/15/19 12:09	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314725	2	07/21/19 03:14	07/21/19 03:14	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1315799	25	07/23/19 16:02	07/23/19 16:02	AMC	Mt. Juliet, TN

B4 L1119489-08 Air

Collected by	Collected date/time	Received date/time
	07/15/19 12:11	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 12:08	07/19/19 12:08	AMC	Mt. Juliet, TN

C1 L1119489-09 Air

Collected by	Collected date/time	Received date/time
	07/15/19 13:28	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 12:51	07/19/19 12:51	AMC	Mt. Juliet, TN

C2 L1119489-10 Air

Collected by	Collected date/time	Received date/time
	07/15/19 13:28	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 13:34	07/19/19 13:34	AMC	Mt. Juliet, TN

C3 L1119489-11 Air

Collected by	Collected date/time	Received date/time
	07/15/19 13:30	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 14:18	07/19/19 14:18	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	25	07/20/19 22:02	07/20/19 22:02	MBF	Mt. Juliet, TN

C4 L1119489-12 Air

Collected by	Collected date/time	Received date/time
	07/15/19 13:30	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 15:00	07/19/19 15:00	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	200	07/20/19 22:36	07/20/19 22:36	MBF	Mt. Juliet, TN

D1 L1119489-13 Air

Collected by	Collected date/time	Received date/time
	07/15/19 14:47	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 15:43	07/19/19 15:43	AMC	Mt. Juliet, TN

D2 L1119489-14 Air

Collected by	Collected date/time	Received date/time
	07/15/19 14:50	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 16:26	07/19/19 16:26	AMC	Mt. Juliet, TN

D3 L1119489-15 Air

Collected by	Collected date/time	Received date/time
	07/15/19 14:51	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 17:09	07/19/19 17:09	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	200	07/20/19 23:10	07/20/19 23:10	MBF	Mt. Juliet, TN

D4 L1119489-16 Air

Collected by	Collected date/time	Received date/time
	07/15/19 14:52	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 17:52	07/19/19 17:52	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	25	07/20/19 23:45	07/20/19 23:45	MBF	Mt. Juliet, TN

E1 L1119489-17 Air

Collected by	Collected date/time	Received date/time
	07/15/19 15:49	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 18:36	07/19/19 18:36	AMC	Mt. Juliet, TN

E2 L1119489-18 Air

Collected by	Collected date/time	Received date/time
	07/15/19 15:52	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 19:19	07/19/19 19:19	AMC	Mt. Juliet, TN

E3 L1119489-19 Air

Collected by	Collected date/time	Received date/time
	07/15/19 17:05	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 20:02	07/19/19 20:02	AMC	Mt. Juliet, TN

E4 L1119489-20 Air

Collected by	Collected date/time	Received date/time
	07/15/19 17:15	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 20:46	07/19/19 20:46	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	80	07/21/19 00:20	07/21/19 00:20	MBF	Mt. Juliet, TN

F3 L1119489-21 Air

Collected by	Collected date/time	Received date/time
	07/15/19 16:34	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 21:29	07/19/19 21:29	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	25	07/21/19 00:56	07/21/19 00:56	MBF	Mt. Juliet, TN

F4 L1119489-22 Air

Collected by	Collected date/time	Received date/time
	07/15/19 16:30	07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1314190	2	07/19/19 22:12	07/19/19 22:12	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1314791	200	07/21/19 01:30	07/21/19 01:30	MBF	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	8.61	20.5		2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	2.57	8.20		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.825	2.57		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	1.49	6.89		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	21.5	40.5		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	1.27	5.50		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.441	2.18		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	0.855	3.01		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	3.20	11.1		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	3.02	7.42		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	0.870	3.70		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.57	7.58		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	6.01	22.6		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.59	7.82		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.411	2.01		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	5.30	23.0		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	1.85	8.03		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	149	615		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	22.4	60.6		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	ND	ND		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	0.646	2.32		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.4*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	2.70	6.41	B	2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	0.834	2.66		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	1.50	6.94		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	12.2	23.0		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	1.57	6.82		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.546	2.68		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	11.4	63.9		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.457	2.26		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.691	4.69		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.754	2.22		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	5.02	18.9		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.78	13.6		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.710	3.49		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	7.47	32.4		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	3.35	14.5		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	132	546		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.37	3.70		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.621	3.05		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.5*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	16.8	39.9		2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	0.812	2.59		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.57	4.90		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	0.925	4.28		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	17.5	32.9		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	0.855	3.71		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	6.66	37.5		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.444	2.20		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	2.73	9.61		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	5.45	18.9		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	3.68	9.05		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	0.716	3.04		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	4.13	28.0		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.815	2.40		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	4.72	17.8		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.35	6.62		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	3.87	16.8		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	1.39	6.02		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	165	680		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	71.2	192		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	ND	ND		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	0.428	1.54		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.7*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	29.0	68.8		2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	2.40	7.68		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.49	4.64		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	1.79	8.28		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	0.418	0.864		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	0.434	1.49		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	31.9	60.2		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	1.12	4.86		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	15.7	88.2		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.447	2.21		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	0.422	1.73		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	3.92	13.8		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	5.86	20.4		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	6.48	15.9		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	0.927	1.60		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	0.992	4.22		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.844	5.73		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.63	7.75		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	7.55	28.4		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.00	4.91		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	4.45	19.3		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	1.52	6.60		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	147	609		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	97.3	263		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	ND	ND		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	0.449	1.59		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	0.848	3.05		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	0.456	1.83		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.5*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	5.63	13.4		2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	2.24	7.14		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	5.14	16.0		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	1.97	9.08		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	16.3	30.7		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	1.61	6.99		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.444	2.18		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.442	2.19		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	0.443	1.81		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	0.532	1.87		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	1.01	1.74		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	1.35	5.75		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.03	6.00		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	22.3	84.2		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	0.471	2.52		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.02	9.91		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.537	2.63		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	6.93	30.0		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	2.55	11.0		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	251	1040		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.16	3.14		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.412	2.02		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	0.463	1.86		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.4*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	ND	ND		2	WG1314191
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314191
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1314191
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314191
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314191
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314191
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314191
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314191
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.45	4.52		2	WG1314191
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314191
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314191
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314191
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314191
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314191
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314191
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314191
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314191
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314191
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314191
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314191
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314191
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314191
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314191
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314191
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314191
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314191
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314191
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314191
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314191
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314191
Ethanol	64-17-5	46.10	1.26	2.38	3.41	6.42		2	WG1314191
Ethylbenzene	100-41-4	106	0.400	1.73	0.757	3.28		2	WG1314191
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1314191
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	33.3	187		2	WG1314191
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.464	2.30		2	WG1314191
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314191
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314191
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314191
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314191
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314191
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314191
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314191
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314191
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314191
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314191
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314191
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314191
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314191
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314191
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314191
Styrene	100-42-5	104	0.400	1.70	0.487	2.07		2	WG1314191
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314191
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.839	5.69		2	WG1314191
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314191
Toluene	108-88-3	92.10	0.400	1.51	4.89	18.4		2	WG1314191
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314191
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314191
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314191
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.59	7.78		2	WG1314191
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1314191
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314191
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314191
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314191
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314191
m&p-Xylene	1330-20-7	106	0.800	3.47	3.62	15.7		2	WG1314191
o-Xylene	95-47-6	106	0.400	1.73	1.40	6.08		2	WG1314191
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	130	537		2	WG1314191
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.18	3.20		2	WG1314191
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	ND	ND		2	WG1314191
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314191
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314191
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314191
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314191
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314191
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.6*				WG1314191

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	13.5	32.1		2	WG1314725
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314725
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1314725
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314725
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314725
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314725
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314725
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314725
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1314725
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314725
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314725
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314725
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314725
Chloromethane	74-87-3	50.50	0.400	0.826	0.445	0.919		2	WG1314725
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314725
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314725
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314725
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314725
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314725
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314725
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314725
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314725
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314725
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314725
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314725
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314725
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314725
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314725
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314725
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314725
Ethanol	64-17-5	46.10	1.26	2.38	9.84	18.5		2	WG1314725
Ethylbenzene	100-41-4	106	0.400	1.73	0.522	2.26		2	WG1314725
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.549	2.70		2	WG1314725
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	6.61	37.1		2	WG1314725
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.569	2.81		2	WG1314725
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314725
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314725
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314725
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314725
n-Hexane	110-54-3	86.20	0.400	1.41	0.472	1.66		2	WG1314725
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314725
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.95	6.77		2	WG1314725
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314725
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314725
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314725
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314725
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314725
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314725
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314725
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314725
Styrene	100-42-5	104	0.400	1.70	0.469	1.99		2	WG1314725
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314725
Tetrachloroethylene	127-18-4	166	5.00	33.9	217	1470		25	WG1315799
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314725
Toluene	108-88-3	92.10	0.400	1.51	2.73	10.3		2	WG1314725
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314725

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314725
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314725
Trichloroethylene	79-01-6	131	0.400	2.14	0.743	3.98		2	WG1314725
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.962	4.72		2	WG1314725
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1314725
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314725
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314725
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314725
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314725
m&p-Xylene	1330-20-7	106	0.800	3.47	2.22	9.64		2	WG1314725
o-Xylene	95-47-6	106	0.400	1.73	0.881	3.82		2	WG1314725
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	393	1620		2	WG1314725
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	2.16	5.83		2	WG1314725
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	ND	ND		2	WG1314725
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	0.431	1.52		2	WG1314725
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314725
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314725
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314725
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314725
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1314725
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.3*				WG1315799

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	ND	ND		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.32	4.10		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	1.04	6.53		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	0.489	1.29		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	1.15	5.58		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	0.629	2.55		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	19.3	36.3		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.13	4.89		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.606	2.97		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	22.4	126		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.508	2.51		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	0.443	1.88		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	61.9	420		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	3.03	11.4		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.971	5.28		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	26.2	140		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.32	11.4		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.616	3.03		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	4.85	21.0		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	1.92	8.32		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	279	1150	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	ND	ND		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.572	2.81		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	5.61	13.3		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	0.943	3.01		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	3.25	10.1		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	1.34	6.20		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	9.93	18.7		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.90	8.25		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.638	3.13		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	1.84	10.3		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.498	2.46		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	0.475	1.94		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.515	1.82		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.487	1.69	B	2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.430	1.76		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.56	6.63		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.785	5.33		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.818	2.41		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	5.31	20.0		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.43	11.9		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.652	3.20		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	8.46	36.7		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	3.20	13.9		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	266	1100	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.62	4.38		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.561	2.75		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.473	1.70		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	0.546	2.19		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.1*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	3.84	9.12		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	2.01	6.41		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.830	2.58		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	2.00	9.23		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	18.0	33.9		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.57	6.79		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.636	3.12		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	13.5	75.7		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.482	2.38		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.415	1.70		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.19	5.05		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	7.35	49.9		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.08	6.13		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	5.16	19.4		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	0.415	2.22		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.36	11.6		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.623	3.06		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	6.68	29.0		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.38	10.3		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	191	787	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.43	3.87		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.548	2.69		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.411	1.48		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.9*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	19.7	46.7		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.78	5.55		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	0.504	1.04		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	1.31	4.73	B	2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	7.50	14.1		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	0.811	3.51		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.482	2.36		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	5.00	28.1	167	941		25	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.998	4.93		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.483	1.68	B	2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	7.04	17.3		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.09	14.2		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.800	2.36		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	2.45	9.22		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.597	3.25		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	35.9	192		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.35	11.5		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.602	2.95		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	3.70	16.0		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	1.48	6.40		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	170	704	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.46	3.93		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.646	3.18		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	7.89	18.7		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.533	1.66		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	1.89	9.20		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	ND	ND		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.20	5.20		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.727	3.57		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	40.0	225	919	5160		200	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.815	4.03		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.532	1.87		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.55	5.38		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	0.450	1.91		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.82	19.2		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	3.79	14.3		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	3.10	16.9		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	2.90	15.5		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.89	14.2		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.730	3.58		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	5.66	24.5		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.18	9.47		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	281	1160	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	6.15	16.6		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.643	3.16		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.8*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	42.9	102		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.66	5.30		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	8.44	26.3		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	1.09	5.02		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	7.12	18.8		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	0.465	0.960		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	1.93	6.65		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	86.8	164		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	3.60	15.6		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.806	3.96		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	5.02	28.2		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.495	2.45		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	3.28	13.4		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	3.97	14.0		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	2.81	9.76		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	22.6	66.7		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	1.70	6.96		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	19.9	48.9		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	4.03	17.1		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.83	19.2		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.38	4.07		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	39.5	149		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.32	16.3		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.893	4.38		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.45	6.76		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	11.5	49.7		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	4.43	19.2		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	316	1310	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	14.5	39.1		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.750	3.68		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	0.632	2.24		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	8.13	29.3		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	5.31	21.3		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.6*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	22.4	53.3		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	2.31	7.37		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	2.70	12.5		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	0.609	1.26		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	19.5	36.7		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.76	7.62		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.637	3.13		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	41.0	231		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.514	2.54		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	0.584	4.08		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.38	12.9		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	1.09	4.48		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	3.58	8.80		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.36	5.79		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	4.10	27.8		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	3.76	11.1		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	6.57	24.8		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.69	13.2		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.732	3.59		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	7.69	33.3		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.73	11.8		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	215	889	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.06	2.85		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.607	2.98		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.796	2.86		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	5.21	12.4		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.77	5.65		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.955	2.97		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	2.60	12.0		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	1.45	3.83		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	0.678	3.30		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	0.455	2.74	B	2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	24.5	46.1		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.25	5.42		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.452	2.22		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	40.0	225	783	4400		200	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	3.81	18.9		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	0.666	5.10		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.549	1.94		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	2.03	7.05		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	0.902	3.84		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	1.09	7.41		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.61	4.75		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	4.21	15.9		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.680	3.70		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	1.77	9.50		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.42	11.9		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.624	3.06		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	5.37	23.3		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	1.73	7.50		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	138	568	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	13.9	37.5		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.686	3.37		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	0.605	2.14		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.470	1.69		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.3*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.0*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	61.5	146		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.43	4.56		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	4.50	14.0		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	1.08	5.01		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	3.26	8.59		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	0.726	3.53		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	0.598	1.24		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	1.21	4.16		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	0.471	1.70	B	2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	47.1	88.8		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	2.75	11.9		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.706	3.46		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	5.00	28.1	132	741		25	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.846	4.18		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	1.80	7.38		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	2.15	7.58		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	0.442	2.17		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.551	1.91	B	2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	7.93	23.4		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.571	2.34		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	10.7	26.3		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.92	8.17		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	1.02	6.92		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	6.69	19.7		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	18.4	69.2		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.575	3.13		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	2.61	14.0		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.07	15.1		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.828	4.06		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.973	4.55		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	10.6	45.9		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	4.12	17.9		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	291	1200	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	3.20	8.65		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.683	3.36		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.588	2.11		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	2.85	11.4		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.8*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*107*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	6.59	15.7		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.50	4.81		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.83	5.71		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	2.27	10.5		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	0.721	4.34	B	2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	0.482	2.90	B	2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	10.7	20.2		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.08	4.67		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.614	3.02		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	0.831	4.67		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.484	2.39		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	0.633	2.59		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.697	2.46		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.464	1.90		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	4.92	25.8	B	2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.05	4.45		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	55.0	373		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.74	5.13		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	2.93	11.0		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.68	18.1		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	1.32	6.50		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	4.96	21.5		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	1.71	7.42		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	264	1090	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.658	1.78		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	1.25	6.15		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.1*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	4.09	9.73		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.51	4.82		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.443	1.38		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	1.88	8.69		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	15.4	29.1		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.43	6.18		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.558	2.74		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	21.1	118		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	1.32	6.53		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.32	5.61		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	10.6	72.3		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.46	4.32		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	4.27	16.1		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.42	11.9		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.642	3.15		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	6.49	28.1		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.47	10.7		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	239	989	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.11	2.99		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.549	2.70		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.1*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	5.94	14.1		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	1.74	5.55		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	2.22	10.3		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	1.26	2.38	15.1	28.5		2	WG1314190
Ethylbenzene	100-41-4	106	0.400	1.73	1.57	6.79		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.709	3.48		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	29.7	167		2	WG1314190
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	2.47	12.2		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	3.07	7.54		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.07	4.57		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	1.96	13.3		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.69	5.00		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	4.83	18.2		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	1.49	8.13		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.37	16.6		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.836	4.10		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	6.88	29.8		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.48	10.7		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	184	760	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	ND	ND		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.796	3.91		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	1.88	6.64		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	0.553	1.99		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.3*				WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	12.9	30.7		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	3.72	11.9		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	33.6	104		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	0.659	1.74		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	1.70	8.28		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	1.76	6.06		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	0.458	1.84		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	0.400	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	50.4	95.0	3250	6120		80	WG1314791
Ethylbenzene	100-41-4	106	0.400	1.73	1.94	8.43		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.824	4.05		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	164	919		80	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	21.6	107		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	0.455	3.49		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	2.39	9.78		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	4.04	14.3		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.15	3.99	B	2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.713	2.92		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	56.3	97.0		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	1.54	6.54		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	4.39	29.8		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	10.6	40.1		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.946	5.15		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	29.3	157		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	4.65	22.8		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	1.90	9.35		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	7.48	35.0		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	8.35	36.2		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	3.63	15.7		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	540	2230		2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.21	3.28		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	1.37	6.72		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	19.9	70.3		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	3.73	15.0		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.0*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	9.46	22.5		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	0.699	2.23		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	1.01	4.69		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	15.8	29.8	21.1	39.7		25	WG1314791
Ethylbenzene	100-41-4	106	0.400	1.73	1.13	4.90		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.580	2.85		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	5.00	28.1	204	1150		25	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	5.00	24.7	227	1130		25	WG1314791
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	0.450	1.84		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.686	2.42		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.11	3.85	B	2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.486	1.99		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	0.957	4.07		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.75	18.7		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.573	1.69		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	3.57	13.5		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	0.626	3.40		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.51	12.3		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.649	3.19		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	5.22	22.6		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.03	8.80		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	219	905	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	4.64	12.5		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.601	2.95		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	ND	ND		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.2*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*115*				WG1314791

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	5.16	12.3		2	WG1314190
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1314190
Benzene	71-43-2	78.10	0.400	1.28	0.570	1.82		2	WG1314190
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1314190
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1314190
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1314190
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1314190
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1314190
Carbon disulfide	75-15-0	76.10	0.400	1.24	8.08	25.1		2	WG1314190
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1314190
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1314190
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1314190
Chloroform	67-66-3	119	0.400	1.95	0.932	4.54		2	WG1314190
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1314190
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1314190
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1314190
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1314190
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1314190
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1314190
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1314190
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1314190
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1314190
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1314190
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1314190
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1314190
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1314190
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1314190
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1314190
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1314190
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1314190
Ethanol	64-17-5	46.10	126	238	4370	8240		200	WG1314791
Ethylbenzene	100-41-4	106	0.400	1.73	1.21	5.24		2	WG1314190
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.586	2.88		2	WG1314190
Trichlorofluoromethane	75-69-4	137.40	40.0	225	737	4140		200	WG1314791
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	21.7	107		2	WG1314190
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1314190
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1314190
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1314190
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1314190
n-Hexane	110-54-3	86.20	0.400	1.41	0.463	1.63		2	WG1314190
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1314190
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1314190
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1314190
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1314190
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1314190
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.454	1.86		2	WG1314190
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1314190
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1314190
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1314190
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1314190
Styrene	100-42-5	104	0.400	1.70	0.483	2.05		2	WG1314190
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1314190
Tetrachloroethylene	127-18-4	166	0.400	2.72	12.0	81.8		2	WG1314190
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1314190
Toluene	108-88-3	92.10	0.400	1.51	3.19	12.0		2	WG1314190
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1314190

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	1.76	9.57		2	WG1314190
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1314190
Trichloroethylene	79-01-6	131	0.400	2.14	0.594	3.18		2	WG1314190
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.06	15.0		2	WG1314190
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.790	3.88		2	WG1314190
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1314190
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1314190
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1314190
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1314190
m&p-Xylene	1330-20-7	106	0.800	3.47	5.09	22.1		2	WG1314190
o-Xylene	95-47-6	106	0.400	1.73	2.14	9.27		2	WG1314190
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	324	1340	B	2	WG1314190
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.752	2.03		2	WG1314190
1,2,3-Trimethylbenzene	526-73-8	120.10	0.400	1.96	0.743	3.65		2	WG1314190
Chlorodifluoromethane	75-45-6	86.50	0.400	1.42	ND	ND		2	WG1314190
Dicyclopentadiene	77-73-6	132.20	0.400	2.16	ND	ND		2	WG1314190
Ethyl acetate	141-78-6	88	0.400	1.44	ND	ND		2	WG1314190
Methyl Cyclohexane	108-87-2	98.1860	0.400	1.61	0.405	1.63		2	WG1314190
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.400	1.90	ND	ND		2	WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.9*				WG1314190
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1314791

Method Blank (MB)

(MB) R3432440-3 07/19/19 10:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	0.0884	J	0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	0.158	J	0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	0.107	J	0.0603	0.200
1,3-Dichlorobenzene	0.139	J	0.0597	0.200
1,4-Dichlorobenzene	0.175	J	0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	0.0742	J	0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3432440-3 07/19/19 10:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	0.0603	J	0.0465	0.200
Methyl Butyl Ketone	0.104	J	0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	0.272	J	0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	0.121	J	0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	0.363	J	0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	0.249	J	0.0832	0.630
TPH (GC/MS) Low Fraction	23.5	J	6.91	50.0
1,1-Difluoroethane	U		0.0325	0.200
1,2,3-Trimethylbenzene	U		0.0325	0.200
Chlorodifluoromethane	U		0.0325	0.200
Dicyclopentadiene	U		0.0325	0.200
Ethyl acetate	U		0.0325	0.200
Methyl Cyclohexane	U		0.0325	0.200
Tert-Amyl Ethyl Ether	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	*99.4*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432440-1 07/19/19 09:08 • (LCSD) R3432440-2 07/19/19 09:51

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.46	3.44	92.3	91.7	55.0-148			0.630	25
Propene	3.75	3.54	3.38	94.4	90.2	64.0-144			4.51	25
Dichlorodifluoromethane	3.75	3.94	3.86	105	103	64.0-139			2.08	25
1,2-Dichlorotetrafluoroethane	3.75	3.97	3.87	106	103	70.0-130			2.54	25
Chloromethane	3.75	3.94	3.81	105	102	70.0-130			3.29	25
Vinyl chloride	3.75	3.85	3.86	103	103	70.0-130			0.222	25
1,3-Butadiene	3.75	3.90	3.85	104	103	70.0-130			1.20	25
Bromomethane	3.75	3.87	3.84	103	102	70.0-130			0.721	25
Chloroethane	3.75	3.95	3.80	105	101	70.0-130			3.87	25
Trichlorofluoromethane	3.75	3.86	3.82	103	102	70.0-130			0.921	25
1,1,2-Trichlorotrifluoroethane	3.75	3.92	3.85	105	103	70.0-130			1.80	25
1,1-Dichloroethene	3.75	3.85	3.80	103	101	70.0-130			1.39	25
1,1-Dichloroethane	3.75	3.85	3.83	103	102	70.0-130			0.560	25
Acetone	3.75	3.74	3.70	99.8	98.7	70.0-130			1.04	25
2-Propanol	3.75	3.83	3.84	102	102	70.0-139			0.409	25
Carbon disulfide	3.75	3.88	3.85	103	103	70.0-130			0.794	25
Methylene Chloride	3.75	3.65	3.55	97.3	94.8	70.0-130			2.60	25
MTBE	3.75	3.85	3.81	103	102	70.0-130			0.991	25
trans-1,2-Dichloroethene	3.75	3.88	3.83	103	102	70.0-130			1.39	25
n-Hexane	3.75	3.85	3.80	103	101	70.0-130			1.46	25
Vinyl acetate	3.75	3.27	3.35	87.1	89.4	70.0-130			2.65	25
Methyl Ethyl Ketone	3.75	3.93	3.95	105	105	70.0-130			0.486	25
cis-1,2-Dichloroethene	3.75	3.86	3.88	103	103	70.0-130			0.563	25
Chloroform	3.75	3.86	3.90	103	104	70.0-130			1.05	25
Cyclohexane	3.75	3.88	3.87	103	103	70.0-130			0.339	25
1,1,1-Trichloroethane	3.75	3.87	3.87	103	103	70.0-130			0.188	25
Carbon tetrachloride	3.75	3.90	3.88	104	103	70.0-130			0.388	25
Benzene	3.75	3.90	3.91	104	104	70.0-130			0.206	25
1,2-Dichloroethane	3.75	3.87	3.95	103	105	70.0-130			2.07	25
Heptane	3.75	3.91	3.90	104	104	70.0-130			0.286	25
Trichloroethylene	3.75	4.00	4.00	107	107	70.0-130			0.143	25
1,2-Dichloropropane	3.75	3.92	3.92	105	105	70.0-130			0.0638	25
1,4-Dioxane	3.75	3.78	3.85	101	103	70.0-140			1.85	25
Bromodichloromethane	3.75	3.95	3.93	105	105	70.0-130			0.369	25
cis-1,3-Dichloropropene	3.75	3.94	3.94	105	105	70.0-130			0.104	25
4-Methyl-2-pentanone (MIBK)	3.75	3.89	4.00	104	107	70.0-139			2.92	25
Toluene	3.75	3.87	3.95	103	105	70.0-130			2.20	25
trans-1,3-Dichloropropene	3.75	3.96	3.96	105	106	70.0-130			0.111	25
1,1,2-Trichloroethane	3.75	3.96	4.01	106	107	70.0-130			1.20	25
Tetrachloroethylene	3.75	3.82	3.87	102	103	70.0-130			1.05	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432440-1 07/19/19 09:08 • (LCSD) R3432440-2 07/19/19 09:51

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Butyl Ketone	3.75	4.01	4.11	107	109	70.0-149			2.29	25
Dibromochloromethane	3.75	3.96	4.04	106	108	70.0-130			2.10	25
1,2-Dibromoethane	3.75	4.02	4.05	107	108	70.0-130			0.629	25
Chlorobenzene	3.75	4.00	4.07	107	108	70.0-130			1.61	25
Ethylbenzene	3.75	3.92	3.96	105	106	70.0-130			0.975	25
m&p-Xylene	7.50	7.90	7.89	105	105	70.0-130			0.0475	25
o-Xylene	3.75	3.90	3.92	104	105	70.0-130			0.472	25
Styrene	3.75	4.00	4.03	107	107	70.0-130			0.651	25
Bromoform	3.75	3.97	4.07	106	109	70.0-130			2.58	25
1,1,2,2-Tetrachloroethane	3.75	3.76	3.80	100	101	70.0-130			1.04	25
4-Ethyltoluene	3.75	3.91	3.99	104	106	70.0-130			2.06	25
1,3,5-Trimethylbenzene	3.75	3.92	3.98	105	106	70.0-130			1.48	25
1,2,4-Trimethylbenzene	3.75	3.89	3.94	104	105	70.0-130			1.32	25
1,3-Dichlorobenzene	3.75	3.97	4.06	106	108	70.0-130			2.19	25
1,4-Dichlorobenzene	3.75	4.05	4.14	108	110	70.0-130			2.18	25
Benzyl Chloride	3.75	4.20	4.22	112	112	70.0-152			0.498	25
1,2-Dichlorobenzene	3.75	3.97	4.00	106	107	70.0-130			0.711	25
1,2,4-Trichlorobenzene	3.75	4.70	4.64	125	124	70.0-160			1.18	25
Hexachloro-1,3-butadiene	3.75	4.13	4.19	110	112	70.0-151			1.60	25
Naphthalene	3.75	4.42	4.54	118	121	70.0-159			2.86	25
TPH (GC/MS) Low Fraction	203	204	206	101	102	70.0-130			1.18	25
Allyl Chloride	3.75	3.94	3.82	105	102	70.0-130			3.03	25
2-Chlorotoluene	3.75	3.89	3.93	104	105	70.0-130			1.05	25
Methyl Methacrylate	3.75	3.90	3.99	104	106	70.0-130			2.08	25
Tetrahydrofuran	3.75	3.85	3.88	103	104	70.0-137			0.688	25
2,2,4-Trimethylpentane	3.75	3.89	3.83	104	102	70.0-130			1.76	25
Vinyl Bromide	3.75	3.84	3.82	102	102	70.0-130			0.477	25
Isopropylbenzene	3.75	3.87	3.93	103	105	70.0-130			1.47	25
1,1-Difluoroethane	3.75	3.86	3.84	103	102	70.0-130			0.523	25
1,2,3-Trimethylbenzene	3.75	3.95	4.01	105	107	70.0-130			1.72	25
Chlorodifluoromethane	3.75	3.89	3.83	104	102	70.0-130			1.59	25
Dicyclopentadiene	3.75	3.90	4.02	104	107	70.0-130			3.05	25
Ethyl acetate	3.75	3.90	3.91	104	104	70.0-130			0.311	25
Methyl Cyclohexane	3.75	3.92	3.93	105	105	70.0-130			0.255	25
Tert-Amyl Ethyl Ether	3.75	3.81	3.84	102	102	70.0-130			0.774	25
(S) 1,4-Bromofluorobenzene				*99.7*	*101*	*60.0-140*				

Method Blank (MB)

(MB) R3432460-3 07/19/19 10:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	0.139	J	0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3432460-3 07/19/19 10:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
TPH (GC/MS) Low Fraction	U		6.91	50.0
1,1-Difluoroethane	U		0.0325	0.200
1,2,3-Trimethylbenzene	U		0.0325	0.200
Chlorodifluoromethane	U		0.0325	0.200
Dicyclopentadiene	U		0.0325	0.200
Ethyl acetate	U		0.0325	0.200
Methyl Cyclohexane	U		0.0325	0.200
Tert-Amyl Ethyl Ether	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	*95.2*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432460-1 07/19/19 08:56 • (LCSD) R3432460-2 07/19/19 09:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.21	3.23	85.5	86.2	55.0-148			0.764	25
Propene	3.75	3.80	3.70	101	98.7	64.0-144			2.75	25
Dichlorodifluoromethane	3.75	3.83	3.79	102	101	64.0-139			0.992	25
1,2-Dichlorotetrafluoroethane	3.75	3.84	3.78	102	101	70.0-130			1.54	25
Chloromethane	3.75	3.71	3.73	99.0	99.5	70.0-130			0.549	25
Vinyl chloride	3.75	3.80	3.76	101	100	70.0-130			1.08	25
1,3-Butadiene	3.75	3.82	3.80	102	101	70.0-130			0.364	25
Bromomethane	3.75	3.71	3.68	98.9	98.1	70.0-130			0.840	25
Chloroethane	3.75	3.71	3.60	99.0	96.1	70.0-130			3.03	25
Trichlorofluoromethane	3.75	3.79	3.77	101	101	70.0-130			0.566	25
1,1,2-Trichlorotrifluoroethane	3.75	3.80	3.77	101	101	70.0-130			0.793	25
1,1-Dichloroethene	3.75	3.83	3.80	102	101	70.0-130			0.946	25
1,1-Dichloroethane	3.75	3.82	3.82	102	102	70.0-130			0.125	25
Acetone	3.75	3.85	3.87	103	103	70.0-130			0.412	25
2-Propanol	3.75	3.75	3.73	99.9	99.5	70.0-139			0.441	25
Carbon disulfide	3.75	3.79	3.79	101	101	70.0-130			0.00551	25
Methylene Chloride	3.75	3.61	3.60	96.4	96.1	70.0-130			0.268	25
MTBE	3.75	3.87	3.84	103	102	70.0-130			0.843	25
trans-1,2-Dichloroethene	3.75	3.82	3.80	102	101	70.0-130			0.416	25
n-Hexane	3.75	3.88	3.87	103	103	70.0-130			0.140	25
Vinyl acetate	3.75	3.91	3.90	104	104	70.0-130			0.289	25
Methyl Ethyl Ketone	3.75	3.81	3.87	102	103	70.0-130			1.38	25
cis-1,2-Dichloroethene	3.75	3.78	3.80	101	101	70.0-130			0.348	25
Chloroform	3.75	3.81	3.81	102	102	70.0-130			0.187	25
Cyclohexane	3.75	3.89	3.87	104	103	70.0-130			0.587	25
1,1,1-Trichloroethane	3.75	3.83	3.81	102	102	70.0-130			0.385	25
Carbon tetrachloride	3.75	3.80	3.78	101	101	70.0-130			0.561	25
Benzene	3.75	3.89	3.89	104	104	70.0-130			0.0550	25
1,2-Dichloroethane	3.75	3.83	3.84	102	102	70.0-130			0.123	25
Heptane	3.75	3.93	3.94	105	105	70.0-130			0.385	25
Trichloroethylene	3.75	3.86	3.85	103	103	70.0-130			0.283	25
1,2-Dichloropropane	3.75	3.87	3.85	103	103	70.0-130			0.573	25
1,4-Dioxane	3.75	3.85	3.87	103	103	70.0-140			0.502	25
Bromodichloromethane	3.75	3.93	3.93	105	105	70.0-130			0.0327	25
cis-1,3-Dichloropropene	3.75	3.92	3.88	105	104	70.0-130			1.04	25
4-Methyl-2-pentanone (MIBK)	3.75	3.96	3.93	106	105	70.0-139			0.630	25
Toluene	3.75	3.89	3.88	104	104	70.0-130			0.297	25
trans-1,3-Dichloropropene	3.75	3.90	3.87	104	103	70.0-130			0.682	25
1,1,2-Trichloroethane	3.75	3.85	3.87	103	103	70.0-130			0.634	25
Tetrachloroethylene	3.75	3.88	3.87	104	103	70.0-130			0.389	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432460-1 07/19/19 08:56 • (LCSD) R3432460-2 07/19/19 09:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Butyl Ketone	3.75	4.00	3.97	107	106	70.0-149			0.676	25
Dibromochloromethane	3.75	3.92	3.93	105	105	70.0-130			0.264	25
1,2-Dibromoethane	3.75	3.86	3.88	103	103	70.0-130			0.464	25
Chlorobenzene	3.75	3.84	3.80	102	101	70.0-130			1.01	25
Ethylbenzene	3.75	3.82	3.80	102	101	70.0-130			0.502	25
m&p-Xylene	7.50	7.67	7.68	102	102	70.0-130			0.0684	25
o-Xylene	3.75	3.81	3.82	102	102	70.0-130			0.152	25
Styrene	3.75	3.88	3.89	103	104	70.0-130			0.231	25
Bromoform	3.75	3.94	3.92	105	105	70.0-130			0.450	25
1,1,2,2-Tetrachloroethane	3.75	3.79	3.76	101	100	70.0-130			0.804	25
4-Ethyltoluene	3.75	3.81	3.83	102	102	70.0-130			0.486	25
1,3,5-Trimethylbenzene	3.75	3.89	3.84	104	102	70.0-130			1.22	25
1,2,4-Trimethylbenzene	3.75	3.83	3.84	102	102	70.0-130			0.275	25
1,3-Dichlorobenzene	3.75	3.83	3.85	102	103	70.0-130			0.573	25
1,4-Dichlorobenzene	3.75	3.90	3.93	104	105	70.0-130			0.856	25
Benzyl Chloride	3.75	3.87	3.90	103	104	70.0-152			0.851	25
1,2-Dichlorobenzene	3.75	3.78	3.77	101	100	70.0-130			0.359	25
1,2,4-Trichlorobenzene	3.75	4.04	3.97	108	106	70.0-160			1.63	25
Hexachloro-1,3-butadiene	3.75	3.85	3.87	103	103	70.0-151			0.511	25
Naphthalene	3.75	3.95	3.93	105	105	70.0-159			0.530	25
TPH (GC/MS) Low Fraction	203	210	211	104	104	70.0-130			0.350	25
Allyl Chloride	3.75	3.97	3.68	106	98.3	70.0-130			7.38	25
2-Chlorotoluene	3.75	3.80	3.80	101	101	70.0-130			0.00618	25
Methyl Methacrylate	3.75	3.92	3.87	105	103	70.0-130			1.33	25
Tetrahydrofuran	3.75	3.84	3.79	102	101	70.0-137			1.25	25
2,2,4-Trimethylpentane	3.75	3.89	3.87	104	103	70.0-130			0.358	25
Vinyl Bromide	3.75	3.77	3.69	101	98.3	70.0-130			2.23	25
Isopropylbenzene	3.75	3.82	3.81	102	102	70.0-130			0.383	25
1,1-Difluoroethane	3.75	3.81	3.74	102	99.6	70.0-130			2.04	25
1,2,3-Trimethylbenzene	3.75	3.84	3.84	102	103	70.0-130			0.0547	25
Chlorodifluoromethane	3.75	3.82	3.81	102	101	70.0-130			0.343	25
Dicyclopentadiene	3.75	3.82	3.83	102	102	70.0-130			0.150	25
Ethyl acetate	3.75	3.80	3.72	101	99.2	70.0-130			2.29	25
Methyl Cyclohexane	3.75	3.86	3.87	103	103	70.0-130			0.0916	25
Tert-Amyl Ethyl Ether	3.75	3.83	3.85	102	103	70.0-130			0.472	25
(S) 1,4-Bromofluorobenzene				*96.8*	*97.5*	*60.0-140*				

Method Blank (MB)

(MB) R3432956-3 07/20/19 10:19

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3432956-3 07/20/19 10:19

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	0.0672	J	0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
TPH (GC/MS) Low Fraction	15.6	J	6.91	50.0
1,1-Difluoroethane	U		0.0325	0.200
1,2,3-Trimethylbenzene	U		0.0325	0.200
Chlorodifluoromethane	U		0.0325	0.200
Dicyclopentadiene	U		0.0325	0.200
Ethyl acetate	U		0.0325	0.200
Methyl Cyclohexane	U		0.0325	0.200
Tert-Amyl Ethyl Ether	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	*98.5*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432956-1 07/20/19 08:32 • (LCSD) R3432956-2 07/20/19 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.20	3.30	85.2	87.9	55.0-148			3.10	25
Propene	3.75	3.80	3.92	101	104	64.0-144			3.04	25
Dichlorodifluoromethane	3.75	3.99	3.99	106	107	64.0-139			0.207	25
1,2-Dichlorotetrafluoroethane	3.75	3.90	3.97	104	106	70.0-130			1.79	25
Chloromethane	3.75	3.92	3.96	105	106	70.0-130			0.825	25
Vinyl chloride	3.75	3.94	3.93	105	105	70.0-130			0.209	25
1,3-Butadiene	3.75	3.70	3.80	98.6	101	70.0-130			2.65	25
Bromomethane	3.75	3.84	3.94	102	105	70.0-130			2.42	25
Chloroethane	3.75	3.90	3.94	104	105	70.0-130			0.992	25
Trichlorofluoromethane	3.75	3.81	3.96	102	106	70.0-130			3.83	25
1,1,2-Trichlorotrifluoroethane	3.75	3.86	3.98	103	106	70.0-130			2.93	25
1,1-Dichloroethene	3.75	3.85	3.97	103	106	70.0-130			3.17	25
1,1-Dichloroethane	3.75	3.87	3.96	103	106	70.0-130			2.39	25
Acetone	3.75	3.76	3.85	100	103	70.0-130			2.35	25
2-Propanol	3.75	3.62	3.73	96.5	99.6	70.0-139			3.16	25
Carbon disulfide	3.75	3.88	3.97	103	106	70.0-130			2.31	25
Methylene Chloride	3.75	3.62	3.74	96.7	99.8	70.0-130			3.23	25
MTBE	3.75	3.79	3.88	101	104	70.0-130			2.48	25
trans-1,2-Dichloroethene	3.75	3.83	3.97	102	106	70.0-130			3.72	25
n-Hexane	3.75	3.90	4.04	104	108	70.0-130			3.56	25
Vinyl acetate	3.75	3.91	3.98	104	106	70.0-130			1.90	25
Methyl Ethyl Ketone	3.75	3.91	3.86	104	103	70.0-130			1.14	25
cis-1,2-Dichloroethene	3.75	3.89	3.94	104	105	70.0-130			1.45	25
Chloroform	3.75	3.90	3.93	104	105	70.0-130			0.702	25
Cyclohexane	3.75	3.85	3.91	103	104	70.0-130			1.67	25
1,1,1-Trichloroethane	3.75	3.82	3.92	102	105	70.0-130			2.73	25
Carbon tetrachloride	3.75	3.89	3.98	104	106	70.0-130			2.35	25
Benzene	3.75	3.90	3.93	104	105	70.0-130			0.894	25
1,2-Dichloroethane	3.75	3.85	3.88	103	103	70.0-130			0.748	25
Heptane	3.75	3.83	3.86	102	103	70.0-130			0.625	25
Trichloroethylene	3.75	3.87	3.86	103	103	70.0-130			0.223	25
1,2-Dichloropropane	3.75	3.97	3.93	106	105	70.0-130			0.824	25
1,4-Dioxane	3.75	3.92	3.85	104	103	70.0-140			1.80	25
Bromodichloromethane	3.75	3.91	3.92	104	104	70.0-130			0.125	25
cis-1,3-Dichloropropene	3.75	4.01	3.93	107	105	70.0-130			1.88	25
4-Methyl-2-pentanone (MIBK)	3.75	3.84	3.83	102	102	70.0-139			0.139	25
Toluene	3.75	4.01	3.98	107	106	70.0-130			0.699	25
trans-1,3-Dichloropropene	3.75	3.95	3.98	105	106	70.0-130			0.788	25
1,1,2-Trichloroethane	3.75	4.02	4.12	107	110	70.0-130			2.27	25
Methyl Butyl Ketone	3.75	3.93	3.95	105	105	70.0-149			0.515	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432956-1 07/20/19 08:32 • (LCSD) R3432956-2 07/20/19 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dibromochloromethane	3.75	4.13	4.14	110	111	70.0-130			0.328	25
1,2-Dibromoethane	3.75	4.03	4.05	108	108	70.0-130			0.491	25
Chlorobenzene	3.75	4.05	4.05	108	108	70.0-130			0.0886	25
Ethylbenzene	3.75	4.01	3.94	107	105	70.0-130			1.64	25
m&p-Xylene	7.50	8.05	8.06	107	107	70.0-130			0.144	25
o-Xylene	3.75	3.95	3.92	105	104	70.0-130			0.740	25
Styrene	3.75	3.99	3.93	106	105	70.0-130			1.31	25
Bromoform	3.75	4.11	4.06	110	108	70.0-130			1.30	25
1,1,2,2-Tetrachloroethane	3.75	3.85	3.87	103	103	70.0-130			0.758	25
4-Ethyltoluene	3.75	3.93	3.95	105	105	70.0-130			0.538	25
1,3,5-Trimethylbenzene	3.75	3.89	3.87	104	103	70.0-130			0.504	25
1,2,4-Trimethylbenzene	3.75	3.91	3.92	104	105	70.0-130			0.331	25
1,3-Dichlorobenzene	3.75	3.94	3.91	105	104	70.0-130			0.713	25
1,4-Dichlorobenzene	3.75	3.99	3.95	106	105	70.0-130			0.976	25
Benzyl Chloride	3.75	4.16	4.24	111	113	70.0-152			1.85	25
1,2-Dichlorobenzene	3.75	3.88	3.93	104	105	70.0-130			1.26	25
1,2,4-Trichlorobenzene	3.75	3.98	4.00	106	107	70.0-160			0.427	25
Hexachloro-1,3-butadiene	3.75	3.64	3.69	97.0	98.4	70.0-151			1.41	25
Naphthalene	3.75	3.99	4.09	106	109	70.0-159			2.41	25
TPH (GC/MS) Low Fraction	203	193	196	95.5	96.7	70.0-130			1.17	25
Allyl Chloride	3.75	3.91	3.93	104	105	70.0-130			0.453	25
2-Chlorotoluene	3.75	3.86	3.86	103	103	70.0-130			0.0583	25
Methyl Methacrylate	3.75	3.80	3.86	101	103	70.0-130			1.66	25
Tetrahydrofuran	3.75	3.79	3.83	101	102	70.0-137			1.06	25
2,2,4-Trimethylpentane	3.75	3.96	4.03	105	107	70.0-130			1.79	25
Vinyl Bromide	3.75	3.91	3.98	104	106	70.0-130			1.70	25
Isopropylbenzene	3.75	3.99	3.95	106	105	70.0-130			0.897	25
1,1-Difluoroethane	3.75	3.87	3.91	103	104	70.0-130			1.18	25
1,2,3-Trimethylbenzene	3.75	3.88	3.91	103	104	70.0-130			0.766	25
Chlorodifluoromethane	3.75	3.96	3.94	106	105	70.0-130			0.562	25
Dicyclopentadiene	3.75	3.88	3.94	103	105	70.0-130			1.60	25
Ethyl acetate	3.75	3.76	3.82	100	102	70.0-130			1.51	25
Methyl Cyclohexane	3.75	3.93	3.90	105	104	70.0-130			0.810	25
Tert-Amyl Ethyl Ether	3.75	3.73	3.77	99.4	100	70.0-130			1.02	25
(S) 1,4-Bromofluorobenzene				*99.5*	*99.6*	*60.0-140*				

Method Blank (MB)

(MB) R3432680-3 07/20/19 21:26

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*96.4*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432680-1 07/20/19 20:09 • (LCSD) R3432680-2 07/20/19 20:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.09	3.08	82.3	82.2	55.0-148			0.0962	25
Dichlorodifluoromethane	3.75	3.90	4.09	104	109	64.0-139			4.81	25
Trichlorofluoromethane	3.75	3.61	3.70	96.3	98.7	70.0-130			2.41	25
(S) 1,4-Bromofluorobenzene				*98.4*	*99.1*	*60.0-140*				

Method Blank (MB)

(MB) R3433552-3 07/23/19 10:05

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Tetrachloroethylene	U		0.0497	0.200
(S) 1,4-Bromofluorobenzene	*87.2*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433552-1 07/23/19 08:31 • (LCSD) R3433552-2 07/23/19 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Tetrachloroethylene	3.75	4.30	4.32	115	115	70.0-130			0.393	25
(S) 1,4-Bromofluorobenzene				*92.1*	*91.4*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

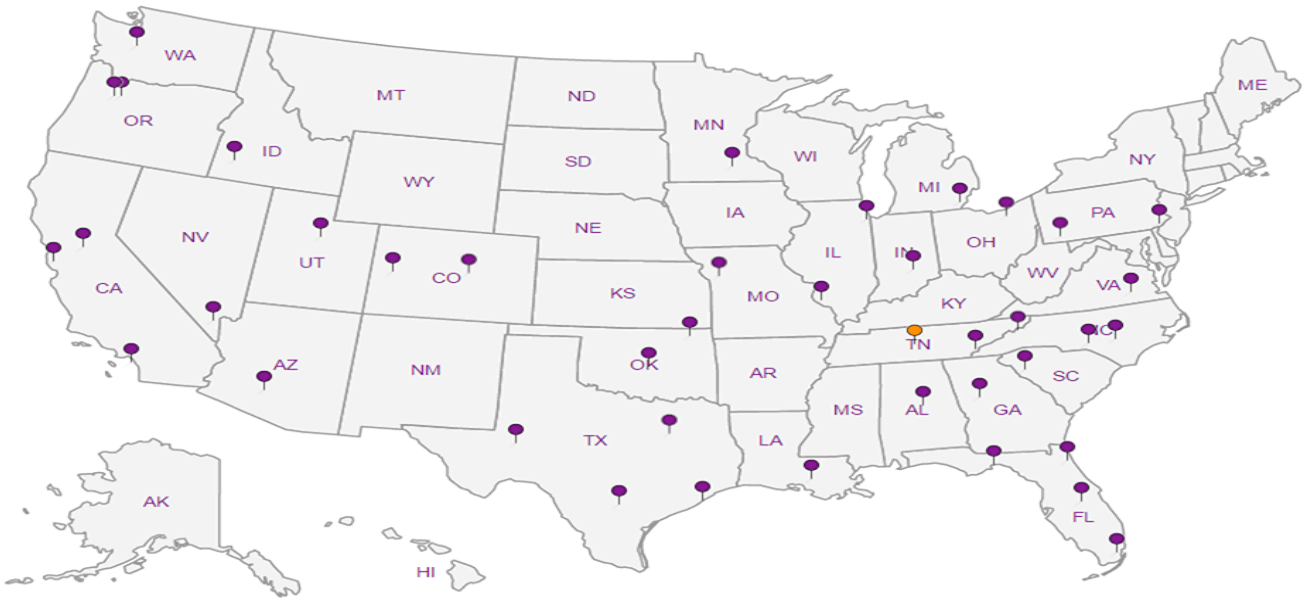
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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Report to: **Gerard DeBusschere**

Email To: **Gerard.DeBusschere@atcgs.com**

Project Description: **Donaldson/Ferndale Soil Gas**

City/State Collected:

Phone: **248-669-5140**
Fax: **248-669-5147**

Client Project # **NPJBD19002**

Lab Project # **ATCNMI-NPJBD19002**

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately
Packed on Ice N____ Y____

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
A1	G	Air	5'	7/15/19	1116	1	X		-9
A2	G	Air	5'		1120	1	X		02
A3	G	Air	5'		1117	1	X		03
A4	G	Air	5'		1117	1	X		04
B1	G	Air		7/15/19	1204	1	X		05
B2	G	Air			1209	1	X		06
B3	G	Air			1209	1	X		07
B4	G	Air			~~1301~~ 1211	1	X		08
C1	G	Air			1328	1	X		09
C2	G	Air			1328	1	X		10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4798 8745 6247

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/15/19	2010	7/16/19 1100	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				Amb 22
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				7/17/19 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1119489

Table #

Acctnum: **ATCNMI**
Template: **T152410**
Prelogin: **P716956**
TSR: **134 - Mark W. Beasley**
PB: BF 7/15/19
Shipped Via: **FedEx Ground**

ATC Group Services - Novi, MI

46555 Humboldt Drive Suite 100
Novi, MI 48377

Billing Information:
Accounts Payable
46555 Humboldt Dr., Ste.100
Novi, MI 48377

Report to: **Gerard DeBusschere**

Email To: **Gerard.DeBusschere@atcgs.com**

Project Description: **Donaldson/Ferndale Soil Gas**

City/State Collected:

Phone: **248-669-5140**
Fax: **248-669-5147**

Client Project # **NPJBD19002**

Lab Project # **ATCNMI-NPJBD19002**

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately
Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

TO-15 Summa

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1119489

Table #

Acctnum: **ATCNMI**
Template: **T152410**
Prelogin: **P716956**
TSR: **134 - Mark W. Beasley**
PB: **BF 7/15/19**

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
C3	G	Air	5'	7/15/19	1330	1	X		11
C4		Air			1330	1	X		12
D1		Air			1447	1	X		13
D2		Air			1450	1	X		14
D3		Air			1451	1	X		15
D4		Air			1452	1	X		16
E1		Air			1549	1	X		17
E2		Air			1552	1	X		18
E3		Air			1705	1	X		19
E4		Air			1715	1	X		20

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4794 8845 6236

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/15/19	2010	7/16/19 1100	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 22
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/17/19 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ATC Group Services - Novi, MI

46555 Humboldt Drive Suite 100
Novi, MI 48377

Billing Information:
Accounts Payable
46555 Humboldt Dr., Ste.100
Novi, MI 48377

Report to: **Gerard DeBusschere**

Email To: **Gerard.DeBusschere@atcgs.com**

Project Description: **Donaldson/Ferndale Soil Gas**

City/State Collected: Ferndale, MI

Phone: **248-669-5140**
Fax: **248-669-5147**

Client Project # **NPJBD19002**

Lab Project # **ATCNMI-NPJBD19002**

Collected by (print): Ian Adolphus

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed

Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
~~A1~~ F3	G	Air	5'	7/15/19	~~16~~ 1634	1	X		-21
~~A2~~ F4	G	Air	5'	7/15/19	1630	1	X		22
~~A3~~		Air				1	X		
~~A4~~		Air				1	X		
		Air				1	X		

Chain of Custody Page ___ of ___

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National Center for Testing & Innovation

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1119484

Table #

Acctnum: **ATCNMI**
Template: **T152410**
Prelogin: **P716956**
TSR: **134 - Mark W. Beasley**
PB: 7/5/19 BF
Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

RAD SCREEN: <0.5 mR/hr

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	7/15/19	2010	4747 8745 6225
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
			7/16/19 1100
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 22
Arb²

If preservation required by Login: Date/Time

Date: 7/17/19 Time: 0845

Hold:

Condition: NCF / (OK)

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

April 23, 2020

Joshua Schuyler
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale
Pace Project No.: 50253160

Dear Joshua Schuyler:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

Revised Report. This report replaces the original dated 040720, it has been revised to add Chrome Speciation, per client request.

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
April Hehir

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50253160001	**MW-101 (2-3')**	Solid	03/23/20 14:40	03/27/20 08:10
50253160002	**MW-102 (2-3')**	Solid	03/23/20 13:50	03/27/20 08:10
50253160003	**MW-103 (2-3')**	Solid	03/23/20 10:47	03/27/20 08:10
50253160004	**MW-104 (2-3')**	Solid	03/23/20 10:20	03/27/20 08:10
50253160005	**MW-105 (2-3')**	Solid	03/23/20 10:10	03/27/20 08:10
50253160006	**MW-106 (2-3')**	Solid	03/25/20 08:10	03/27/20 08:10
50253160007	**MW-107 (2-3')**	Solid	03/25/20 08:50	03/27/20 08:10
50253160008	**MW-108 (2-3')**	Solid	03/25/20 09:09	03/27/20 08:10
50253160009	**MW-109 (1-2')**	Solid	03/25/20 09:35	03/27/20 08:10
50253160010	**MW-110 (1-2')**	Solid	03/25/20 10:00	03/27/20 08:10
50253160011	**MW-111 (3-4')**	Solid	03/25/20 10:30	03/27/20 08:10
50253160012	**MW-112 (3-4')**	Solid	03/25/20 10:50	03/27/20 08:10
50253160013	**MW-104 (14-15')**	Solid	03/23/20 12:30	03/27/20 08:10
50253160014	**MW-105 (12-13')**	Solid	03/23/20 12:10	03/27/20 08:10
50253160015	**MW-106 (5-6')**	Solid	03/25/20 08:22	03/27/20 08:10
50253160016	**MW-107 (6-7')**	Solid	03/25/20 08:55	03/27/20 08:10
50253160017	**MW-108 (4-5')**	Solid	03/25/20 09:15	03/27/20 08:10
50253160018	**MW-109 (4-5')**	Solid	03/25/20 09:40	03/27/20 08:10
50253160019	**MW-110 (4-5')**	Solid	03/25/20 10:05	03/27/20 08:10
50253160020	**MW-113 (7-8')**	Solid	03/24/20 09:45	03/27/20 08:10
50253160021	**MW-114 (8-9')**	Solid	03/24/20 11:10	03/27/20 08:10
50253160022	**MW-115 (7-8')**	Solid	03/24/20 12:20	03/27/20 08:10
50253160023	**Dup-1**	Solid	03/23/20 12:00	03/27/20 08:10
50253160024	**Dup-2**	Solid	03/24/20 11:15	03/27/20 08:10
50253160025	**MW-113 (2-3')**	Solid	03/23/20 15:50	03/27/20 08:10
50253160026	**MW-114 (3-4')**	Solid	03/24/20 11:00	03/27/20 08:10
50253160027	**MW-115 (2-3')**	Solid	03/24/20 12:15	03/27/20 08:10
50253160028	**Trip Blank**	Solid	03/23/20 08:30	03/27/20 08:10
50253160029	**Field Blank**	Solid	03/23/20 11:00	03/27/20 08:10

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50253160001	**MW-101 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160002	**MW-102 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160003	**MW-103 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160004	**MW-104 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160005	**MW-105 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160006	**MW-106 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160007	**MW-107 (2-3')**	EPA 6010	KJE	4

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160008	**MW-108 (2-3')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160009	**MW-109 (1-2')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160010	**MW-110 (1-2')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160011	**MW-111 (3-4')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160012	**MW-112 (3-4')**	EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160013	**MW-104 (14-15')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19

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Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160014	**MW-105 (12-13')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160015	**MW-106 (5-6')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160016	**MW-107 (6-7')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160017	**MW-108 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160018	**MW-109 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160019	**MW-110 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160020	**MW-113 (7-8')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160021	**MW-114 (8-9')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160022	**MW-115 (7-8')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160023	**Dup-1**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160024	**Dup-2**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
50253160025	**MW-113 (2-3')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160026	**MW-114 (3-4')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160027	**MW-115 (2-3')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SLB	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253160028	**Trip Blank**	EPA 8260	JPV	75
50253160029	**Field Blank**	EPA 8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-101 (2-3') **Lab ID: 50253160001** Collected: 03/23/20 14:40 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2110**	ug/kg	2110	2110	1	03/31/20 06:15	04/05/20 13:46	7440-38-2	
Barium	**13300**	ug/kg	1050	1050	1	03/31/20 06:15	04/05/20 13:46	7440-39-3	
Chromium	**5920**	ug/kg	2110	2110	1	03/31/20 06:15	04/05/20 13:46	7440-47-3	
Lead	**<10500**	ug/kg	10500	10500	1	03/31/20 06:15	04/05/20 13:46	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<210**	ug/kg	210	210	1	03/30/20 10:20	03/31/20 09:55	7440-43-9	
Selenium	**<1050**	ug/kg	1050	1050	5	03/30/20 10:20	03/31/20 07:10	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 09:55	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<59.9**	ug/kg	107	59.9	1	04/03/20 12:46	04/06/20 08:28	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**7.1**	%	0.10	0.10	1		04/01/20 08:36		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 09:57	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.9**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-102 (2-3') **Lab ID: 50253160002** Collected: 03/23/20 13:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**2190**	ug/kg	2070	2070	1	03/31/20 06:15	04/05/20 14:00	7440-38-2	
Barium	**16800**	ug/kg	1030	1030	1	03/31/20 06:15	04/05/20 14:00	7440-39-3	
Chromium	**10500**	ug/kg	2070	2070	1	03/31/20 06:15	04/05/20 14:00	7440-47-3	
Lead	**<10300**	ug/kg	10300	10300	1	03/31/20 06:15	04/05/20 14:00	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<210**	ug/kg	210	210	1	03/30/20 10:20	03/31/20 10:36	7440-43-9	
Selenium	**<1050**	ug/kg	1050	1050	5	03/30/20 10:20	03/31/20 07:42	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 10:36	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**70.6J**	ug/kg	112	62.7	1	04/03/20 12:46	04/06/20 08:36	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**7.0**	%	0.10	0.10	1		04/01/20 08:36		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	04/17/20 09:08	04/18/20 09:58	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**10.5**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-103 (2-3') **Lab ID: 50253160003** Collected: 03/23/20 10:47 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2470**	ug/kg	2470	2470	1	03/31/20 06:15	04/05/20 14:02	7440-38-2	
Barium	**20800**	ug/kg	1240	1240	1	03/31/20 06:15	04/05/20 14:02	7440-39-3	
Chromium	**6570**	ug/kg	2470	2470	1	03/31/20 06:15	04/05/20 14:02	7440-47-3	
Lead	**<12400**	ug/kg	12400	12400	1	03/31/20 06:15	04/05/20 14:02	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<267**	ug/kg	267	267	1	03/30/20 10:20	03/31/20 10:49	7440-43-9	
Selenium	**<1340**	ug/kg	1340	1340	5	03/30/20 10:20	03/31/20 07:46	7782-49-2	D3
Silver	**<134**	ug/kg	134	134	1	03/30/20 10:20	03/31/20 10:49	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<76.9**	ug/kg	137	76.9	1	04/03/20 12:46	04/06/20 08:43	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**25.7**	%	0.10	0.10	1		04/01/20 08:36		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.7**	mg/kg	2.7	2.7	1	04/17/20 09:08	04/18/20 09:59	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**6.6**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-104 (2-3') **Lab ID: 50253160004** Collected: 03/23/20 10:20 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2240**	ug/kg	2240	2240	1	03/31/20 06:15	04/05/20 14:04	7440-38-2	
Barium	**17500**	ug/kg	1120	1120	1	03/31/20 06:15	04/05/20 14:04	7440-39-3	
Chromium	**6270**	ug/kg	2240	2240	1	03/31/20 06:15	04/05/20 14:04	7440-47-3	
Lead	**<11200**	ug/kg	11200	11200	1	03/31/20 06:15	04/05/20 14:04	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<217**	ug/kg	217	217	1	03/30/20 10:20	03/31/20 10:54	7440-43-9	
Selenium	**<1080**	ug/kg	1080	1080	5	03/30/20 10:20	03/31/20 07:51	7782-49-2	D3
Silver	**<108**	ug/kg	108	108	1	03/30/20 10:20	03/31/20 10:54	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<62.3**	ug/kg	111	62.3	1	04/03/20 12:46	04/06/20 08:45	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**11.8**	%	0.10	0.10	1		04/01/20 08:37		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:02	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**6.3**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-105 (2-3') **Lab ID: 50253160005** Collected: 03/23/20 10:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2090**	ug/kg	2090	2090	1	03/31/20 06:15	04/05/20 14:06	7440-38-2	
Barium	**18200**	ug/kg	1040	1040	1	03/31/20 06:15	04/05/20 14:06	7440-39-3	
Chromium	**5590**	ug/kg	2090	2090	1	03/31/20 06:15	04/05/20 14:06	7440-47-3	
Lead	**<10400**	ug/kg	10400	10400	1	03/31/20 06:15	04/05/20 14:06	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<221**	ug/kg	221	221	1	03/30/20 10:20	03/31/20 11:03	7440-43-9	
Selenium	**<1100**	ug/kg	1100	1100	5	03/30/20 10:20	03/31/20 07:56	7782-49-2	D3
Silver	**<110**	ug/kg	110	110	1	03/30/20 10:20	03/31/20 11:03	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<62.7**	ug/kg	112	62.7	1	04/03/20 12:46	04/06/20 08:48	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**10.3**	%	0.10	0.10	1		04/01/20 08:37		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:02	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.6**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-106 (2-3') **Lab ID: 50253160006** Collected: 03/25/20 08:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<1960**	ug/kg	1960	1960	1	03/31/20 06:15	04/05/20 14:08	7440-38-2	
Barium	**5360**	ug/kg	979	979	1	03/31/20 06:15	04/05/20 14:08	7440-39-3	
Chromium	**5720**	ug/kg	1960	1960	1	03/31/20 06:15	04/05/20 14:08	7440-47-3	
Lead	**<9790**	ug/kg	9790	9790	1	03/31/20 06:15	04/05/20 14:08	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<205**	ug/kg	205	205	1	03/30/20 10:20	03/31/20 11:17	7440-43-9	
Selenium	**<1030**	ug/kg	1030	1030	5	03/30/20 10:20	03/31/20 08:09	7782-49-2	D3
Silver	**<103**	ug/kg	103	103	1	03/30/20 10:20	03/31/20 11:17	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<58.9**	ug/kg	105	58.9	1	04/03/20 12:46	04/06/20 08:50	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**5.6**	%	0.10	0.10	1		04/01/20 08:37		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	04/17/20 09:08	04/18/20 10:02	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.7**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-107 (2-3') **Lab ID: 50253160007** Collected: 03/25/20 08:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2180**	ug/kg	2180	2180	1	03/31/20 06:15	04/05/20 14:10	7440-38-2	
Barium	**9360**	ug/kg	1090	1090	1	03/31/20 06:15	04/05/20 14:10	7440-39-3	
Chromium	**8840**	ug/kg	2180	2180	1	03/31/20 06:15	04/05/20 14:10	7440-47-3	
Lead	**<10900**	ug/kg	10900	10900	1	03/31/20 06:15	04/05/20 14:10	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<210**	ug/kg	210	210	1	03/30/20 10:20	03/31/20 11:22	7440-43-9	
Selenium	**<1050**	ug/kg	1050	1050	5	03/30/20 10:20	03/31/20 08:14	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 11:22	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<60.1**	ug/kg	107	60.1	1	04/03/20 12:46	04/06/20 08:53	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**9.9**	%	0.10	0.10	1		04/01/20 08:37		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:02	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**8.8**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-108 (2-3') **Lab ID: 50253160008** Collected: 03/25/20 09:09 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<1960**	ug/kg	1960	1960	1	03/31/20 06:15	04/05/20 14:12	7440-38-2	
Barium	**12200**	ug/kg	982	982	1	03/31/20 06:15	04/05/20 14:12	7440-39-3	
Chromium	**7220**	ug/kg	1960	1960	1	03/31/20 06:15	04/05/20 14:12	7440-47-3	
Lead	**<9820**	ug/kg	9820	9820	1	03/31/20 06:15	04/05/20 14:12	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<209**	ug/kg	209	209	1	03/30/20 10:20	03/31/20 11:31	7440-43-9	
Selenium	**<2090**	ug/kg	2090	2090	10	03/30/20 10:20	04/02/20 03:39	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 11:31	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<64.0**	ug/kg	114	64.0	1	04/03/20 12:46	04/06/20 08:55	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**9.2**	%	0.10	0.10	1		04/01/20 08:37		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**7.2**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-109 (1-2') **Lab ID: 50253160009** Collected: 03/25/20 09:35 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2040**	ug/kg	2040	2040	1	03/31/20 06:15	04/05/20 14:14	7440-38-2	
Barium	**13900**	ug/kg	1020	1020	1	03/31/20 06:15	04/05/20 14:14	7440-39-3	
Chromium	**5420**	ug/kg	2040	2040	1	03/31/20 06:15	04/05/20 14:14	7440-47-3	
Lead	**<10200**	ug/kg	10200	10200	1	03/31/20 06:15	04/05/20 14:14	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<211**	ug/kg	211	211	1	03/30/20 10:20	03/31/20 11:45	7440-43-9	
Selenium	**<1050**	ug/kg	1050	1050	5	03/30/20 10:20	03/31/20 08:23	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 11:45	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<60.7**	ug/kg	108	60.7	1	04/03/20 12:47	04/06/20 09:29	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**8.3**	%	0.10	0.10	1		04/01/20 09:01		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.4**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-110 (1-2') **Lab ID: 50253160010** Collected: 03/25/20 10:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2100**	ug/kg	2100	2100	1	03/31/20 06:15	04/05/20 14:16	7440-38-2	
Barium	**9050**	ug/kg	1050	1050	1	03/31/20 06:15	04/05/20 14:16	7440-39-3	
Chromium	**5330**	ug/kg	2100	2100	1	03/31/20 06:15	04/05/20 14:16	7440-47-3	
Lead	**<10500**	ug/kg	10500	10500	1	03/31/20 06:15	04/05/20 14:16	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<202**	ug/kg	202	202	1	03/30/20 10:20	03/31/20 11:49	7440-43-9	
Selenium	**<2020**	ug/kg	2020	2020	10	03/30/20 10:20	04/02/20 03:43	7782-49-2	D3
Silver	**<101**	ug/kg	101	101	1	03/30/20 10:20	03/31/20 11:49	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<57.7**	ug/kg	103	57.7	1	04/03/20 12:47	04/06/20 09:37	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**6.6**	%	0.10	0.10	1		04/01/20 09:02		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.3**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-111 (3-4') **Lab ID: 50253160011** Collected: 03/25/20 10:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2030**	ug/kg	2030	2030	1	03/31/20 06:15	04/05/20 14:18	7440-38-2	
Barium	**7070**	ug/kg	1010	1010	1	03/31/20 06:15	04/05/20 14:18	7440-39-3	
Chromium	**5420**	ug/kg	2030	2030	1	03/31/20 06:15	04/05/20 14:18	7440-47-3	
Lead	**<10100**	ug/kg	10100	10100	1	03/31/20 06:15	04/05/20 14:18	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<198**	ug/kg	198	198	1	03/30/20 10:20	03/31/20 11:58	7440-43-9	
Selenium	**<990**	ug/kg	990	990	5	03/30/20 10:20	03/31/20 08:41	7782-49-2	D3
Silver	**<99.0**	ug/kg	99.0	99.0	1	03/30/20 10:20	03/31/20 11:58	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<57.8**	ug/kg	103	57.8	1	04/03/20 12:47	04/06/20 09:39	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**5.0**	%	0.10	0.10	1		04/01/20 09:02		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.4**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-112 (3-4') **Lab ID: 50253160012** Collected: 03/25/20 10:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2020**	ug/kg	2020	2020	1	03/31/20 06:15	04/05/20 14:24	7440-38-2	
Barium	**8750**	ug/kg	1010	1010	1	03/31/20 06:15	04/05/20 14:24	7440-39-3	
Chromium	**4670**	ug/kg	2020	2020	1	03/31/20 06:15	04/05/20 14:24	7440-47-3	
Lead	**<10100**	ug/kg	10100	10100	1	03/31/20 06:15	04/05/20 14:24	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<219**	ug/kg	219	219	1	03/30/20 10:20	03/31/20 12:12	7440-43-9	
Selenium	**<1100**	ug/kg	1100	1100	5	03/30/20 10:20	03/31/20 08:46	7782-49-2	D3
Silver	**<110**	ug/kg	110	110	1	03/30/20 10:20	03/31/20 12:12	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<66.7**	ug/kg	119	66.7	1	04/03/20 12:47	04/06/20 09:41	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**13.4**	%	0.10	0.10	1		04/01/20 09:02		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**4.7**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-104 (14-15') **Lab ID: 50253160013** Collected: 03/23/20 12:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5240**	ug/kg	5240	5240	1		03/30/20 22:21	71-36-3	
Ethanol	**<2980**	ug/kg	2980	2980	1		03/30/20 22:21	64-17-5	B0
Methanol	**18900**	ug/kg	5240	5240	1		03/30/20 22:21	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	83-32-9	
Acenaphthylene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	208-96-8	
Anthracene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	120-12-7	
Benzo(a)anthracene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	56-55-3	
Benzo(a)pyrene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	50-32-8	
Benzo(b)fluoranthene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	205-99-2	
Benzo(g,h,i)perylene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	191-24-2	
Benzo(k)fluoranthene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	207-08-9	
Chrysene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	218-01-9	
Dibenz(a,h)anthracene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	53-70-3	
Fluoranthene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	206-44-0	
Fluorene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	86-73-7	
Indeno(1,2,3-cd)pyrene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	193-39-5	
2-Methylnaphthalene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	91-57-6	
Naphthalene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	91-20-3	
Phenanthrene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	85-01-8	
Pyrene	**<388**	ug/kg	388	388	1	04/03/20 09:30	04/03/20 19:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%.	37-111		1	04/03/20 09:30	04/03/20 19:28	321-60-8	
p-Terphenyl-d14 (S)	63	%.	29-124		1	04/03/20 09:30	04/03/20 19:28	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1900**	ug/kg	1900	1900	1		04/03/20 17:06	67-64-1	
Acrylonitrile	**<190**	ug/kg	190	190	1		04/03/20 17:06	107-13-1	
tert-Amylmethyl ether	**<474**	ug/kg	474	474	1		04/03/20 17:06	994-05-8	N2
Benzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	71-43-2	
Bromobenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	108-86-1	
Bromochloromethane	**<47.4**	ug/kg	94.9	47.4	1		04/03/20 17:06	74-97-5	
Bromodichloromethane	**<190**	ug/kg	190	190	1		04/03/20 17:06	75-27-4	
Bromoform	**<190**	ug/kg	190	190	1		04/03/20 17:06	75-25-2	
Bromomethane	**<379**	ug/kg	379	379	1		04/03/20 17:06	74-83-9	L1
2-Butanone (MEK)	**<1420**	ug/kg	1420	1420	1		04/03/20 17:06	78-93-3	
tert-Butyl Alcohol	**<4740**	ug/kg	4740	4740	1		04/03/20 17:06	75-65-0	
n-Butylbenzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	104-51-8	
sec-Butylbenzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	135-98-8	
tert-Butylbenzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	98-06-6	
Carbon disulfide	**<474**	ug/kg	474	474	1		04/03/20 17:06	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-104 (14-15') **Lab ID: 50253160013** Collected: 03/23/20 12:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	56-23-5	
Chlorobenzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	108-90-7	
Chloroethane	**<474**	ug/kg	474	474	1		04/03/20 17:06	75-00-3	
Chloroform	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	67-66-3	
Chloromethane	**<474**	ug/kg	474	474	1		04/03/20 17:06	74-87-3	
Cyclohexane	**<949**	ug/kg	949	949	1		04/03/20 17:06	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	96-12-8	
Dibromochloromethane	**<190**	ug/kg	190	190	1		04/03/20 17:06	124-48-1	
1,2-Dibromoethane (EDB)	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	106-93-4	
Dibromomethane	**<474**	ug/kg	474	474	1		04/03/20 17:06	74-95-3	
1,2-Dichlorobenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	95-50-1	
1,3-Dichlorobenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	541-73-1	
1,4-Dichlorobenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	106-46-7	
trans-1,4-Dichloro-2-butene	**<190**	ug/kg	1900	190	1		04/03/20 17:06	110-57-6	
Dichlorodifluoromethane	**<474**	ug/kg	474	474	1		04/03/20 17:06	75-71-8	
1,1-Dichloroethane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	75-34-3	
1,2-Dichloroethane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	107-06-2	
1,1-Dichloroethene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	75-35-4	
cis-1,2-Dichloroethene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	156-59-2	
trans-1,2-Dichloroethene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	156-60-5	
1,2-Dichloropropane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	78-87-5	
cis-1,3-Dichloropropene	**<190**	ug/kg	190	190	1		04/03/20 17:06	10061-01-5	
trans-1,3-Dichloropropene	**<190**	ug/kg	190	190	1		04/03/20 17:06	10061-02-6	
Diethyl ether (Ethyl ether)	**<379**	ug/kg	379	379	1		04/03/20 17:06	60-29-7	
Diisopropyl ether	**<474**	ug/kg	474	474	1		04/03/20 17:06	108-20-3	N2
Ethylbenzene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	100-41-4	
Ethyl-tert-butyl ether	**<474**	ug/kg	474	474	1		04/03/20 17:06	637-92-3	N2
Hexachloroethane	**<569**	ug/kg	569	569	1		04/03/20 17:06	67-72-1	N2
2-Hexanone	**<4740**	ug/kg	4740	4740	1		04/03/20 17:06	591-78-6	
Iodomethane	**<190**	ug/kg	1900	190	1		04/03/20 17:06	74-88-4	
Isopropylbenzene (Cumene)	**<474**	ug/kg	474	474	1		04/03/20 17:06	98-82-8	
p-Isopropyltoluene	**<47.4**	ug/kg	94.9	47.4	1		04/03/20 17:06	99-87-6	
Methylene Chloride	**<190**	ug/kg	190	190	1		04/03/20 17:06	75-09-2	
2-Methylnaphthalene	**<626**	ug/kg	626	626	1		04/03/20 17:06	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<4740**	ug/kg	4740	4740	1		04/03/20 17:06	108-10-1	
Methyl-tert-butyl ether	**<474**	ug/kg	474	474	1		04/03/20 17:06	1634-04-4	
Naphthalene	**<626**	ug/kg	626	626	1		04/03/20 17:06	91-20-3	
n-Propylbenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	103-65-1	
Styrene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	100-42-5	
1,1,1,2-Tetrachloroethane	**<190**	ug/kg	190	190	1		04/03/20 17:06	630-20-6	
1,1,2,2-Tetrachloroethane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	79-34-5	
Tetrachloroethene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	127-18-4	
Tetrahydrofuran	**<1900**	ug/kg	1900	1900	1		04/03/20 17:06	109-99-9	N2
Toluene	**<190**	ug/kg	190	190	1		04/03/20 17:06	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-104 (14-15') **Lab ID: 50253160013** Collected: 03/23/20 12:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<474**	ug/kg	474	474	1		04/03/20 17:06	87-61-6	
1,2,4-Trichlorobenzene	**<474**	ug/kg	474	474	1		04/03/20 17:06	120-82-1	
1,1,1-Trichloroethane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	71-55-6	
1,1,2-Trichloroethane	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	79-00-5	
Trichloroethene	**<94.9**	ug/kg	94.9	94.9	1		04/03/20 17:06	79-01-6	
Trichlorofluoromethane	**<190**	ug/kg	190	190	1		04/03/20 17:06	75-69-4	
1,2,3-Trichloropropane	**<190**	ug/kg	190	190	1		04/03/20 17:06	96-18-4	
1,2,3-Trimethylbenzene	**<474**	ug/kg	474	474	1		04/03/20 17:06	526-73-8	N2
1,2,4-Trimethylbenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	95-63-6	
1,3,5-Trimethylbenzene	**<190**	ug/kg	190	190	1		04/03/20 17:06	108-67-8	
Vinyl chloride	**<75.9**	ug/kg	75.9	75.9	1		04/03/20 17:06	75-01-4	
m&p-Xylene	**<47.4**	ug/kg	94.9	47.4	1		04/03/20 17:06	179601-23-1	
o-Xylene	**<47.4**	ug/kg	94.9	47.4	1		04/03/20 17:06	95-47-6	
Surrogates									
Dibromofluoromethane (S)	113	%.	62-137		1		04/03/20 17:06	1868-53-7	
Toluene-d8 (S)	116	%.	64-139		1		04/03/20 17:06	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		04/03/20 17:06	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**16.0**	%	0.10	0.10	1		04/01/20 09:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-105 (12-13') **Lab ID: 50253160014** Collected: 03/23/20 12:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5190**	ug/kg	5190	5190	1		03/30/20 22:30	71-36-3	
Ethanol	**<2950**	ug/kg	2950	2950	1		03/30/20 22:30	64-17-5	B0
Methanol	**16000**	ug/kg	5190	5190	1		03/30/20 22:30	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	83-32-9	
Acenaphthylene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	208-96-8	
Anthracene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	120-12-7	
Benzo(a)anthracene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	56-55-3	
Benzo(a)pyrene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	50-32-8	
Benzo(b)fluoranthene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	205-99-2	
Benzo(g,h,i)perylene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	191-24-2	
Benzo(k)fluoranthene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	207-08-9	
Chrysene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	218-01-9	
Dibenz(a,h)anthracene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	53-70-3	
Fluoranthene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	206-44-0	
Fluorene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	193-39-5	
2-Methylnaphthalene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	91-57-6	
Naphthalene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	91-20-3	
Phenanthrene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	85-01-8	
Pyrene	**<389**	ug/kg	389	389	1	04/03/20 09:30	04/03/20 19:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%.	37-111		1	04/03/20 09:30	04/03/20 19:45	321-60-8	
p-Terphenyl-d14 (S)	75	%.	29-124		1	04/03/20 09:30	04/03/20 19:45	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<923**	ug/kg	923	923	1		04/03/20 17:39	67-64-1	
Acrylonitrile	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	107-13-1	
tert-Amylmethyl ether	**<231**	ug/kg	231	231	1		04/03/20 17:39	994-05-8	N2
Benzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	71-43-2	
Bromobenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	108-86-1	
Bromochloromethane	**<23.1**	ug/kg	46.1	23.1	1		04/03/20 17:39	74-97-5	
Bromodichloromethane	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	75-27-4	
Bromoform	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	75-25-2	
Bromomethane	**<185**	ug/kg	185	185	1		04/03/20 17:39	74-83-9	L1
2-Butanone (MEK)	**<692**	ug/kg	692	692	1		04/03/20 17:39	78-93-3	
tert-Butyl Alcohol	**<2310**	ug/kg	2310	2310	1		04/03/20 17:39	75-65-0	
n-Butylbenzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	104-51-8	
sec-Butylbenzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	135-98-8	
tert-Butylbenzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	98-06-6	
Carbon disulfide	**<231**	ug/kg	231	231	1		04/03/20 17:39	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-105 (12-13') **Lab ID: 50253160014** Collected: 03/23/20 12:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	56-23-5	
Chlorobenzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	108-90-7	
Chloroethane	**<231**	ug/kg	231	231	1		04/03/20 17:39	75-00-3	
Chloroform	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	67-66-3	
Chloromethane	**<231**	ug/kg	231	231	1		04/03/20 17:39	74-87-3	
Cyclohexane	**<461**	ug/kg	461	461	1		04/03/20 17:39	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	96-12-8	
Dibromochloromethane	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	124-48-1	
1,2-Dibromoethane (EDB)	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	106-93-4	
Dibromomethane	**<231**	ug/kg	231	231	1		04/03/20 17:39	74-95-3	
1,2-Dichlorobenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	95-50-1	
1,3-Dichlorobenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	541-73-1	
1,4-Dichlorobenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	106-46-7	
trans-1,4-Dichloro-2-butene	**<92.3**	ug/kg	923	92.3	1		04/03/20 17:39	110-57-6	
Dichlorodifluoromethane	**<231**	ug/kg	231	231	1		04/03/20 17:39	75-71-8	
1,1-Dichloroethane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	75-34-3	
1,2-Dichloroethane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	107-06-2	
1,1-Dichloroethene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	75-35-4	
cis-1,2-Dichloroethene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	156-59-2	
trans-1,2-Dichloroethene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	156-60-5	
1,2-Dichloropropane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	78-87-5	
cis-1,3-Dichloropropene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	10061-01-5	
trans-1,3-Dichloropropene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	10061-02-6	
Diethyl ether (Ethyl ether)	**<185**	ug/kg	185	185	1		04/03/20 17:39	60-29-7	
Diisopropyl ether	**<231**	ug/kg	231	231	1		04/03/20 17:39	108-20-3	N2
Ethylbenzene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	100-41-4	
Ethyl-tert-butyl ether	**<231**	ug/kg	231	231	1		04/03/20 17:39	637-92-3	N2
Hexachloroethane	**<277**	ug/kg	277	277	1		04/03/20 17:39	67-72-1	N2
2-Hexanone	**<2310**	ug/kg	2310	2310	1		04/03/20 17:39	591-78-6	
Iodomethane	**<92.3**	ug/kg	923	92.3	1		04/03/20 17:39	74-88-4	
Isopropylbenzene (Cumene)	**<231**	ug/kg	231	231	1		04/03/20 17:39	98-82-8	
p-Isopropyltoluene	**<23.1**	ug/kg	46.1	23.1	1		04/03/20 17:39	99-87-6	
Methylene Chloride	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	75-09-2	
2-Methylnaphthalene	**<304**	ug/kg	304	304	1		04/03/20 17:39	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2310**	ug/kg	2310	2310	1		04/03/20 17:39	108-10-1	
Methyl-tert-butyl ether	**<231**	ug/kg	231	231	1		04/03/20 17:39	1634-04-4	
Naphthalene	**<304**	ug/kg	304	304	1		04/03/20 17:39	91-20-3	
n-Propylbenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	103-65-1	
Styrene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	79-34-5	
Tetrachloroethene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	127-18-4	
Tetrahydrofuran	**<923**	ug/kg	923	923	1		04/03/20 17:39	109-99-9	N2
Toluene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-105 (12-13') **Lab ID: 50253160014** Collected: 03/23/20 12:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<231**	ug/kg	231	231	1		04/03/20 17:39	87-61-6	
1,2,4-Trichlorobenzene	**<231**	ug/kg	231	231	1		04/03/20 17:39	120-82-1	
1,1,1-Trichloroethane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	71-55-6	
1,1,2-Trichloroethane	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	79-00-5	
Trichloroethene	**<46.1**	ug/kg	46.1	46.1	1		04/03/20 17:39	79-01-6	
Trichlorofluoromethane	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	75-69-4	
1,2,3-Trichloropropane	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	96-18-4	
1,2,3-Trimethylbenzene	**<231**	ug/kg	231	231	1		04/03/20 17:39	526-73-8	N2
1,2,4-Trimethylbenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	95-63-6	
1,3,5-Trimethylbenzene	**<92.3**	ug/kg	92.3	92.3	1		04/03/20 17:39	108-67-8	
Vinyl chloride	**<36.9**	ug/kg	36.9	36.9	1		04/03/20 17:39	75-01-4	
m&p-Xylene	**<23.1**	ug/kg	46.1	23.1	1		04/03/20 17:39	179601-23-1	
o-Xylene	**<23.1**	ug/kg	46.1	23.1	1		04/03/20 17:39	95-47-6	
Surrogates									
Dibromofluoromethane (S)	124	%.	62-137		1		04/03/20 17:39	1868-53-7	
Toluene-d8 (S)	132	%.	64-139		1		04/03/20 17:39	2037-26-5	
4-Bromofluorobenzene (S)	120	%.	60-142		1		04/03/20 17:39	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**15.2**	%	0.10	0.10	1		04/01/20 09:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-106 (5-6') **Lab ID: 50253160015** Collected: 03/25/20 08:22 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4810**	ug/kg	4810	4810	1		03/30/20 22:40	71-36-3	
Ethanol	**<2730**	ug/kg	2730	2730	1		03/30/20 22:40	64-17-5	B0
Methanol	**15200**	ug/kg	4810	4810	1		03/30/20 22:40	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	83-32-9	
Acenaphthylene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	208-96-8	
Anthracene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	120-12-7	
Benzo(a)anthracene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	56-55-3	
Benzo(a)pyrene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	50-32-8	
Benzo(b)fluoranthene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	205-99-2	
Benzo(g,h,i)perylene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	191-24-2	
Benzo(k)fluoranthene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	207-08-9	
Chrysene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	218-01-9	
Dibenz(a,h)anthracene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	53-70-3	
Fluoranthene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	206-44-0	
Fluorene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	86-73-7	
Indeno(1,2,3-cd)pyrene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	193-39-5	
2-Methylnaphthalene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	91-57-6	
Naphthalene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	91-20-3	
Phenanthrene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	85-01-8	
Pyrene	**<357**	ug/kg	357	357	1	04/03/20 09:30	04/03/20 20:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%.	37-111		1	04/03/20 09:30	04/03/20 20:02	321-60-8	
p-Terphenyl-d14 (S)	70	%.	29-124		1	04/03/20 09:30	04/03/20 20:02	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1040**	ug/kg	1040	1040	1		04/03/20 18:12	67-64-1	
Acrylonitrile	**<104**	ug/kg	104	104	1		04/03/20 18:12	107-13-1	
tert-Amylmethyl ether	**<260**	ug/kg	260	260	1		04/03/20 18:12	994-05-8	N2
Benzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	71-43-2	
Bromobenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	108-86-1	
Bromochloromethane	**<26.0**	ug/kg	52.1	26.0	1		04/03/20 18:12	74-97-5	
Bromodichloromethane	**<104**	ug/kg	104	104	1		04/03/20 18:12	75-27-4	
Bromoform	**<104**	ug/kg	104	104	1		04/03/20 18:12	75-25-2	
Bromomethane	**<208**	ug/kg	208	208	1		04/03/20 18:12	74-83-9	L1
2-Butanone (MEK)	**<781**	ug/kg	781	781	1		04/03/20 18:12	78-93-3	
tert-Butyl Alcohol	**<2600**	ug/kg	2600	2600	1		04/03/20 18:12	75-65-0	
n-Butylbenzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	104-51-8	
sec-Butylbenzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	135-98-8	
tert-Butylbenzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	98-06-6	
Carbon disulfide	**<260**	ug/kg	260	260	1		04/03/20 18:12	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-106 (5-6') **Lab ID: 50253160015** Collected: 03/25/20 08:22 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	56-23-5	
Chlorobenzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	108-90-7	
Chloroethane	**<260**	ug/kg	260	260	1		04/03/20 18:12	75-00-3	
Chloroform	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	67-66-3	
Chloromethane	**<260**	ug/kg	260	260	1		04/03/20 18:12	74-87-3	
Cyclohexane	**<521**	ug/kg	521	521	1		04/03/20 18:12	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	96-12-8	
Dibromochloromethane	**<104**	ug/kg	104	104	1		04/03/20 18:12	124-48-1	
1,2-Dibromoethane (EDB)	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	106-93-4	
Dibromomethane	**<260**	ug/kg	260	260	1		04/03/20 18:12	74-95-3	
1,2-Dichlorobenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	95-50-1	
1,3-Dichlorobenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	541-73-1	
1,4-Dichlorobenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	106-46-7	
trans-1,4-Dichloro-2-butene	**<104**	ug/kg	1040	104	1		04/03/20 18:12	110-57-6	
Dichlorodifluoromethane	**<260**	ug/kg	260	260	1		04/03/20 18:12	75-71-8	
1,1-Dichloroethane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	75-34-3	
1,2-Dichloroethane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	107-06-2	
1,1-Dichloroethene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	75-35-4	
cis-1,2-Dichloroethene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	156-59-2	
trans-1,2-Dichloroethene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	156-60-5	
1,2-Dichloropropane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	78-87-5	
cis-1,3-Dichloropropene	**<104**	ug/kg	104	104	1		04/03/20 18:12	10061-01-5	
trans-1,3-Dichloropropene	**<104**	ug/kg	104	104	1		04/03/20 18:12	10061-02-6	
Diethyl ether (Ethyl ether)	**<208**	ug/kg	208	208	1		04/03/20 18:12	60-29-7	
Diisopropyl ether	**<260**	ug/kg	260	260	1		04/03/20 18:12	108-20-3	N2
Ethylbenzene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	100-41-4	
Ethyl-tert-butyl ether	**<260**	ug/kg	260	260	1		04/03/20 18:12	637-92-3	N2
Hexachloroethane	**<312**	ug/kg	312	312	1		04/03/20 18:12	67-72-1	N2
2-Hexanone	**<2600**	ug/kg	2600	2600	1		04/03/20 18:12	591-78-6	
Iodomethane	**<104**	ug/kg	1040	104	1		04/03/20 18:12	74-88-4	
Isopropylbenzene (Cumene)	**<260**	ug/kg	260	260	1		04/03/20 18:12	98-82-8	
p-Isopropyltoluene	**<26.0**	ug/kg	52.1	26.0	1		04/03/20 18:12	99-87-6	
Methylene Chloride	**<104**	ug/kg	104	104	1		04/03/20 18:12	75-09-2	
2-Methylnaphthalene	**<344**	ug/kg	344	344	1		04/03/20 18:12	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2600**	ug/kg	2600	2600	1		04/03/20 18:12	108-10-1	
Methyl-tert-butyl ether	**<260**	ug/kg	260	260	1		04/03/20 18:12	1634-04-4	
Naphthalene	**<344**	ug/kg	344	344	1		04/03/20 18:12	91-20-3	
n-Propylbenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	103-65-1	
Styrene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	100-42-5	
1,1,1,2-Tetrachloroethane	**<104**	ug/kg	104	104	1		04/03/20 18:12	630-20-6	
1,1,2,2-Tetrachloroethane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	79-34-5	
Tetrachloroethene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	127-18-4	
Tetrahydrofuran	**<1040**	ug/kg	1040	1040	1		04/03/20 18:12	109-99-9	N2
Toluene	**<104**	ug/kg	104	104	1		04/03/20 18:12	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-106 (5-6') **Lab ID: 50253160015** Collected: 03/25/20 08:22 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<260**	ug/kg	260	260	1		04/03/20 18:12	87-61-6	
1,2,4-Trichlorobenzene	**<260**	ug/kg	260	260	1		04/03/20 18:12	120-82-1	
1,1,1-Trichloroethane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	71-55-6	
1,1,2-Trichloroethane	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	79-00-5	
Trichloroethene	**<52.1**	ug/kg	52.1	52.1	1		04/03/20 18:12	79-01-6	
Trichlorofluoromethane	**<104**	ug/kg	104	104	1		04/03/20 18:12	75-69-4	
1,2,3-Trichloropropane	**<104**	ug/kg	104	104	1		04/03/20 18:12	96-18-4	
1,2,3-Trimethylbenzene	**<260**	ug/kg	260	260	1		04/03/20 18:12	526-73-8	N2
1,2,4-Trimethylbenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	95-63-6	
1,3,5-Trimethylbenzene	**<104**	ug/kg	104	104	1		04/03/20 18:12	108-67-8	
Vinyl chloride	**<41.6**	ug/kg	41.6	41.6	1		04/03/20 18:12	75-01-4	
m&p-Xylene	**<26.0**	ug/kg	52.1	26.0	1		04/03/20 18:12	179601-23-1	
o-Xylene	**<26.0**	ug/kg	52.1	26.0	1		04/03/20 18:12	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		04/03/20 18:12	1868-53-7	
Toluene-d8 (S)	105	%.	64-139		1		04/03/20 18:12	2037-26-5	
4-Bromofluorobenzene (S)	95	%.	60-142		1		04/03/20 18:12	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**8.5**	%	0.10	0.10	1		04/01/20 09:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-107 (6-7') **Lab ID: 50253160016** Collected: 03/25/20 08:55 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5060**	ug/kg	5060	5060	1		03/30/20 22:49	71-36-3	
Ethanol	**<2870**	ug/kg	2870	2870	1		03/30/20 22:49	64-17-5	B0
Methanol	**14800**	ug/kg	5060	5060	1		03/30/20 22:49	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	83-32-9	
Acenaphthylene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	208-96-8	
Anthracene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	120-12-7	
Benzo(a)anthracene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	56-55-3	
Benzo(a)pyrene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	50-32-8	
Benzo(b)fluoranthene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	205-99-2	
Benzo(g,h,i)perylene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	191-24-2	
Benzo(k)fluoranthene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	207-08-9	
Chrysene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	218-01-9	
Dibenz(a,h)anthracene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	53-70-3	
Fluoranthene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	206-44-0	
Fluorene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	86-73-7	
Indeno(1,2,3-cd)pyrene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	193-39-5	
2-Methylnaphthalene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	91-57-6	
Naphthalene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	91-20-3	
Phenanthrene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	85-01-8	
Pyrene	**<374**	ug/kg	374	374	1	04/03/20 09:30	04/03/20 20:19	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%.	37-111		1	04/03/20 09:30	04/03/20 20:19	321-60-8	
p-Terphenyl-d14 (S)	69	%.	29-124		1	04/03/20 09:30	04/03/20 20:19	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1290**	ug/kg	1290	1290	1		04/03/20 18:44	67-64-1	
Acrylonitrile	**<129**	ug/kg	129	129	1		04/03/20 18:44	107-13-1	
tert-Amylmethyl ether	**<322**	ug/kg	322	322	1		04/03/20 18:44	994-05-8	N2
Benzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	71-43-2	
Bromobenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	108-86-1	
Bromochloromethane	**<32.2**	ug/kg	64.5	32.2	1		04/03/20 18:44	74-97-5	
Bromodichloromethane	**<129**	ug/kg	129	129	1		04/03/20 18:44	75-27-4	
Bromoform	**<129**	ug/kg	129	129	1		04/03/20 18:44	75-25-2	
Bromomethane	**<258**	ug/kg	258	258	1		04/03/20 18:44	74-83-9	L1
2-Butanone (MEK)	**<967**	ug/kg	967	967	1		04/03/20 18:44	78-93-3	
tert-Butyl Alcohol	**<3220**	ug/kg	3220	3220	1		04/03/20 18:44	75-65-0	
n-Butylbenzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	104-51-8	
sec-Butylbenzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	135-98-8	
tert-Butylbenzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	98-06-6	
Carbon disulfide	**<322**	ug/kg	322	322	1		04/03/20 18:44	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-107 (6-7') **Lab ID: 50253160016** Collected: 03/25/20 08:55 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	56-23-5	
Chlorobenzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	108-90-7	
Chloroethane	**<322**	ug/kg	322	322	1		04/03/20 18:44	75-00-3	
Chloroform	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	67-66-3	
Chloromethane	**<322**	ug/kg	322	322	1		04/03/20 18:44	74-87-3	
Cyclohexane	**<645**	ug/kg	645	645	1		04/03/20 18:44	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	96-12-8	
Dibromochloromethane	**<129**	ug/kg	129	129	1		04/03/20 18:44	124-48-1	
1,2-Dibromoethane (EDB)	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	106-93-4	
Dibromomethane	**<322**	ug/kg	322	322	1		04/03/20 18:44	74-95-3	
1,2-Dichlorobenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	95-50-1	
1,3-Dichlorobenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	541-73-1	
1,4-Dichlorobenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	106-46-7	
trans-1,4-Dichloro-2-butene	**<129**	ug/kg	1290	129	1		04/03/20 18:44	110-57-6	
Dichlorodifluoromethane	**<322**	ug/kg	322	322	1		04/03/20 18:44	75-71-8	
1,1-Dichloroethane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	75-34-3	
1,2-Dichloroethane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	107-06-2	
1,1-Dichloroethene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	75-35-4	
cis-1,2-Dichloroethene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	156-59-2	
trans-1,2-Dichloroethene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	156-60-5	
1,2-Dichloropropane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	78-87-5	
cis-1,3-Dichloropropene	**<129**	ug/kg	129	129	1		04/03/20 18:44	10061-01-5	
trans-1,3-Dichloropropene	**<129**	ug/kg	129	129	1		04/03/20 18:44	10061-02-6	
Diethyl ether (Ethyl ether)	**<258**	ug/kg	258	258	1		04/03/20 18:44	60-29-7	
Diisopropyl ether	**<322**	ug/kg	322	322	1		04/03/20 18:44	108-20-3	N2
Ethylbenzene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	100-41-4	
Ethyl-tert-butyl ether	**<322**	ug/kg	322	322	1		04/03/20 18:44	637-92-3	N2
Hexachloroethane	**<387**	ug/kg	387	387	1		04/03/20 18:44	67-72-1	N2
2-Hexanone	**<3220**	ug/kg	3220	3220	1		04/03/20 18:44	591-78-6	
Iodomethane	**<129**	ug/kg	1290	129	1		04/03/20 18:44	74-88-4	
Isopropylbenzene (Cumene)	**<322**	ug/kg	322	322	1		04/03/20 18:44	98-82-8	
p-Isopropyltoluene	**<32.2**	ug/kg	64.5	32.2	1		04/03/20 18:44	99-87-6	
Methylene Chloride	**<129**	ug/kg	129	129	1		04/03/20 18:44	75-09-2	
2-Methylnaphthalene	**<426**	ug/kg	426	426	1		04/03/20 18:44	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3220**	ug/kg	3220	3220	1		04/03/20 18:44	108-10-1	
Methyl-tert-butyl ether	**<322**	ug/kg	322	322	1		04/03/20 18:44	1634-04-4	
Naphthalene	**<426**	ug/kg	426	426	1		04/03/20 18:44	91-20-3	
n-Propylbenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	103-65-1	
Styrene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<129**	ug/kg	129	129	1		04/03/20 18:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	79-34-5	
Tetrachloroethene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	127-18-4	
Tetrahydrofuran	**<1290**	ug/kg	1290	1290	1		04/03/20 18:44	109-99-9	N2
Toluene	**<129**	ug/kg	129	129	1		04/03/20 18:44	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-107 (6-7') **Lab ID: 50253160016** Collected: 03/25/20 08:55 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<322**	ug/kg	322	322	1		04/03/20 18:44	87-61-6	
1,2,4-Trichlorobenzene	**<322**	ug/kg	322	322	1		04/03/20 18:44	120-82-1	
1,1,1-Trichloroethane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	71-55-6	
1,1,2-Trichloroethane	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	79-00-5	
Trichloroethene	**<64.5**	ug/kg	64.5	64.5	1		04/03/20 18:44	79-01-6	
Trichlorofluoromethane	**<129**	ug/kg	129	129	1		04/03/20 18:44	75-69-4	
1,2,3-Trichloropropane	**<129**	ug/kg	129	129	1		04/03/20 18:44	96-18-4	
1,2,3-Trimethylbenzene	**<322**	ug/kg	322	322	1		04/03/20 18:44	526-73-8	N2
1,2,4-Trimethylbenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	95-63-6	
1,3,5-Trimethylbenzene	**<129**	ug/kg	129	129	1		04/03/20 18:44	108-67-8	
Vinyl chloride	**<51.6**	ug/kg	51.6	51.6	1		04/03/20 18:44	75-01-4	
m&p-Xylene	**<32.2**	ug/kg	64.5	32.2	1		04/03/20 18:44	179601-23-1	
o-Xylene	**<32.2**	ug/kg	64.5	32.2	1		04/03/20 18:44	95-47-6	
Surrogates									
Dibromofluoromethane (S)	119	%.	62-137		1		04/03/20 18:44	1868-53-7	
Toluene-d8 (S)	118	%.	64-139		1		04/03/20 18:44	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		04/03/20 18:44	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**13.0**	%	0.10	0.10	1		04/01/20 09:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-108 (4-5') **Lab ID: 50253160017** Collected: 03/25/20 09:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4670**	ug/kg	4670	4670	1		03/30/20 22:58	71-36-3	
Ethanol	**<2660**	ug/kg	2660	2660	1		03/30/20 22:58	64-17-5	B0
Methanol	**13000**	ug/kg	4670	4670	1		03/30/20 22:58	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	83-32-9	
Acenaphthylene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	208-96-8	
Anthracene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	120-12-7	
Benzo(a)anthracene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	56-55-3	
Benzo(a)pyrene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	50-32-8	
Benzo(b)fluoranthene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	205-99-2	
Benzo(g,h,i)perylene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	191-24-2	
Benzo(k)fluoranthene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	207-08-9	
Chrysene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	218-01-9	
Dibenz(a,h)anthracene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	53-70-3	
Fluoranthene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	206-44-0	
Fluorene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	86-73-7	
Indeno(1,2,3-cd)pyrene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	193-39-5	
2-Methylnaphthalene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	91-57-6	
Naphthalene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	91-20-3	
Phenanthrene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	85-01-8	
Pyrene	**<349**	ug/kg	349	349	1	04/03/20 09:30	04/03/20 20:36	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%.	37-111		1	04/03/20 09:30	04/03/20 20:36	321-60-8	
p-Terphenyl-d14 (S)	84	%.	29-124		1	04/03/20 09:30	04/03/20 20:36	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1600**	ug/kg	1600	1600	1		04/03/20 19:17	67-64-1	
Acrylonitrile	**<160**	ug/kg	160	160	1		04/03/20 19:17	107-13-1	
tert-Amylmethyl ether	**<399**	ug/kg	399	399	1		04/03/20 19:17	994-05-8	N2
Benzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	71-43-2	
Bromobenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	108-86-1	
Bromochloromethane	**<39.9**	ug/kg	79.8	39.9	1		04/03/20 19:17	74-97-5	
Bromodichloromethane	**<160**	ug/kg	160	160	1		04/03/20 19:17	75-27-4	
Bromoform	**<160**	ug/kg	160	160	1		04/03/20 19:17	75-25-2	
Bromomethane	**<319**	ug/kg	319	319	1		04/03/20 19:17	74-83-9	L1
2-Butanone (MEK)	**<1200**	ug/kg	1200	1200	1		04/03/20 19:17	78-93-3	
tert-Butyl Alcohol	**<3990**	ug/kg	3990	3990	1		04/03/20 19:17	75-65-0	
n-Butylbenzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	104-51-8	
sec-Butylbenzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	135-98-8	
tert-Butylbenzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	98-06-6	
Carbon disulfide	**<399**	ug/kg	399	399	1		04/03/20 19:17	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-108 (4-5') **Lab ID: 50253160017** Collected: 03/25/20 09:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	56-23-5	
Chlorobenzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	108-90-7	
Chloroethane	**<399**	ug/kg	399	399	1		04/03/20 19:17	75-00-3	
Chloroform	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	67-66-3	
Chloromethane	**<399**	ug/kg	399	399	1		04/03/20 19:17	74-87-3	
Cyclohexane	**<798**	ug/kg	798	798	1		04/03/20 19:17	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	96-12-8	
Dibromochloromethane	**<160**	ug/kg	160	160	1		04/03/20 19:17	124-48-1	
1,2-Dibromoethane (EDB)	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	106-93-4	
Dibromomethane	**<399**	ug/kg	399	399	1		04/03/20 19:17	74-95-3	
1,2-Dichlorobenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	95-50-1	
1,3-Dichlorobenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	541-73-1	
1,4-Dichlorobenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	106-46-7	
trans-1,4-Dichloro-2-butene	**<160**	ug/kg	1600	160	1		04/03/20 19:17	110-57-6	
Dichlorodifluoromethane	**<399**	ug/kg	399	399	1		04/03/20 19:17	75-71-8	
1,1-Dichloroethane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	75-34-3	
1,2-Dichloroethane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	107-06-2	
1,1-Dichloroethene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	75-35-4	
cis-1,2-Dichloroethene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	156-59-2	
trans-1,2-Dichloroethene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	156-60-5	
1,2-Dichloropropane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	78-87-5	
cis-1,3-Dichloropropene	**<160**	ug/kg	160	160	1		04/03/20 19:17	10061-01-5	
trans-1,3-Dichloropropene	**<160**	ug/kg	160	160	1		04/03/20 19:17	10061-02-6	
Diethyl ether (Ethyl ether)	**<319**	ug/kg	319	319	1		04/03/20 19:17	60-29-7	
Diisopropyl ether	**<399**	ug/kg	399	399	1		04/03/20 19:17	108-20-3	N2
Ethylbenzene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	100-41-4	
Ethyl-tert-butyl ether	**<399**	ug/kg	399	399	1		04/03/20 19:17	637-92-3	N2
Hexachloroethane	**<479**	ug/kg	479	479	1		04/03/20 19:17	67-72-1	N2
2-Hexanone	**<3990**	ug/kg	3990	3990	1		04/03/20 19:17	591-78-6	
Iodomethane	**<160**	ug/kg	1600	160	1		04/03/20 19:17	74-88-4	
Isopropylbenzene (Cumene)	**<399**	ug/kg	399	399	1		04/03/20 19:17	98-82-8	
p-Isopropyltoluene	**<39.9**	ug/kg	79.8	39.9	1		04/03/20 19:17	99-87-6	
Methylene Chloride	**<160**	ug/kg	160	160	1		04/03/20 19:17	75-09-2	
2-Methylnaphthalene	**<527**	ug/kg	527	527	1		04/03/20 19:17	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3990**	ug/kg	3990	3990	1		04/03/20 19:17	108-10-1	
Methyl-tert-butyl ether	**<399**	ug/kg	399	399	1		04/03/20 19:17	1634-04-4	
Naphthalene	**<527**	ug/kg	527	527	1		04/03/20 19:17	91-20-3	
n-Propylbenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	103-65-1	
Styrene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	100-42-5	
1,1,1,2-Tetrachloroethane	**<160**	ug/kg	160	160	1		04/03/20 19:17	630-20-6	
1,1,2,2-Tetrachloroethane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	79-34-5	
Tetrachloroethene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	127-18-4	
Tetrahydrofuran	**<1600**	ug/kg	1600	1600	1		04/03/20 19:17	109-99-9	N2
Toluene	**<160**	ug/kg	160	160	1		04/03/20 19:17	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-108 (4-5') **Lab ID: 50253160017** Collected: 03/25/20 09:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<399**	ug/kg	399	399	1		04/03/20 19:17	87-61-6	
1,2,4-Trichlorobenzene	**<399**	ug/kg	399	399	1		04/03/20 19:17	120-82-1	
1,1,1-Trichloroethane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	71-55-6	
1,1,2-Trichloroethane	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	79-00-5	
Trichloroethene	**<79.8**	ug/kg	79.8	79.8	1		04/03/20 19:17	79-01-6	
Trichlorofluoromethane	**<160**	ug/kg	160	160	1		04/03/20 19:17	75-69-4	
1,2,3-Trichloropropane	**<160**	ug/kg	160	160	1		04/03/20 19:17	96-18-4	
1,2,3-Trimethylbenzene	**<399**	ug/kg	399	399	1		04/03/20 19:17	526-73-8	N2
1,2,4-Trimethylbenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	95-63-6	
1,3,5-Trimethylbenzene	**<160**	ug/kg	160	160	1		04/03/20 19:17	108-67-8	
Vinyl chloride	**<63.8**	ug/kg	63.8	63.8	1		04/03/20 19:17	75-01-4	
m&p-Xylene	**<39.9**	ug/kg	79.8	39.9	1		04/03/20 19:17	179601-23-1	
o-Xylene	**<39.9**	ug/kg	79.8	39.9	1		04/03/20 19:17	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		04/03/20 19:17	1868-53-7	
Toluene-d8 (S)	104	%.	64-139		1		04/03/20 19:17	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	60-142		1		04/03/20 19:17	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.8**	%	0.10	0.10	1		04/01/20 09:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-109 (4-5') **Lab ID: 50253160018** Collected: 03/25/20 09:40 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4640**	ug/kg	4640	4640	1		03/30/20 23:07	71-36-3	
Ethanol	**<2640**	ug/kg	2640	2640	1		03/30/20 23:07	64-17-5	B0
Methanol	**13300**	ug/kg	4640	4640	1		03/30/20 23:07	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	83-32-9	
Acenaphthylene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	208-96-8	
Anthracene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	120-12-7	
Benzo(a)anthracene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	56-55-3	
Benzo(a)pyrene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	50-32-8	
Benzo(b)fluoranthene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	205-99-2	
Benzo(g,h,i)perylene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	191-24-2	
Benzo(k)fluoranthene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	207-08-9	
Chrysene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	218-01-9	
Dibenz(a,h)anthracene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	53-70-3	
Fluoranthene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	206-44-0	
Fluorene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	86-73-7	
Indeno(1,2,3-cd)pyrene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	193-39-5	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	91-57-6	
Naphthalene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	91-20-3	
Phenanthrene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	85-01-8	
Pyrene	**<348**	ug/kg	348	348	1	04/03/20 09:30	04/03/20 20:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%.	37-111		1	04/03/20 09:30	04/03/20 20:53	321-60-8	
p-Terphenyl-d14 (S)	79	%.	29-124		1	04/03/20 09:30	04/03/20 20:53	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1020**	ug/kg	1020	1020	1		04/03/20 19:49	67-64-1	
Acrylonitrile	**<102**	ug/kg	102	102	1		04/03/20 19:49	107-13-1	
tert-Amylmethyl ether	**<255**	ug/kg	255	255	1		04/03/20 19:49	994-05-8	N2
Benzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	71-43-2	
Bromobenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	108-86-1	
Bromochloromethane	**<25.5**	ug/kg	51.0	25.5	1		04/03/20 19:49	74-97-5	
Bromodichloromethane	**<102**	ug/kg	102	102	1		04/03/20 19:49	75-27-4	
Bromoform	**<102**	ug/kg	102	102	1		04/03/20 19:49	75-25-2	
Bromomethane	**<204**	ug/kg	204	204	1		04/03/20 19:49	74-83-9	L1
2-Butanone (MEK)	**<764**	ug/kg	764	764	1		04/03/20 19:49	78-93-3	
tert-Butyl Alcohol	**<2550**	ug/kg	2550	2550	1		04/03/20 19:49	75-65-0	
n-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	104-51-8	
sec-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	135-98-8	
tert-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	98-06-6	
Carbon disulfide	**<255**	ug/kg	255	255	1		04/03/20 19:49	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-109 (4-5') **Lab ID: 50253160018** Collected: 03/25/20 09:40 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	56-23-5	
Chlorobenzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	108-90-7	
Chloroethane	**<255**	ug/kg	255	255	1		04/03/20 19:49	75-00-3	
Chloroform	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	67-66-3	
Chloromethane	**<255**	ug/kg	255	255	1		04/03/20 19:49	74-87-3	
Cyclohexane	**<510**	ug/kg	510	510	1		04/03/20 19:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	96-12-8	
Dibromochloromethane	**<102**	ug/kg	102	102	1		04/03/20 19:49	124-48-1	
1,2-Dibromoethane (EDB)	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	106-93-4	
Dibromomethane	**<255**	ug/kg	255	255	1		04/03/20 19:49	74-95-3	
1,2-Dichlorobenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	95-50-1	
1,3-Dichlorobenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	541-73-1	
1,4-Dichlorobenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<102**	ug/kg	1020	102	1		04/03/20 19:49	110-57-6	
Dichlorodifluoromethane	**<255**	ug/kg	255	255	1		04/03/20 19:49	75-71-8	
1,1-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	75-34-3	
1,2-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	107-06-2	
1,1-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	75-35-4	
cis-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	156-59-2	
trans-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	156-60-5	
1,2-Dichloropropane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	78-87-5	
cis-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		04/03/20 19:49	10061-01-5	
trans-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		04/03/20 19:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<204**	ug/kg	204	204	1		04/03/20 19:49	60-29-7	
Diisopropyl ether	**<255**	ug/kg	255	255	1		04/03/20 19:49	108-20-3	N2
Ethylbenzene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	100-41-4	
Ethyl-tert-butyl ether	**<255**	ug/kg	255	255	1		04/03/20 19:49	637-92-3	N2
Hexachloroethane	**<306**	ug/kg	306	306	1		04/03/20 19:49	67-72-1	N2
2-Hexanone	**<2550**	ug/kg	2550	2550	1		04/03/20 19:49	591-78-6	
Iodomethane	**<102**	ug/kg	1020	102	1		04/03/20 19:49	74-88-4	
Isopropylbenzene (Cumene)	**<255**	ug/kg	255	255	1		04/03/20 19:49	98-82-8	
p-Isopropyltoluene	**<25.5**	ug/kg	51.0	25.5	1		04/03/20 19:49	99-87-6	
Methylene Chloride	**<102**	ug/kg	102	102	1		04/03/20 19:49	75-09-2	
2-Methylnaphthalene	**<336**	ug/kg	336	336	1		04/03/20 19:49	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2550**	ug/kg	2550	2550	1		04/03/20 19:49	108-10-1	
Methyl-tert-butyl ether	**<255**	ug/kg	255	255	1		04/03/20 19:49	1634-04-4	
Naphthalene	**<336**	ug/kg	336	336	1		04/03/20 19:49	91-20-3	
n-Propylbenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	103-65-1	
Styrene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<102**	ug/kg	102	102	1		04/03/20 19:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	79-34-5	
Tetrachloroethene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	127-18-4	
Tetrahydrofuran	**<1020**	ug/kg	1020	1020	1		04/03/20 19:49	109-99-9	N2
Toluene	**<102**	ug/kg	102	102	1		04/03/20 19:49	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-109 (4-5') **Lab ID: 50253160018** Collected: 03/25/20 09:40 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<255**	ug/kg	255	255	1		04/03/20 19:49	87-61-6	
1,2,4-Trichlorobenzene	**<255**	ug/kg	255	255	1		04/03/20 19:49	120-82-1	
1,1,1-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	71-55-6	
1,1,2-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	79-00-5	
Trichloroethene	**<51.0**	ug/kg	51.0	51.0	1		04/03/20 19:49	79-01-6	
Trichlorofluoromethane	**<102**	ug/kg	102	102	1		04/03/20 19:49	75-69-4	
1,2,3-Trichloropropane	**<102**	ug/kg	102	102	1		04/03/20 19:49	96-18-4	
1,2,3-Trimethylbenzene	**<255**	ug/kg	255	255	1		04/03/20 19:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	95-63-6	
1,3,5-Trimethylbenzene	**<102**	ug/kg	102	102	1		04/03/20 19:49	108-67-8	
Vinyl chloride	**<40.8**	ug/kg	40.8	40.8	1		04/03/20 19:49	75-01-4	
m&p-Xylene	**<25.5**	ug/kg	51.0	25.5	1		04/03/20 19:49	179601-23-1	
o-Xylene	**<25.5**	ug/kg	51.0	25.5	1		04/03/20 19:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	100	%.	62-137		1		04/03/20 19:49	1868-53-7	
Toluene-d8 (S)	106	%.	64-139		1		04/03/20 19:49	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	60-142		1		04/03/20 19:49	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.2**	%	0.10	0.10	1		04/01/20 09:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-110 (4-5') **Lab ID: 50253160019** Collected: 03/25/20 10:05 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4670**	ug/kg	4670	4670	1		03/30/20 23:17	71-36-3	
Ethanol	**<2650**	ug/kg	2650	2650	1		03/30/20 23:17	64-17-5	B0
Methanol	**17600**	ug/kg	4670	4670	1		03/30/20 23:17	67-56-1	B0
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	83-32-9	
Acenaphthylene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	208-96-8	
Anthracene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	120-12-7	
Benzo(a)anthracene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	56-55-3	
Benzo(a)pyrene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	50-32-8	
Benzo(b)fluoranthene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	205-99-2	
Benzo(g,h,i)perylene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	191-24-2	
Benzo(k)fluoranthene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	207-08-9	
Chrysene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	218-01-9	
Dibenz(a,h)anthracene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	53-70-3	
Fluoranthene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	206-44-0	
Fluorene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	193-39-5	
2-Methylnaphthalene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	91-57-6	
Naphthalene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	91-20-3	
Phenanthrene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	85-01-8	
Pyrene	**<350**	ug/kg	350	350	1	04/03/20 09:30	04/03/20 21:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%.	37-111		1	04/03/20 09:30	04/03/20 21:44	321-60-8	
p-Terphenyl-d14 (S)	73	%.	29-124		1	04/03/20 09:30	04/03/20 21:44	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1110**	ug/kg	1110	1110	1		04/03/20 20:22	67-64-1	
Acrylonitrile	**<111**	ug/kg	111	111	1		04/03/20 20:22	107-13-1	
tert-Amylmethyl ether	**<276**	ug/kg	276	276	1		04/03/20 20:22	994-05-8	N2
Benzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	71-43-2	
Bromobenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	108-86-1	
Bromochloromethane	**<27.6**	ug/kg	55.3	27.6	1		04/03/20 20:22	74-97-5	
Bromodichloromethane	**<111**	ug/kg	111	111	1		04/03/20 20:22	75-27-4	
Bromoform	**<111**	ug/kg	111	111	1		04/03/20 20:22	75-25-2	
Bromomethane	**<221**	ug/kg	221	221	1		04/03/20 20:22	74-83-9	L1
2-Butanone (MEK)	**<829**	ug/kg	829	829	1		04/03/20 20:22	78-93-3	
tert-Butyl Alcohol	**<2760**	ug/kg	2760	2760	1		04/03/20 20:22	75-65-0	
n-Butylbenzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	104-51-8	
sec-Butylbenzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	135-98-8	
tert-Butylbenzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	98-06-6	
Carbon disulfide	**<276**	ug/kg	276	276	1		04/03/20 20:22	75-15-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-110 (4-5') **Lab ID: 50253160019** Collected: 03/25/20 10:05 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Carbon tetrachloride	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	56-23-5	
Chlorobenzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	108-90-7	
Chloroethane	**<276**	ug/kg	276	276	1		04/03/20 20:22	75-00-3	
Chloroform	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	67-66-3	
Chloromethane	**<276**	ug/kg	276	276	1		04/03/20 20:22	74-87-3	
Cyclohexane	**<553**	ug/kg	553	553	1		04/03/20 20:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	96-12-8	
Dibromochloromethane	**<111**	ug/kg	111	111	1		04/03/20 20:22	124-48-1	
1,2-Dibromoethane (EDB)	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	106-93-4	
Dibromomethane	**<276**	ug/kg	276	276	1		04/03/20 20:22	74-95-3	
1,2-Dichlorobenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	95-50-1	
1,3-Dichlorobenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	541-73-1	
1,4-Dichlorobenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<111**	ug/kg	1110	111	1		04/03/20 20:22	110-57-6	
Dichlorodifluoromethane	**<276**	ug/kg	276	276	1		04/03/20 20:22	75-71-8	
1,1-Dichloroethane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	75-34-3	
1,2-Dichloroethane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	107-06-2	
1,1-Dichloroethene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	75-35-4	
cis-1,2-Dichloroethene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	156-59-2	
trans-1,2-Dichloroethene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	156-60-5	
1,2-Dichloropropane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	78-87-5	
cis-1,3-Dichloropropene	**<111**	ug/kg	111	111	1		04/03/20 20:22	10061-01-5	
trans-1,3-Dichloropropene	**<111**	ug/kg	111	111	1		04/03/20 20:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<221**	ug/kg	221	221	1		04/03/20 20:22	60-29-7	
Diisopropyl ether	**<276**	ug/kg	276	276	1		04/03/20 20:22	108-20-3	N2
Ethylbenzene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	100-41-4	
Ethyl-tert-butyl ether	**<276**	ug/kg	276	276	1		04/03/20 20:22	637-92-3	N2
Hexachloroethane	**<332**	ug/kg	332	332	1		04/03/20 20:22	67-72-1	N2
2-Hexanone	**<2760**	ug/kg	2760	2760	1		04/03/20 20:22	591-78-6	
Iodomethane	**<111**	ug/kg	1110	111	1		04/03/20 20:22	74-88-4	
Isopropylbenzene (Cumene)	**<276**	ug/kg	276	276	1		04/03/20 20:22	98-82-8	
p-Isopropyltoluene	**<27.6**	ug/kg	55.3	27.6	1		04/03/20 20:22	99-87-6	
Methylene Chloride	**<111**	ug/kg	111	111	1		04/03/20 20:22	75-09-2	
2-Methylnaphthalene	**<365**	ug/kg	365	365	1		04/03/20 20:22	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2760**	ug/kg	2760	2760	1		04/03/20 20:22	108-10-1	
Methyl-tert-butyl ether	**<276**	ug/kg	276	276	1		04/03/20 20:22	1634-04-4	
Naphthalene	**<365**	ug/kg	365	365	1		04/03/20 20:22	91-20-3	
n-Propylbenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	103-65-1	
Styrene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<111**	ug/kg	111	111	1		04/03/20 20:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	79-34-5	
Tetrachloroethene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	127-18-4	
Tetrahydrofuran	**<1110**	ug/kg	1110	1110	1		04/03/20 20:22	109-99-9	N2
Toluene	**<111**	ug/kg	111	111	1		04/03/20 20:22	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-110 (4-5') **Lab ID: 50253160019** Collected: 03/25/20 10:05 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,2,3-Trichlorobenzene	**<276**	ug/kg	276	276	1		04/03/20 20:22	87-61-6	
1,2,4-Trichlorobenzene	**<276**	ug/kg	276	276	1		04/03/20 20:22	120-82-1	
1,1,1-Trichloroethane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	71-55-6	
1,1,2-Trichloroethane	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	79-00-5	
Trichloroethene	**<55.3**	ug/kg	55.3	55.3	1		04/03/20 20:22	79-01-6	
Trichlorofluoromethane	**<111**	ug/kg	111	111	1		04/03/20 20:22	75-69-4	
1,2,3-Trichloropropane	**<111**	ug/kg	111	111	1		04/03/20 20:22	96-18-4	
1,2,3-Trimethylbenzene	**<276**	ug/kg	276	276	1		04/03/20 20:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	95-63-6	
1,3,5-Trimethylbenzene	**<111**	ug/kg	111	111	1		04/03/20 20:22	108-67-8	
Vinyl chloride	**<44.2**	ug/kg	44.2	44.2	1		04/03/20 20:22	75-01-4	
m&p-Xylene	**<27.6**	ug/kg	55.3	27.6	1		04/03/20 20:22	179601-23-1	
o-Xylene	**<27.6**	ug/kg	55.3	27.6	1		04/03/20 20:22	95-47-6	
Surrogates									
Dibromofluoromethane (S)	100	%.	62-137		1		04/03/20 20:22	1868-53-7	
Toluene-d8 (S)	105	%.	64-139		1		04/03/20 20:22	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	60-142		1		04/03/20 20:22	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.8**	%	0.10	0.10	1		04/01/20 09:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (7-8') **Lab ID: 50253160020** Collected: 03/24/20 09:45 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4950**	ug/kg	4950	4950	1		03/30/20 23:26	71-36-3	
Ethanol	**<2810**	ug/kg	2810	2810	1		03/30/20 23:26	64-17-5	B0
Methanol	**11700**	ug/kg	4950	4950	1		03/30/20 23:26	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2140**	ug/kg	2140	2140	1	03/31/20 06:15	04/05/20 14:26	7440-38-2	
Barium	**8370**	ug/kg	1070	1070	1	03/31/20 06:15	04/05/20 14:26	7440-39-3	
Chromium	**5640**	ug/kg	2140	2140	1	03/31/20 06:15	04/05/20 14:26	7440-47-3	
Lead	**<10700**	ug/kg	10700	10700	1	03/31/20 06:15	04/05/20 14:26	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<210**	ug/kg	210	210	1	03/30/20 10:20	03/31/20 12:17	7440-43-9	
Selenium	**<2100**	ug/kg	2100	2100	10	03/30/20 10:20	04/02/20 03:48	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	03/30/20 10:20	03/31/20 12:17	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<61.3**	ug/kg	109	61.3	1	04/03/20 12:47	04/06/20 09:44	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	83-32-9	
Acenaphthylene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	208-96-8	
Anthracene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	120-12-7	
Benzo(a)anthracene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	56-55-3	
Benzo(a)pyrene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	50-32-8	
Benzo(b)fluoranthene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	205-99-2	
Benzo(g,h,i)perylene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	191-24-2	
Benzo(k)fluoranthene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	207-08-9	
Chrysene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	218-01-9	
Dibenz(a,h)anthracene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	53-70-3	
Fluoranthene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	206-44-0	
Fluorene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	193-39-5	
2-Methylnaphthalene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	91-57-6	
Naphthalene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	91-20-3	
Phenanthrene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	85-01-8	
Pyrene	**<371**	ug/kg	371	371	1	04/03/20 09:30	04/03/20 22:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%.	37-111		1	04/03/20 09:30	04/03/20 22:01	321-60-8	
p-Terphenyl-d14 (S)	79	%.	29-124		1	04/03/20 09:30	04/03/20 22:01	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (7-8') **Lab ID: 50253160020** Collected: 03/24/20 09:45 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1320**	ug/kg	1320	1320	1		04/03/20 20:55	67-64-1	
Acrylonitrile	**<132**	ug/kg	132	132	1		04/03/20 20:55	107-13-1	
tert-Amylmethyl ether	**<329**	ug/kg	329	329	1		04/03/20 20:55	994-05-8	N2
Benzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	71-43-2	
Bromobenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	108-86-1	
Bromochloromethane	**<32.9**	ug/kg	65.8	32.9	1		04/03/20 20:55	74-97-5	
Bromodichloromethane	**<132**	ug/kg	132	132	1		04/03/20 20:55	75-27-4	
Bromoform	**<132**	ug/kg	132	132	1		04/03/20 20:55	75-25-2	
Bromomethane	**<263**	ug/kg	263	263	1		04/03/20 20:55	74-83-9	L1
2-Butanone (MEK)	**<987**	ug/kg	987	987	1		04/03/20 20:55	78-93-3	
tert-Butyl Alcohol	**<3290**	ug/kg	3290	3290	1		04/03/20 20:55	75-65-0	
n-Butylbenzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	104-51-8	
sec-Butylbenzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	135-98-8	
tert-Butylbenzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	98-06-6	
Carbon disulfide	**<329**	ug/kg	329	329	1		04/03/20 20:55	75-15-0	
Carbon tetrachloride	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	56-23-5	
Chlorobenzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	108-90-7	
Chloroethane	**<329**	ug/kg	329	329	1		04/03/20 20:55	75-00-3	
Chloroform	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	67-66-3	
Chloromethane	**<329**	ug/kg	329	329	1		04/03/20 20:55	74-87-3	
Cyclohexane	**<658**	ug/kg	658	658	1		04/03/20 20:55	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	96-12-8	
Dibromochloromethane	**<132**	ug/kg	132	132	1		04/03/20 20:55	124-48-1	
1,2-Dibromoethane (EDB)	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	106-93-4	
Dibromomethane	**<329**	ug/kg	329	329	1		04/03/20 20:55	74-95-3	
1,2-Dichlorobenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	95-50-1	
1,3-Dichlorobenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	541-73-1	
1,4-Dichlorobenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	106-46-7	
trans-1,4-Dichloro-2-butene	**<132**	ug/kg	1320	132	1		04/03/20 20:55	110-57-6	
Dichlorodifluoromethane	**<329**	ug/kg	329	329	1		04/03/20 20:55	75-71-8	
1,1-Dichloroethane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	75-34-3	
1,2-Dichloroethane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	107-06-2	
1,1-Dichloroethene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	75-35-4	
cis-1,2-Dichloroethene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	156-59-2	
trans-1,2-Dichloroethene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	156-60-5	
1,2-Dichloropropane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	78-87-5	
cis-1,3-Dichloropropene	**<132**	ug/kg	132	132	1		04/03/20 20:55	10061-01-5	
trans-1,3-Dichloropropene	**<132**	ug/kg	132	132	1		04/03/20 20:55	10061-02-6	
Diethyl ether (Ethyl ether)	**<263**	ug/kg	263	263	1		04/03/20 20:55	60-29-7	
Diisopropyl ether	**<329**	ug/kg	329	329	1		04/03/20 20:55	108-20-3	N2
Ethylbenzene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	100-41-4	
Ethyl-tert-butyl ether	**<329**	ug/kg	329	329	1		04/03/20 20:55	637-92-3	N2
Hexachloroethane	**<395**	ug/kg	395	395	1		04/03/20 20:55	67-72-1	N2
2-Hexanone	**<3290**	ug/kg	3290	3290	1		04/03/20 20:55	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (7-8') **Lab ID: 50253160020** Collected: 03/24/20 09:45 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<132**	ug/kg	1320	132	1		04/03/20 20:55	74-88-4	
Isopropylbenzene (Cumene)	**<329**	ug/kg	329	329	1		04/03/20 20:55	98-82-8	
p-Isopropyltoluene	**<32.9**	ug/kg	65.8	32.9	1		04/03/20 20:55	99-87-6	
Methylene Chloride	**<132**	ug/kg	132	132	1		04/03/20 20:55	75-09-2	
2-Methylnaphthalene	**<434**	ug/kg	434	434	1		04/03/20 20:55	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3290**	ug/kg	3290	3290	1		04/03/20 20:55	108-10-1	
Methyl-tert-butyl ether	**<329**	ug/kg	329	329	1		04/03/20 20:55	1634-04-4	
Naphthalene	**<434**	ug/kg	434	434	1		04/03/20 20:55	91-20-3	
n-Propylbenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	103-65-1	
Styrene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<132**	ug/kg	132	132	1		04/03/20 20:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	79-34-5	
Tetrachloroethene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	127-18-4	
Tetrahydrofuran	**<1320**	ug/kg	1320	1320	1		04/03/20 20:55	109-99-9	N2
Toluene	**<132**	ug/kg	132	132	1		04/03/20 20:55	108-88-3	
1,2,3-Trichlorobenzene	**<329**	ug/kg	329	329	1		04/03/20 20:55	87-61-6	
1,2,4-Trichlorobenzene	**<329**	ug/kg	329	329	1		04/03/20 20:55	120-82-1	
1,1,1-Trichloroethane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	71-55-6	
1,1,2-Trichloroethane	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	79-00-5	
Trichloroethene	**<65.8**	ug/kg	65.8	65.8	1		04/03/20 20:55	79-01-6	
Trichlorofluoromethane	**<132**	ug/kg	132	132	1		04/03/20 20:55	75-69-4	
1,2,3-Trichloropropane	**<132**	ug/kg	132	132	1		04/03/20 20:55	96-18-4	
1,2,3-Trimethylbenzene	**<329**	ug/kg	329	329	1		04/03/20 20:55	526-73-8	N2
1,2,4-Trimethylbenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	95-63-6	
1,3,5-Trimethylbenzene	**<132**	ug/kg	132	132	1		04/03/20 20:55	108-67-8	
Vinyl chloride	**<52.6**	ug/kg	52.6	52.6	1		04/03/20 20:55	75-01-4	
m&p-Xylene	**<32.9**	ug/kg	65.8	32.9	1		04/03/20 20:55	179601-23-1	
o-Xylene	**<32.9**	ug/kg	65.8	32.9	1		04/03/20 20:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	110	%.	62-137		1		04/03/20 20:55	1868-53-7	
Toluene-d8 (S)	118	%.	64-139		1		04/03/20 20:55	2037-26-5	
4-Bromofluorobenzene (S)	112	%.	60-142		1		04/03/20 20:55	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**11.0**	%	0.10	0.10	1		04/01/20 09:03		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:03	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.6**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (8-9') **Lab ID: 50253160021** Collected: 03/24/20 11:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5170**	ug/kg	5170	5170	1		03/30/20 23:35	71-36-3	
Ethanol	**<2940**	ug/kg	2940	2940	1		03/30/20 23:35	64-17-5	B0
Methanol	**6850**	ug/kg	5170	5170	1		03/30/20 23:35	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**6350**	ug/kg	2210	2210	1	03/31/20 06:15	04/05/20 14:28	7440-38-2	
Barium	**63900**	ug/kg	1100	1100	1	03/31/20 06:15	04/05/20 14:28	7440-39-3	
Chromium	**16300**	ug/kg	2210	2210	1	03/31/20 06:15	04/05/20 14:28	7440-47-3	
Lead	**21500**	ug/kg	11000	11000	1	03/31/20 06:15	04/05/20 14:28	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**263**	ug/kg	219	219	1	03/30/20 10:20	03/31/20 12:26	7440-43-9	
Selenium	**<2190**	ug/kg	2190	2190	10	03/30/20 10:20	04/02/20 03:52	7782-49-2	D3
Silver	**<110**	ug/kg	110	110	1	03/30/20 10:20	03/31/20 12:26	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<67.7**	ug/kg	121	67.7	1	04/03/20 12:47	04/06/20 09:46	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	83-32-9	
Acenaphthylene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	208-96-8	
Anthracene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	120-12-7	
Benzo(a)anthracene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	56-55-3	
Benzo(a)pyrene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	50-32-8	
Benzo(b)fluoranthene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	205-99-2	
Benzo(g,h,i)perylene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	191-24-2	
Benzo(k)fluoranthene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	207-08-9	
Chrysene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	218-01-9	
Dibenz(a,h)anthracene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	53-70-3	
Fluoranthene	**724**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	206-44-0	
Fluorene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	193-39-5	
2-Methylnaphthalene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	91-57-6	
Naphthalene	**<383**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	91-20-3	
Phenanthrene	**561**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	85-01-8	
Pyrene	**528**	ug/kg	383	383	1	04/03/20 09:30	04/03/20 22:18	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%.	37-111		1	04/03/20 09:30	04/03/20 22:18	321-60-8	
p-Terphenyl-d14 (S)	68	%.	29-124		1	04/03/20 09:30	04/03/20 22:18	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (8-9') **Lab ID: 50253160021** Collected: 03/24/20 11:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<2030**	ug/kg	2030	2030	1		04/03/20 21:27	67-64-1	
Acrylonitrile	**<203**	ug/kg	203	203	1		04/03/20 21:27	107-13-1	
tert-Amylmethyl ether	**<507**	ug/kg	507	507	1		04/03/20 21:27	994-05-8	N2
Benzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	71-43-2	
Bromobenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	108-86-1	
Bromochloromethane	**<50.7**	ug/kg	101	50.7	1		04/03/20 21:27	74-97-5	
Bromodichloromethane	**<203**	ug/kg	203	203	1		04/03/20 21:27	75-27-4	
Bromoform	**<203**	ug/kg	203	203	1		04/03/20 21:27	75-25-2	
Bromomethane	**<406**	ug/kg	406	406	1		04/03/20 21:27	74-83-9	L1
2-Butanone (MEK)	**<1520**	ug/kg	1520	1520	1		04/03/20 21:27	78-93-3	
tert-Butyl Alcohol	**<5070**	ug/kg	5070	5070	1		04/03/20 21:27	75-65-0	
n-Butylbenzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	104-51-8	
sec-Butylbenzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	135-98-8	
tert-Butylbenzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	98-06-6	
Carbon disulfide	**<507**	ug/kg	507	507	1		04/03/20 21:27	75-15-0	
Carbon tetrachloride	**<101**	ug/kg	101	101	1		04/03/20 21:27	56-23-5	
Chlorobenzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	108-90-7	
Chloroethane	**<507**	ug/kg	507	507	1		04/03/20 21:27	75-00-3	
Chloroform	**<101**	ug/kg	101	101	1		04/03/20 21:27	67-66-3	
Chloromethane	**<507**	ug/kg	507	507	1		04/03/20 21:27	74-87-3	
Cyclohexane	**<1010**	ug/kg	1010	1010	1		04/03/20 21:27	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<101**	ug/kg	101	101	1		04/03/20 21:27	96-12-8	
Dibromochloromethane	**<203**	ug/kg	203	203	1		04/03/20 21:27	124-48-1	
1,2-Dibromoethane (EDB)	**<101**	ug/kg	101	101	1		04/03/20 21:27	106-93-4	
Dibromomethane	**<507**	ug/kg	507	507	1		04/03/20 21:27	74-95-3	
1,2-Dichlorobenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	95-50-1	
1,3-Dichlorobenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	541-73-1	
1,4-Dichlorobenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	106-46-7	
trans-1,4-Dichloro-2-butene	**<203**	ug/kg	2030	203	1		04/03/20 21:27	110-57-6	
Dichlorodifluoromethane	**<507**	ug/kg	507	507	1		04/03/20 21:27	75-71-8	
1,1-Dichloroethane	**<101**	ug/kg	101	101	1		04/03/20 21:27	75-34-3	
1,2-Dichloroethane	**<101**	ug/kg	101	101	1		04/03/20 21:27	107-06-2	
1,1-Dichloroethene	**<101**	ug/kg	101	101	1		04/03/20 21:27	75-35-4	
cis-1,2-Dichloroethene	**<101**	ug/kg	101	101	1		04/03/20 21:27	156-59-2	
trans-1,2-Dichloroethene	**<101**	ug/kg	101	101	1		04/03/20 21:27	156-60-5	
1,2-Dichloropropane	**<101**	ug/kg	101	101	1		04/03/20 21:27	78-87-5	
cis-1,3-Dichloropropene	**<203**	ug/kg	203	203	1		04/03/20 21:27	10061-01-5	
trans-1,3-Dichloropropene	**<203**	ug/kg	203	203	1		04/03/20 21:27	10061-02-6	
Diethyl ether (Ethyl ether)	**<406**	ug/kg	406	406	1		04/03/20 21:27	60-29-7	
Diisopropyl ether	**<507**	ug/kg	507	507	1		04/03/20 21:27	108-20-3	N2
Ethylbenzene	**<101**	ug/kg	101	101	1		04/03/20 21:27	100-41-4	
Ethyl-tert-butyl ether	**<507**	ug/kg	507	507	1		04/03/20 21:27	637-92-3	N2
Hexachloroethane	**<608**	ug/kg	608	608	1		04/03/20 21:27	67-72-1	N2
2-Hexanone	**<5070**	ug/kg	5070	5070	1		04/03/20 21:27	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (8-9') **Lab ID: 50253160021** Collected: 03/24/20 11:10 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<203**	ug/kg	2030	203	1		04/03/20 21:27	74-88-4	
Isopropylbenzene (Cumene)	**<507**	ug/kg	507	507	1		04/03/20 21:27	98-82-8	
p-Isopropyltoluene	**<50.7**	ug/kg	101	50.7	1		04/03/20 21:27	99-87-6	
Methylene Chloride	**<203**	ug/kg	203	203	1		04/03/20 21:27	75-09-2	
2-Methylnaphthalene	**<669**	ug/kg	669	669	1		04/03/20 21:27	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<5070**	ug/kg	5070	5070	1		04/03/20 21:27	108-10-1	
Methyl-tert-butyl ether	**<507**	ug/kg	507	507	1		04/03/20 21:27	1634-04-4	
Naphthalene	**<669**	ug/kg	669	669	1		04/03/20 21:27	91-20-3	
n-Propylbenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	103-65-1	
Styrene	**<101**	ug/kg	101	101	1		04/03/20 21:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<203**	ug/kg	203	203	1		04/03/20 21:27	630-20-6	
1,1,2,2-Tetrachloroethane	**<101**	ug/kg	101	101	1		04/03/20 21:27	79-34-5	
Tetrachloroethene	**<101**	ug/kg	101	101	1		04/03/20 21:27	127-18-4	
Tetrahydrofuran	**<2030**	ug/kg	2030	2030	1		04/03/20 21:27	109-99-9	N2
Toluene	**<203**	ug/kg	203	203	1		04/03/20 21:27	108-88-3	
1,2,3-Trichlorobenzene	**<507**	ug/kg	507	507	1		04/03/20 21:27	87-61-6	
1,2,4-Trichlorobenzene	**<507**	ug/kg	507	507	1		04/03/20 21:27	120-82-1	
1,1,1-Trichloroethane	**<101**	ug/kg	101	101	1		04/03/20 21:27	71-55-6	
1,1,2-Trichloroethane	**<101**	ug/kg	101	101	1		04/03/20 21:27	79-00-5	
Trichloroethene	**<101**	ug/kg	101	101	1		04/03/20 21:27	79-01-6	
Trichlorofluoromethane	**<203**	ug/kg	203	203	1		04/03/20 21:27	75-69-4	
1,2,3-Trichloropropane	**<203**	ug/kg	203	203	1		04/03/20 21:27	96-18-4	
1,2,3-Trimethylbenzene	**<507**	ug/kg	507	507	1		04/03/20 21:27	526-73-8	N2
1,2,4-Trimethylbenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	95-63-6	
1,3,5-Trimethylbenzene	**<203**	ug/kg	203	203	1		04/03/20 21:27	108-67-8	
Vinyl chloride	**<81.1**	ug/kg	81.1	81.1	1		04/03/20 21:27	75-01-4	
m&p-Xylene	**<50.7**	ug/kg	101	50.7	1		04/03/20 21:27	179601-23-1	
o-Xylene	**<50.7**	ug/kg	101	50.7	1		04/03/20 21:27	95-47-6	
Surrogates									
Dibromofluoromethane (S)	112	%.	62-137		1		04/03/20 21:27	1868-53-7	
Toluene-d8 (S)	116	%.	64-139		1		04/03/20 21:27	2037-26-5	
4-Bromofluorobenzene (S)	111	%.	60-142		1		04/03/20 21:27	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**15.0**	%	0.10	0.10	1		04/01/20 09:03		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:04	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**16.3**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (7-8') **Lab ID: 50253160022** Collected: 03/24/20 12:20 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5440**	ug/kg	5440	5440	1		03/30/20 23:45	71-36-3	
Ethanol	**<3090**	ug/kg	3090	3090	1		03/30/20 23:45	64-17-5	B0
Methanol	**13400**	ug/kg	5440	5440	1		03/30/20 23:45	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**24600**	ug/kg	2340	2340	1	03/31/20 06:15	04/05/20 14:30	7440-38-2	
Barium	**1950000**	ug/kg	5860	5860	5	03/31/20 06:15	04/05/20 14:43	7440-39-3	
Chromium	**179000**	ug/kg	2340	2340	1	03/31/20 06:15	04/05/20 14:30	7440-47-3	
Lead	**895000**	ug/kg	11700	11700	1	03/31/20 06:15	04/05/20 14:30	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**77000**	ug/kg	1220	1220	5	03/30/20 10:20	03/31/20 09:09	7440-43-9	
Selenium	**<1220**	ug/kg	1220	1220	5	03/30/20 10:20	03/31/20 09:09	7782-49-2	D3
Silver	**1390**	ug/kg	122	122	1	03/30/20 10:20	03/31/20 12:40	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**252**	ug/kg	122	68.3	1	04/03/20 12:47	04/06/20 09:49	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	83-32-9	
Acenaphthylene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	208-96-8	
Anthracene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	120-12-7	
Benzo(a)anthracene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	56-55-3	
Benzo(a)pyrene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	50-32-8	
Benzo(b)fluoranthene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	205-99-2	
Benzo(g,h,i)perylene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	191-24-2	
Benzo(k)fluoranthene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	207-08-9	
Chrysene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	218-01-9	
Dibenz(a,h)anthracene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	53-70-3	
Fluoranthene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	206-44-0	
Fluorene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	193-39-5	
2-Methylnaphthalene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	91-57-6	
Naphthalene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	91-20-3	
Phenanthrene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	85-01-8	
Pyrene	**<406**	ug/kg	406	406	1	04/07/20 12:40	04/07/20 14:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63	%.	37-111		1	04/07/20 12:40	04/07/20 14:34	321-60-8	
p-Terphenyl-d14 (S)	68	%.	29-124		1	04/07/20 12:40	04/07/20 14:34	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (7-8') **Lab ID: 50253160022** Collected: 03/24/20 12:20 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1490**	ug/kg	1490	1490	1		04/03/20 22:00	67-64-1	
Acrylonitrile	**<149**	ug/kg	149	149	1		04/03/20 22:00	107-13-1	
tert-Amylmethyl ether	**<372**	ug/kg	372	372	1		04/03/20 22:00	994-05-8	N2
Benzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	71-43-2	
Bromobenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	108-86-1	
Bromochloromethane	**<37.2**	ug/kg	74.4	37.2	1		04/03/20 22:00	74-97-5	
Bromodichloromethane	**<149**	ug/kg	149	149	1		04/03/20 22:00	75-27-4	
Bromoform	**<149**	ug/kg	149	149	1		04/03/20 22:00	75-25-2	
Bromomethane	**<297**	ug/kg	297	297	1		04/03/20 22:00	74-83-9	L1
2-Butanone (MEK)	**<1120**	ug/kg	1120	1120	1		04/03/20 22:00	78-93-3	
tert-Butyl Alcohol	**<3720**	ug/kg	3720	3720	1		04/03/20 22:00	75-65-0	
n-Butylbenzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	104-51-8	
sec-Butylbenzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	135-98-8	
tert-Butylbenzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	98-06-6	
Carbon disulfide	**<372**	ug/kg	372	372	1		04/03/20 22:00	75-15-0	
Carbon tetrachloride	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	56-23-5	
Chlorobenzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	108-90-7	
Chloroethane	**<372**	ug/kg	372	372	1		04/03/20 22:00	75-00-3	
Chloroform	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	67-66-3	
Chloromethane	**<372**	ug/kg	372	372	1		04/03/20 22:00	74-87-3	
Cyclohexane	**<744**	ug/kg	744	744	1		04/03/20 22:00	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	96-12-8	
Dibromochloromethane	**<149**	ug/kg	149	149	1		04/03/20 22:00	124-48-1	
1,2-Dibromoethane (EDB)	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	106-93-4	
Dibromomethane	**<372**	ug/kg	372	372	1		04/03/20 22:00	74-95-3	
1,2-Dichlorobenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	95-50-1	
1,3-Dichlorobenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	541-73-1	
1,4-Dichlorobenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	106-46-7	
trans-1,4-Dichloro-2-butene	**<149**	ug/kg	1490	149	1		04/03/20 22:00	110-57-6	
Dichlorodifluoromethane	**<372**	ug/kg	372	372	1		04/03/20 22:00	75-71-8	
1,1-Dichloroethane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	75-34-3	
1,2-Dichloroethane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	107-06-2	
1,1-Dichloroethene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	75-35-4	
cis-1,2-Dichloroethene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	156-59-2	
trans-1,2-Dichloroethene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	156-60-5	
1,2-Dichloropropane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	78-87-5	
cis-1,3-Dichloropropene	**<149**	ug/kg	149	149	1		04/03/20 22:00	10061-01-5	
trans-1,3-Dichloropropene	**<149**	ug/kg	149	149	1		04/03/20 22:00	10061-02-6	
Diethyl ether (Ethyl ether)	**<297**	ug/kg	297	297	1		04/03/20 22:00	60-29-7	
Diisopropyl ether	**<372**	ug/kg	372	372	1		04/03/20 22:00	108-20-3	N2
Ethylbenzene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	100-41-4	
Ethyl-tert-butyl ether	**<372**	ug/kg	372	372	1		04/03/20 22:00	637-92-3	N2
Hexachloroethane	**<446**	ug/kg	446	446	1		04/03/20 22:00	67-72-1	N2
2-Hexanone	**<3720**	ug/kg	3720	3720	1		04/03/20 22:00	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (7-8') **Lab ID: 50253160022** Collected: 03/24/20 12:20 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<149**	ug/kg	1490	149	1		04/03/20 22:00	74-88-4	
Isopropylbenzene (Cumene)	**<372**	ug/kg	372	372	1		04/03/20 22:00	98-82-8	
p-Isopropyltoluene	**<37.2**	ug/kg	74.4	37.2	1		04/03/20 22:00	99-87-6	
Methylene Chloride	**<149**	ug/kg	149	149	1		04/03/20 22:00	75-09-2	
2-Methylnaphthalene	**<491**	ug/kg	491	491	1		04/03/20 22:00	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3720**	ug/kg	3720	3720	1		04/03/20 22:00	108-10-1	
Methyl-tert-butyl ether	**<372**	ug/kg	372	372	1		04/03/20 22:00	1634-04-4	
Naphthalene	**<491**	ug/kg	491	491	1		04/03/20 22:00	91-20-3	
n-Propylbenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	103-65-1	
Styrene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	100-42-5	
1,1,1,2-Tetrachloroethane	**<149**	ug/kg	149	149	1		04/03/20 22:00	630-20-6	
1,1,2,2-Tetrachloroethane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	79-34-5	
Tetrachloroethene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	127-18-4	
Tetrahydrofuran	**<1490**	ug/kg	1490	1490	1		04/03/20 22:00	109-99-9	N2
Toluene	**<149**	ug/kg	149	149	1		04/03/20 22:00	108-88-3	
1,2,3-Trichlorobenzene	**<372**	ug/kg	372	372	1		04/03/20 22:00	87-61-6	
1,2,4-Trichlorobenzene	**<372**	ug/kg	372	372	1		04/03/20 22:00	120-82-1	
1,1,1-Trichloroethane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	71-55-6	
1,1,2-Trichloroethane	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	79-00-5	
Trichloroethene	**<74.4**	ug/kg	74.4	74.4	1		04/03/20 22:00	79-01-6	
Trichlorofluoromethane	**<149**	ug/kg	149	149	1		04/03/20 22:00	75-69-4	
1,2,3-Trichloropropane	**<149**	ug/kg	149	149	1		04/03/20 22:00	96-18-4	
1,2,3-Trimethylbenzene	**<372**	ug/kg	372	372	1		04/03/20 22:00	526-73-8	N2
1,2,4-Trimethylbenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	95-63-6	
1,3,5-Trimethylbenzene	**<149**	ug/kg	149	149	1		04/03/20 22:00	108-67-8	
Vinyl chloride	**<59.5**	ug/kg	59.5	59.5	1		04/03/20 22:00	75-01-4	
m&p-Xylene	**<37.2**	ug/kg	74.4	37.2	1		04/03/20 22:00	179601-23-1	
o-Xylene	**<37.2**	ug/kg	74.4	37.2	1		04/03/20 22:00	95-47-6	
Surrogates									
Dibromofluoromethane (S)	118	%.	62-137		1		04/03/20 22:00	1868-53-7	
Toluene-d8 (S)	125	%.	64-139		1		04/03/20 22:00	2037-26-5	
4-Bromofluorobenzene (S)	122	%.	60-142		1		04/03/20 22:00	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**19.1**	%	0.10	0.10	1		04/01/20 09:03		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A								
	Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.5**	mg/kg	2.5	2.5	1	04/17/20 09:08	04/18/20 10:04	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation								
	Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**179**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-1 **Lab ID: 50253160023** Collected: 03/23/20 12:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4870**	ug/kg	4870	4870	1		03/30/20 23:54	71-36-3	
Ethanol	**<2770**	ug/kg	2770	2770	1		03/30/20 23:54	64-17-5	B0
Methanol	**10800**	ug/kg	4870	4870	1		03/30/20 23:54	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<1870**	ug/kg	1870	1870	1	03/31/20 06:15	04/05/20 14:33	7440-38-2	
Barium	**17900**	ug/kg	933	933	1	03/31/20 06:15	04/05/20 14:33	7440-39-3	
Chromium	**5980**	ug/kg	1870	1870	1	03/31/20 06:15	04/05/20 14:33	7440-47-3	
Lead	**<9330**	ug/kg	9330	9330	1	03/31/20 06:15	04/05/20 14:33	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<216**	ug/kg	216	216	1	03/30/20 10:20	03/31/20 12:44	7440-43-9	
Selenium	**<1080**	ug/kg	1080	1080	5	03/30/20 10:20	03/31/20 09:13	7782-49-2	D3
Silver	**<108**	ug/kg	108	108	1	03/30/20 10:20	03/31/20 12:44	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<63.4**	ug/kg	113	63.4	1	04/03/20 12:47	04/06/20 09:51	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	83-32-9	
Acenaphthylene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	208-96-8	
Anthracene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	120-12-7	
Benzo(a)anthracene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	56-55-3	
Benzo(a)pyrene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	50-32-8	
Benzo(b)fluoranthene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	205-99-2	
Benzo(g,h,i)perylene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	191-24-2	
Benzo(k)fluoranthene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	207-08-9	
Chrysene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	218-01-9	
Dibenz(a,h)anthracene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	53-70-3	
Fluoranthene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	206-44-0	
Fluorene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	86-73-7	
Indeno(1,2,3-cd)pyrene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	193-39-5	
2-Methylnaphthalene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	91-57-6	
Naphthalene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	91-20-3	
Phenanthrene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	85-01-8	
Pyrene	**<361**	ug/kg	361	361	1	04/03/20 09:30	04/06/20 09:57	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%.	37-111		1	04/03/20 09:30	04/06/20 09:57	321-60-8	
p-Terphenyl-d14 (S)	70	%.	29-124		1	04/03/20 09:30	04/06/20 09:57	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-1 **Lab ID: 50253160023** Collected: 03/23/20 12:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1140**	ug/kg	1140	1140	1		04/03/20 22:33	67-64-1	
Acrylonitrile	**<114**	ug/kg	114	114	1		04/03/20 22:33	107-13-1	
tert-Amylmethyl ether	**<284**	ug/kg	284	284	1		04/03/20 22:33	994-05-8	N2
Benzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	71-43-2	
Bromobenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	108-86-1	
Bromochloromethane	**<28.4**	ug/kg	56.8	28.4	1		04/03/20 22:33	74-97-5	
Bromodichloromethane	**<114**	ug/kg	114	114	1		04/03/20 22:33	75-27-4	
Bromoform	**<114**	ug/kg	114	114	1		04/03/20 22:33	75-25-2	
Bromomethane	**<227**	ug/kg	227	227	1		04/03/20 22:33	74-83-9	L1
2-Butanone (MEK)	**<852**	ug/kg	852	852	1		04/03/20 22:33	78-93-3	
tert-Butyl Alcohol	**<2840**	ug/kg	2840	2840	1		04/03/20 22:33	75-65-0	
n-Butylbenzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	104-51-8	
sec-Butylbenzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	135-98-8	
tert-Butylbenzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	98-06-6	
Carbon disulfide	**<284**	ug/kg	284	284	1		04/03/20 22:33	75-15-0	
Carbon tetrachloride	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	56-23-5	
Chlorobenzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	108-90-7	
Chloroethane	**<284**	ug/kg	284	284	1		04/03/20 22:33	75-00-3	
Chloroform	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	67-66-3	
Chloromethane	**<284**	ug/kg	284	284	1		04/03/20 22:33	74-87-3	
Cyclohexane	**<568**	ug/kg	568	568	1		04/03/20 22:33	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	96-12-8	
Dibromochloromethane	**<114**	ug/kg	114	114	1		04/03/20 22:33	124-48-1	
1,2-Dibromoethane (EDB)	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	106-93-4	
Dibromomethane	**<284**	ug/kg	284	284	1		04/03/20 22:33	74-95-3	
1,2-Dichlorobenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	95-50-1	
1,3-Dichlorobenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	541-73-1	
1,4-Dichlorobenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	106-46-7	
trans-1,4-Dichloro-2-butene	**<114**	ug/kg	1140	114	1		04/03/20 22:33	110-57-6	
Dichlorodifluoromethane	**<284**	ug/kg	284	284	1		04/03/20 22:33	75-71-8	
1,1-Dichloroethane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	75-34-3	
1,2-Dichloroethane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	107-06-2	
1,1-Dichloroethene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	75-35-4	
cis-1,2-Dichloroethene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	156-59-2	
trans-1,2-Dichloroethene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	156-60-5	
1,2-Dichloropropane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	78-87-5	
cis-1,3-Dichloropropene	**<114**	ug/kg	114	114	1		04/03/20 22:33	10061-01-5	
trans-1,3-Dichloropropene	**<114**	ug/kg	114	114	1		04/03/20 22:33	10061-02-6	
Diethyl ether (Ethyl ether)	**<227**	ug/kg	227	227	1		04/03/20 22:33	60-29-7	
Diisopropyl ether	**<284**	ug/kg	284	284	1		04/03/20 22:33	108-20-3	N2
Ethylbenzene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	100-41-4	
Ethyl-tert-butyl ether	**<284**	ug/kg	284	284	1		04/03/20 22:33	637-92-3	N2
Hexachloroethane	**<341**	ug/kg	341	341	1		04/03/20 22:33	67-72-1	N2
2-Hexanone	**<2840**	ug/kg	2840	2840	1		04/03/20 22:33	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-1 **Lab ID: 50253160023** Collected: 03/23/20 12:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<114**	ug/kg	1140	114	1		04/03/20 22:33	74-88-4	
Isopropylbenzene (Cumene)	**<284**	ug/kg	284	284	1		04/03/20 22:33	98-82-8	
p-Isopropyltoluene	**<28.4**	ug/kg	56.8	28.4	1		04/03/20 22:33	99-87-6	
Methylene Chloride	**<114**	ug/kg	114	114	1		04/03/20 22:33	75-09-2	
2-Methylnaphthalene	**<375**	ug/kg	375	375	1		04/03/20 22:33	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2840**	ug/kg	2840	2840	1		04/03/20 22:33	108-10-1	
Methyl-tert-butyl ether	**<284**	ug/kg	284	284	1		04/03/20 22:33	1634-04-4	
Naphthalene	**<375**	ug/kg	375	375	1		04/03/20 22:33	91-20-3	
n-Propylbenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	103-65-1	
Styrene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	100-42-5	
1,1,1,2-Tetrachloroethane	**<114**	ug/kg	114	114	1		04/03/20 22:33	630-20-6	
1,1,2,2-Tetrachloroethane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	79-34-5	
Tetrachloroethene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	127-18-4	
Tetrahydrofuran	**<1140**	ug/kg	1140	1140	1		04/03/20 22:33	109-99-9	N2
Toluene	**<114**	ug/kg	114	114	1		04/03/20 22:33	108-88-3	
1,2,3-Trichlorobenzene	**<284**	ug/kg	284	284	1		04/03/20 22:33	87-61-6	
1,2,4-Trichlorobenzene	**<284**	ug/kg	284	284	1		04/03/20 22:33	120-82-1	
1,1,1-Trichloroethane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	71-55-6	
1,1,2-Trichloroethane	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	79-00-5	
Trichloroethene	**<56.8**	ug/kg	56.8	56.8	1		04/03/20 22:33	79-01-6	
Trichlorofluoromethane	**<114**	ug/kg	114	114	1		04/03/20 22:33	75-69-4	
1,2,3-Trichloropropane	**<114**	ug/kg	114	114	1		04/03/20 22:33	96-18-4	
1,2,3-Trimethylbenzene	**<284**	ug/kg	284	284	1		04/03/20 22:33	526-73-8	N2
1,2,4-Trimethylbenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	95-63-6	
1,3,5-Trimethylbenzene	**<114**	ug/kg	114	114	1		04/03/20 22:33	108-67-8	
Vinyl chloride	**<45.5**	ug/kg	45.5	45.5	1		04/03/20 22:33	75-01-4	
m&p-Xylene	**<28.4**	ug/kg	56.8	28.4	1		04/03/20 22:33	179601-23-1	
o-Xylene	**<28.4**	ug/kg	56.8	28.4	1		04/03/20 22:33	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		04/03/20 22:33	1868-53-7	
Toluene-d8 (S)	107	%.	64-139		1		04/03/20 22:33	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	60-142		1		04/03/20 22:33	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**9.6**	%	0.10	0.10	1		04/01/20 09:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-2 **Lab ID: 50253160024** Collected: 03/24/20 11:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5030**	ug/kg	5030	5030	1		03/31/20 00:03	71-36-3	
Ethanol	**<2860**	ug/kg	2860	2860	1		03/31/20 00:03	64-17-5	B0
Methanol	**39000**	ug/kg	5030	5030	1		03/31/20 00:03	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**9020**	ug/kg	2100	2100	1	03/31/20 06:15	04/05/20 14:35	7440-38-2	
Barium	**182000**	ug/kg	1050	1050	1	03/31/20 06:15	04/05/20 14:35	7440-39-3	
Chromium	**16400**	ug/kg	2100	2100	1	03/31/20 06:15	04/05/20 14:35	7440-47-3	
Lead	**38300**	ug/kg	10500	10500	1	03/31/20 06:15	04/05/20 14:35	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**1700**	ug/kg	222	222	1	03/30/20 10:20	03/31/20 12:53	7440-43-9	
Selenium	**<2220**	ug/kg	2220	2220	10	03/30/20 10:20	04/02/20 03:57	7782-49-2	D3
Silver	**135**	ug/kg	111	111	1	03/30/20 10:20	03/31/20 12:53	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**229**	ug/kg	109	61.0	1	04/03/20 12:47	04/06/20 09:54	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<3720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	83-32-9	
Acenaphthylene	**<3720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	208-96-8	
Anthracene	**10000**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	120-12-7	
Benzo(a)anthracene	**14300**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	56-55-3	
Benzo(a)pyrene	**13100**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	50-32-8	
Benzo(b)fluoranthene	**15100**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	205-99-2	
Benzo(g,h,i)perylene	**8220**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	191-24-2	
Benzo(k)fluoranthene	**8720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	207-08-9	
Chrysene	**12500**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	218-01-9	
Dibenz(a,h)anthracene	**<3720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	53-70-3	
Fluoranthene	**36600**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	206-44-0	
Fluorene	**<3720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**7320**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	193-39-5	
2-Methylnaphthalene	**<3720**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	91-57-6	
Naphthalene	**4090**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	91-20-3	ED
Phenanthrene	**31700**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	85-01-8	
Pyrene	**27100**	ug/kg	3720	3720	10	04/03/20 09:30	04/06/20 10:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%.	37-111		10	04/03/20 09:30	04/06/20 10:14	321-60-8	
p-Terphenyl-d14 (S)	89	%.	29-124		10	04/03/20 09:30	04/06/20 10:14	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-2 **Lab ID: 50253160024** Collected: 03/24/20 11:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1370**	ug/kg	1370	1370	1		04/03/20 23:06	67-64-1	
Acrylonitrile	**<137**	ug/kg	137	137	1		04/03/20 23:06	107-13-1	
tert-Amylmethyl ether	**<342**	ug/kg	342	342	1		04/03/20 23:06	994-05-8	N2
Benzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	71-43-2	
Bromobenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	108-86-1	
Bromochloromethane	**<34.2**	ug/kg	68.4	34.2	1		04/03/20 23:06	74-97-5	
Bromodichloromethane	**<137**	ug/kg	137	137	1		04/03/20 23:06	75-27-4	
Bromoform	**<137**	ug/kg	137	137	1		04/03/20 23:06	75-25-2	
Bromomethane	**<274**	ug/kg	274	274	1		04/03/20 23:06	74-83-9	L1
2-Butanone (MEK)	**<1030**	ug/kg	1030	1030	1		04/03/20 23:06	78-93-3	
tert-Butyl Alcohol	**<3420**	ug/kg	3420	3420	1		04/03/20 23:06	75-65-0	
n-Butylbenzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	104-51-8	
sec-Butylbenzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	135-98-8	
tert-Butylbenzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	98-06-6	
Carbon disulfide	**<342**	ug/kg	342	342	1		04/03/20 23:06	75-15-0	
Carbon tetrachloride	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	56-23-5	
Chlorobenzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	108-90-7	
Chloroethane	**<342**	ug/kg	342	342	1		04/03/20 23:06	75-00-3	
Chloroform	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	67-66-3	
Chloromethane	**<342**	ug/kg	342	342	1		04/03/20 23:06	74-87-3	
Cyclohexane	**<684**	ug/kg	684	684	1		04/03/20 23:06	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	96-12-8	
Dibromochloromethane	**<137**	ug/kg	137	137	1		04/03/20 23:06	124-48-1	
1,2-Dibromoethane (EDB)	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	106-93-4	
Dibromomethane	**<342**	ug/kg	342	342	1		04/03/20 23:06	74-95-3	
1,2-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	95-50-1	
1,3-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	541-73-1	
1,4-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	106-46-7	
trans-1,4-Dichloro-2-butene	**<137**	ug/kg	1370	137	1		04/03/20 23:06	110-57-6	
Dichlorodifluoromethane	**<342**	ug/kg	342	342	1		04/03/20 23:06	75-71-8	
1,1-Dichloroethane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	75-34-3	
1,2-Dichloroethane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	107-06-2	
1,1-Dichloroethene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	75-35-4	
cis-1,2-Dichloroethene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	156-59-2	
trans-1,2-Dichloroethene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	156-60-5	
1,2-Dichloropropane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	78-87-5	
cis-1,3-Dichloropropene	**<137**	ug/kg	137	137	1		04/03/20 23:06	10061-01-5	
trans-1,3-Dichloropropene	**<137**	ug/kg	137	137	1		04/03/20 23:06	10061-02-6	
Diethyl ether (Ethyl ether)	**<274**	ug/kg	274	274	1		04/03/20 23:06	60-29-7	
Diisopropyl ether	**<342**	ug/kg	342	342	1		04/03/20 23:06	108-20-3	N2
Ethylbenzene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	100-41-4	
Ethyl-tert-butyl ether	**<342**	ug/kg	342	342	1		04/03/20 23:06	637-92-3	N2
Hexachloroethane	**<411**	ug/kg	411	411	1		04/03/20 23:06	67-72-1	N2
2-Hexanone	**<3420**	ug/kg	3420	3420	1		04/03/20 23:06	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Dup-2 **Lab ID: 50253160024** Collected: 03/24/20 11:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<137**	ug/kg	1370	137	1		04/03/20 23:06	74-88-4	
Isopropylbenzene (Cumene)	**<342**	ug/kg	342	342	1		04/03/20 23:06	98-82-8	
p-Isopropyltoluene	**<34.2**	ug/kg	68.4	34.2	1		04/03/20 23:06	99-87-6	
Methylene Chloride	**<137**	ug/kg	137	137	1		04/03/20 23:06	75-09-2	
2-Methylnaphthalene	**<452**	ug/kg	452	452	1		04/03/20 23:06	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3420**	ug/kg	3420	3420	1		04/03/20 23:06	108-10-1	
Methyl-tert-butyl ether	**<342**	ug/kg	342	342	1		04/03/20 23:06	1634-04-4	
Naphthalene	**<452**	ug/kg	452	452	1		04/03/20 23:06	91-20-3	
n-Propylbenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	103-65-1	
Styrene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	100-42-5	
1,1,1,2-Tetrachloroethane	**<137**	ug/kg	137	137	1		04/03/20 23:06	630-20-6	
1,1,2,2-Tetrachloroethane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	79-34-5	
Tetrachloroethene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	127-18-4	
Tetrahydrofuran	**<1370**	ug/kg	1370	1370	1		04/03/20 23:06	109-99-9	N2
Toluene	**<137**	ug/kg	137	137	1		04/03/20 23:06	108-88-3	
1,2,3-Trichlorobenzene	**<342**	ug/kg	342	342	1		04/03/20 23:06	87-61-6	
1,2,4-Trichlorobenzene	**<342**	ug/kg	342	342	1		04/03/20 23:06	120-82-1	
1,1,1-Trichloroethane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	71-55-6	
1,1,2-Trichloroethane	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	79-00-5	
Trichloroethene	**<68.4**	ug/kg	68.4	68.4	1		04/03/20 23:06	79-01-6	
Trichlorofluoromethane	**<137**	ug/kg	137	137	1		04/03/20 23:06	75-69-4	
1,2,3-Trichloropropane	**<137**	ug/kg	137	137	1		04/03/20 23:06	96-18-4	
1,2,3-Trimethylbenzene	**<342**	ug/kg	342	342	1		04/03/20 23:06	526-73-8	N2
1,2,4-Trimethylbenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	95-63-6	
1,3,5-Trimethylbenzene	**<137**	ug/kg	137	137	1		04/03/20 23:06	108-67-8	
Vinyl chloride	**<54.7**	ug/kg	54.7	54.7	1		04/03/20 23:06	75-01-4	
m&p-Xylene	**<34.2**	ug/kg	68.4	34.2	1		04/03/20 23:06	179601-23-1	
o-Xylene	**<34.2**	ug/kg	68.4	34.2	1		04/03/20 23:06	95-47-6	
Surrogates									
Dibromofluoromethane (S)	111	%.	62-137		1		04/03/20 23:06	1868-53-7	
Toluene-d8 (S)	117	%.	64-139		1		04/03/20 23:06	2037-26-5	
4-Bromofluorobenzene (S)	115	%.	60-142		1		04/03/20 23:06	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**12.5**	%	0.10	0.10	1		04/01/20 09:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (2-3') **Lab ID: 50253160025** Collected: 03/23/20 15:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4910**	ug/kg	4910	4910	1		03/31/20 00:13	71-36-3	
Ethanol	**<2790**	ug/kg	2790	2790	1		03/31/20 00:13	64-17-5	B0
Methanol	**233000**	ug/kg	4910	4910	1		03/31/20 00:13	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**3260**	ug/kg	2200	2200	1	03/31/20 06:15	04/05/20 14:37	7440-38-2	
Barium	**24700**	ug/kg	1100	1100	1	03/31/20 06:15	04/05/20 14:37	7440-39-3	
Chromium	**7150**	ug/kg	2200	2200	1	03/31/20 06:15	04/05/20 14:37	7440-47-3	
Lead	**13800**	ug/kg	11000	11000	1	03/31/20 06:15	04/05/20 14:37	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**249**	ug/kg	219	219	1	03/30/20 10:20	03/31/20 13:07	7440-43-9	
Selenium	**<1090**	ug/kg	1090	1090	5	03/30/20 10:20	03/31/20 09:32	7782-49-2	D3
Silver	**<109**	ug/kg	109	109	1	03/30/20 10:20	03/31/20 13:07	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<61.5**	ug/kg	110	61.5	1	04/03/20 12:47	04/06/20 09:56	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	83-32-9	
Acenaphthylene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	208-96-8	
Anthracene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	120-12-7	
Benzo(a)anthracene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	56-55-3	
Benzo(a)pyrene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	50-32-8	
Benzo(b)fluoranthene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	205-99-2	
Benzo(g,h,i)perylene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	191-24-2	
Benzo(k)fluoranthene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	207-08-9	
Chrysene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	218-01-9	
Dibenz(a,h)anthracene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	53-70-3	
Fluoranthene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	206-44-0	
Fluorene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	86-73-7	
Indeno(1,2,3-cd)pyrene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	193-39-5	
2-Methylnaphthalene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	91-57-6	
Naphthalene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	91-20-3	
Phenanthrene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	85-01-8	
Pyrene	**<368**	ug/kg	368	368	1	04/03/20 09:30	04/06/20 10:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	37-111		1	04/03/20 09:30	04/06/20 10:31	321-60-8	
p-Terphenyl-d14 (S)	67	%.	29-124		1	04/03/20 09:30	04/06/20 10:31	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (2-3') **Lab ID: 50253160025** Collected: 03/23/20 15:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1210**	ug/kg	1210	1210	1		04/03/20 23:38	67-64-1	
Acrylonitrile	**<121**	ug/kg	121	121	1		04/03/20 23:38	107-13-1	
tert-Amylmethyl ether	**<303**	ug/kg	303	303	1		04/03/20 23:38	994-05-8	N2
Benzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	71-43-2	
Bromobenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	108-86-1	
Bromochloromethane	**<30.3**	ug/kg	60.6	30.3	1		04/03/20 23:38	74-97-5	
Bromodichloromethane	**<121**	ug/kg	121	121	1		04/03/20 23:38	75-27-4	
Bromoform	**<121**	ug/kg	121	121	1		04/03/20 23:38	75-25-2	
Bromomethane	**<242**	ug/kg	242	242	1		04/03/20 23:38	74-83-9	L1
2-Butanone (MEK)	**<909**	ug/kg	909	909	1		04/03/20 23:38	78-93-3	
tert-Butyl Alcohol	**<3030**	ug/kg	3030	3030	1		04/03/20 23:38	75-65-0	
n-Butylbenzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	104-51-8	
sec-Butylbenzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	135-98-8	
tert-Butylbenzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	98-06-6	
Carbon disulfide	**<303**	ug/kg	303	303	1		04/03/20 23:38	75-15-0	
Carbon tetrachloride	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	56-23-5	
Chlorobenzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	108-90-7	
Chloroethane	**<303**	ug/kg	303	303	1		04/03/20 23:38	75-00-3	
Chloroform	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	67-66-3	
Chloromethane	**<303**	ug/kg	303	303	1		04/03/20 23:38	74-87-3	
Cyclohexane	**<606**	ug/kg	606	606	1		04/03/20 23:38	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	96-12-8	
Dibromochloromethane	**<121**	ug/kg	121	121	1		04/03/20 23:38	124-48-1	
1,2-Dibromoethane (EDB)	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	106-93-4	
Dibromomethane	**<303**	ug/kg	303	303	1		04/03/20 23:38	74-95-3	
1,2-Dichlorobenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	95-50-1	
1,3-Dichlorobenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	541-73-1	
1,4-Dichlorobenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	106-46-7	
trans-1,4-Dichloro-2-butene	**<121**	ug/kg	1210	121	1		04/03/20 23:38	110-57-6	
Dichlorodifluoromethane	**<303**	ug/kg	303	303	1		04/03/20 23:38	75-71-8	
1,1-Dichloroethane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	75-34-3	
1,2-Dichloroethane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	107-06-2	
1,1-Dichloroethene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	75-35-4	
cis-1,2-Dichloroethene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	156-59-2	
trans-1,2-Dichloroethene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	156-60-5	
1,2-Dichloropropane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	78-87-5	
cis-1,3-Dichloropropene	**<121**	ug/kg	121	121	1		04/03/20 23:38	10061-01-5	
trans-1,3-Dichloropropene	**<121**	ug/kg	121	121	1		04/03/20 23:38	10061-02-6	
Diethyl ether (Ethyl ether)	**<242**	ug/kg	242	242	1		04/03/20 23:38	60-29-7	
Diisopropyl ether	**<303**	ug/kg	303	303	1		04/03/20 23:38	108-20-3	N2
Ethylbenzene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	100-41-4	
Ethyl-tert-butyl ether	**<303**	ug/kg	303	303	1		04/03/20 23:38	637-92-3	N2
Hexachloroethane	**<364**	ug/kg	364	364	1		04/03/20 23:38	67-72-1	N2
2-Hexanone	**<3030**	ug/kg	3030	3030	1		04/03/20 23:38	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-113 (2-3') **Lab ID: 50253160025** Collected: 03/23/20 15:50 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<121**	ug/kg	1210	121	1		04/03/20 23:38	74-88-4	
Isopropylbenzene (Cumene)	**<303**	ug/kg	303	303	1		04/03/20 23:38	98-82-8	
p-Isopropyltoluene	**<30.3**	ug/kg	60.6	30.3	1		04/03/20 23:38	99-87-6	
Methylene Chloride	**<121**	ug/kg	121	121	1		04/03/20 23:38	75-09-2	
2-Methylnaphthalene	**<400**	ug/kg	400	400	1		04/03/20 23:38	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3030**	ug/kg	3030	3030	1		04/03/20 23:38	108-10-1	
Methyl-tert-butyl ether	**<303**	ug/kg	303	303	1		04/03/20 23:38	1634-04-4	
Naphthalene	**<400**	ug/kg	400	400	1		04/03/20 23:38	91-20-3	
n-Propylbenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	103-65-1	
Styrene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<121**	ug/kg	121	121	1		04/03/20 23:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	79-34-5	
Tetrachloroethene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	127-18-4	
Tetrahydrofuran	**<1210**	ug/kg	1210	1210	1		04/03/20 23:38	109-99-9	N2
Toluene	**<121**	ug/kg	121	121	1		04/03/20 23:38	108-88-3	
1,2,3-Trichlorobenzene	**<303**	ug/kg	303	303	1		04/03/20 23:38	87-61-6	
1,2,4-Trichlorobenzene	**<303**	ug/kg	303	303	1		04/03/20 23:38	120-82-1	
1,1,1-Trichloroethane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	71-55-6	
1,1,2-Trichloroethane	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	79-00-5	
Trichloroethene	**<60.6**	ug/kg	60.6	60.6	1		04/03/20 23:38	79-01-6	
Trichlorofluoromethane	**<121**	ug/kg	121	121	1		04/03/20 23:38	75-69-4	
1,2,3-Trichloropropane	**<121**	ug/kg	121	121	1		04/03/20 23:38	96-18-4	
1,2,3-Trimethylbenzene	**<303**	ug/kg	303	303	1		04/03/20 23:38	526-73-8	N2
1,2,4-Trimethylbenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	95-63-6	
1,3,5-Trimethylbenzene	**<121**	ug/kg	121	121	1		04/03/20 23:38	108-67-8	
Vinyl chloride	**<48.5**	ug/kg	48.5	48.5	1		04/03/20 23:38	75-01-4	
m&p-Xylene	**<30.3**	ug/kg	60.6	30.3	1		04/03/20 23:38	179601-23-1	
o-Xylene	**<30.3**	ug/kg	60.6	30.3	1		04/03/20 23:38	95-47-6	
Surrogates									
Dibromofluoromethane (S)	111	%.	62-137		1		04/03/20 23:38	1868-53-7	
Toluene-d8 (S)	118	%.	64-139		1		04/03/20 23:38	2037-26-5	
4-Bromofluorobenzene (S)	113	%.	60-142		1		04/03/20 23:38	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**10.4**	%	0.10	0.10	1		04/01/20 09:03		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:04	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**7.2**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (3-4') **Lab ID: 50253160026** Collected: 03/24/20 11:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5300**	ug/kg	5300	5300	1		03/31/20 00:22	71-36-3	
Ethanol	**<3010**	ug/kg	3010	3010	1		03/31/20 00:22	64-17-5	B0
Methanol	**43000**	ug/kg	5300	5300	1		03/31/20 00:22	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**7760**	ug/kg	2030	2030	1	03/31/20 06:15	04/05/20 14:39	7440-38-2	
Barium	**225000**	ug/kg	1010	1010	1	03/31/20 06:15	04/05/20 14:39	7440-39-3	
Chromium	**11600**	ug/kg	2030	2030	1	03/31/20 06:15	04/05/20 14:39	7440-47-3	
Lead	**75900**	ug/kg	10100	10100	1	03/31/20 06:15	04/05/20 14:39	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**2800**	ug/kg	241	241	1	03/30/20 10:20	03/31/20 13:12	7440-43-9	
Selenium	**<2410**	ug/kg	2410	2410	10	03/30/20 10:20	04/02/20 04:02	7782-49-2	D3
Silver	**2890**	ug/kg	120	120	1	03/30/20 10:20	03/31/20 13:12	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**218**	ug/kg	123	69.0	1	04/03/20 12:47	04/06/20 09:59	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<3950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	83-32-9	
Acenaphthylene	**<3950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	208-96-8	
Anthracene	**11100**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	120-12-7	
Benzo(a)anthracene	**12600**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	56-55-3	
Benzo(a)pyrene	**11600**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	50-32-8	
Benzo(b)fluoranthene	**12700**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	205-99-2	
Benzo(g,h,i)perylene	**6950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	191-24-2	
Benzo(k)fluoranthene	**7880**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	207-08-9	
Chrysene	**11400**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	218-01-9	
Dibenz(a,h)anthracene	**<3950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	53-70-3	
Fluoranthene	**33900**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	206-44-0	
Fluorene	**4400**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**6190**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	193-39-5	
2-Methylnaphthalene	**<3950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	91-57-6	
Naphthalene	**<3950**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	91-20-3	ED
Phenanthrene	**33500**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	85-01-8	
Pyrene	**24900**	ug/kg	3950	3950	10	04/03/20 09:30	04/03/20 16:22	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	31	%.	37-111		10	04/03/20 09:30	04/03/20 16:22	321-60-8	S4
p-Terphenyl-d14 (S)	39	%.	29-124		10	04/03/20 09:30	04/03/20 16:22	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (3-4') **Lab ID: 50253160026** Collected: 03/24/20 11:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1870**	ug/kg	1870	1870	1		04/04/20 00:11	67-64-1	
Acrylonitrile	**<187**	ug/kg	187	187	1		04/04/20 00:11	107-13-1	
tert-Amylmethyl ether	**<468**	ug/kg	468	468	1		04/04/20 00:11	994-05-8	N2
Benzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	71-43-2	
Bromobenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	108-86-1	
Bromochloromethane	**<46.8**	ug/kg	93.7	46.8	1		04/04/20 00:11	74-97-5	
Bromodichloromethane	**<187**	ug/kg	187	187	1		04/04/20 00:11	75-27-4	
Bromoform	**<187**	ug/kg	187	187	1		04/04/20 00:11	75-25-2	
Bromomethane	**<375**	ug/kg	375	375	1		04/04/20 00:11	74-83-9	L1
2-Butanone (MEK)	**<1410**	ug/kg	1410	1410	1		04/04/20 00:11	78-93-3	
tert-Butyl Alcohol	**<4680**	ug/kg	4680	4680	1		04/04/20 00:11	75-65-0	
n-Butylbenzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	104-51-8	
sec-Butylbenzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	135-98-8	
tert-Butylbenzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	98-06-6	
Carbon disulfide	**<468**	ug/kg	468	468	1		04/04/20 00:11	75-15-0	
Carbon tetrachloride	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	56-23-5	
Chlorobenzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	108-90-7	
Chloroethane	**<468**	ug/kg	468	468	1		04/04/20 00:11	75-00-3	
Chloroform	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	67-66-3	
Chloromethane	**<468**	ug/kg	468	468	1		04/04/20 00:11	74-87-3	
Cyclohexane	**<937**	ug/kg	937	937	1		04/04/20 00:11	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	96-12-8	
Dibromochloromethane	**<187**	ug/kg	187	187	1		04/04/20 00:11	124-48-1	
1,2-Dibromoethane (EDB)	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	106-93-4	
Dibromomethane	**<468**	ug/kg	468	468	1		04/04/20 00:11	74-95-3	
1,2-Dichlorobenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	95-50-1	
1,3-Dichlorobenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	541-73-1	
1,4-Dichlorobenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	106-46-7	
trans-1,4-Dichloro-2-butene	**<187**	ug/kg	1870	187	1		04/04/20 00:11	110-57-6	
Dichlorodifluoromethane	**<468**	ug/kg	468	468	1		04/04/20 00:11	75-71-8	
1,1-Dichloroethane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	75-34-3	
1,2-Dichloroethane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	107-06-2	
1,1-Dichloroethene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	75-35-4	
cis-1,2-Dichloroethene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	156-59-2	
trans-1,2-Dichloroethene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	156-60-5	
1,2-Dichloropropane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	78-87-5	
cis-1,3-Dichloropropene	**<187**	ug/kg	187	187	1		04/04/20 00:11	10061-01-5	
trans-1,3-Dichloropropene	**<187**	ug/kg	187	187	1		04/04/20 00:11	10061-02-6	
Diethyl ether (Ethyl ether)	**<375**	ug/kg	375	375	1		04/04/20 00:11	60-29-7	
Diisopropyl ether	**<468**	ug/kg	468	468	1		04/04/20 00:11	108-20-3	N2
Ethylbenzene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	100-41-4	
Ethyl-tert-butyl ether	**<468**	ug/kg	468	468	1		04/04/20 00:11	637-92-3	N2
Hexachloroethane	**<562**	ug/kg	562	562	1		04/04/20 00:11	67-72-1	N2
2-Hexanone	**<4680**	ug/kg	4680	4680	1		04/04/20 00:11	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-114 (3-4') **Lab ID: 50253160026** Collected: 03/24/20 11:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<187**	ug/kg	1870	187	1		04/04/20 00:11	74-88-4	
Isopropylbenzene (Cumene)	**<468**	ug/kg	468	468	1		04/04/20 00:11	98-82-8	
p-Isopropyltoluene	**<46.8**	ug/kg	93.7	46.8	1		04/04/20 00:11	99-87-6	
Methylene Chloride	**<187**	ug/kg	187	187	1		04/04/20 00:11	75-09-2	
2-Methylnaphthalene	**<618**	ug/kg	618	618	1		04/04/20 00:11	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<4680**	ug/kg	4680	4680	1		04/04/20 00:11	108-10-1	
Methyl-tert-butyl ether	**<468**	ug/kg	468	468	1		04/04/20 00:11	1634-04-4	
Naphthalene	**<618**	ug/kg	618	618	1		04/04/20 00:11	91-20-3	
n-Propylbenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	103-65-1	
Styrene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	100-42-5	
1,1,1,2-Tetrachloroethane	**<187**	ug/kg	187	187	1		04/04/20 00:11	630-20-6	
1,1,2,2-Tetrachloroethane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	79-34-5	
Tetrachloroethene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	127-18-4	
Tetrahydrofuran	**<1870**	ug/kg	1870	1870	1		04/04/20 00:11	109-99-9	N2
Toluene	**<187**	ug/kg	187	187	1		04/04/20 00:11	108-88-3	
1,2,3-Trichlorobenzene	**<468**	ug/kg	468	468	1		04/04/20 00:11	87-61-6	
1,2,4-Trichlorobenzene	**<468**	ug/kg	468	468	1		04/04/20 00:11	120-82-1	
1,1,1-Trichloroethane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	71-55-6	
1,1,2-Trichloroethane	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	79-00-5	
Trichloroethene	**<93.7**	ug/kg	93.7	93.7	1		04/04/20 00:11	79-01-6	
Trichlorofluoromethane	**<187**	ug/kg	187	187	1		04/04/20 00:11	75-69-4	
1,2,3-Trichloropropane	**<187**	ug/kg	187	187	1		04/04/20 00:11	96-18-4	
1,2,3-Trimethylbenzene	**<468**	ug/kg	468	468	1		04/04/20 00:11	526-73-8	N2
1,2,4-Trimethylbenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	95-63-6	
1,3,5-Trimethylbenzene	**<187**	ug/kg	187	187	1		04/04/20 00:11	108-67-8	
Vinyl chloride	**<74.9**	ug/kg	74.9	74.9	1		04/04/20 00:11	75-01-4	
m&p-Xylene	**<46.8**	ug/kg	93.7	46.8	1		04/04/20 00:11	179601-23-1	
o-Xylene	**<46.8**	ug/kg	93.7	46.8	1		04/04/20 00:11	95-47-6	
Surrogates									
Dibromofluoromethane (S)	115	%.	62-137		1		04/04/20 00:11	1868-53-7	
Toluene-d8 (S)	120	%.	64-139		1		04/04/20 00:11	2037-26-5	
4-Bromofluorobenzene (S)	116	%.	60-142		1		04/04/20 00:11	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**16.9**	%	0.10	0.10	1		04/01/20 09:04		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A								
	Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.4**	mg/kg	2.4	2.4	1	04/17/20 09:08	04/18/20 10:04	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation								
	Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**11.6**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (2-3') **Lab ID: 50253160027** Collected: 03/24/20 12:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5190**	ug/kg	5190	5190	1		03/31/20 00:31	71-36-3	
Ethanol	**<2950**	ug/kg	2950	2950	1		03/31/20 00:31	64-17-5	B0
Methanol	**<5190**	ug/kg	5190	5190	1		03/31/20 00:31	67-56-1	B0
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**6680**	ug/kg	2350	2350	1	03/31/20 06:15	04/05/20 14:41	7440-38-2	
Barium	**59000**	ug/kg	1170	1170	1	03/31/20 06:15	04/05/20 14:41	7440-39-3	
Chromium	**17700**	ug/kg	2350	2350	1	03/31/20 06:15	04/05/20 14:41	7440-47-3	
Lead	**<11700**	ug/kg	11700	11700	1	03/31/20 06:15	04/05/20 14:41	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<234**	ug/kg	234	234	1	03/30/20 10:20	03/31/20 13:21	7440-43-9	
Selenium	**<2340**	ug/kg	2340	2340	10	03/30/20 10:20	04/02/20 04:06	7782-49-2	D3
Silver	**<117**	ug/kg	117	117	1	03/30/20 10:20	03/31/20 13:21	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<66.1**	ug/kg	118	66.1	1	04/03/20 12:47	04/06/20 10:08	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	83-32-9	
Acenaphthylene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	208-96-8	
Anthracene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	120-12-7	
Benzo(a)anthracene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	56-55-3	
Benzo(a)pyrene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	50-32-8	
Benzo(b)fluoranthene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	205-99-2	
Benzo(g,h,i)perylene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	191-24-2	
Benzo(k)fluoranthene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	207-08-9	
Chrysene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	218-01-9	
Dibenz(a,h)anthracene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	53-70-3	
Fluoranthene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	206-44-0	
Fluorene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	193-39-5	
2-Methylnaphthalene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	91-57-6	
Naphthalene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	91-20-3	
Phenanthrene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	85-01-8	
Pyrene	**<387**	ug/kg	387	387	1	04/03/20 09:30	04/06/20 12:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	66	%.	37-111		1	04/03/20 09:30	04/06/20 12:40	321-60-8	
p-Terphenyl-d14 (S)	66	%.	29-124		1	04/03/20 09:30	04/06/20 12:40	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (2-3') **Lab ID: 50253160027** Collected: 03/24/20 12:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<2390**	ug/kg	2390	2390	1		04/04/20 00:44	67-64-1	
Acrylonitrile	**<239**	ug/kg	239	239	1		04/04/20 00:44	107-13-1	
tert-Amylmethyl ether	**<598**	ug/kg	598	598	1		04/04/20 00:44	994-05-8	N2
Benzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	71-43-2	
Bromobenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	108-86-1	
Bromochloromethane	**<59.8**	ug/kg	120	59.8	1		04/04/20 00:44	74-97-5	
Bromodichloromethane	**<239**	ug/kg	239	239	1		04/04/20 00:44	75-27-4	
Bromoform	**<239**	ug/kg	239	239	1		04/04/20 00:44	75-25-2	
Bromomethane	**<478**	ug/kg	478	478	1		04/04/20 00:44	74-83-9	L1
2-Butanone (MEK)	**<1790**	ug/kg	1790	1790	1		04/04/20 00:44	78-93-3	
tert-Butyl Alcohol	**<5980**	ug/kg	5980	5980	1		04/04/20 00:44	75-65-0	
n-Butylbenzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	104-51-8	
sec-Butylbenzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	135-98-8	
tert-Butylbenzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	98-06-6	
Carbon disulfide	**<598**	ug/kg	598	598	1		04/04/20 00:44	75-15-0	
Carbon tetrachloride	**<120**	ug/kg	120	120	1		04/04/20 00:44	56-23-5	
Chlorobenzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	108-90-7	
Chloroethane	**<598**	ug/kg	598	598	1		04/04/20 00:44	75-00-3	
Chloroform	**<120**	ug/kg	120	120	1		04/04/20 00:44	67-66-3	
Chloromethane	**<598**	ug/kg	598	598	1		04/04/20 00:44	74-87-3	
Cyclohexane	**<1200**	ug/kg	1200	1200	1		04/04/20 00:44	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<120**	ug/kg	120	120	1		04/04/20 00:44	96-12-8	
Dibromochloromethane	**<239**	ug/kg	239	239	1		04/04/20 00:44	124-48-1	
1,2-Dibromoethane (EDB)	**<120**	ug/kg	120	120	1		04/04/20 00:44	106-93-4	
Dibromomethane	**<598**	ug/kg	598	598	1		04/04/20 00:44	74-95-3	
1,2-Dichlorobenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	95-50-1	
1,3-Dichlorobenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	541-73-1	
1,4-Dichlorobenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	106-46-7	
trans-1,4-Dichloro-2-butene	**<239**	ug/kg	2390	239	1		04/04/20 00:44	110-57-6	
Dichlorodifluoromethane	**<598**	ug/kg	598	598	1		04/04/20 00:44	75-71-8	
1,1-Dichloroethane	**<120**	ug/kg	120	120	1		04/04/20 00:44	75-34-3	
1,2-Dichloroethane	**<120**	ug/kg	120	120	1		04/04/20 00:44	107-06-2	
1,1-Dichloroethene	**<120**	ug/kg	120	120	1		04/04/20 00:44	75-35-4	
cis-1,2-Dichloroethene	**<120**	ug/kg	120	120	1		04/04/20 00:44	156-59-2	
trans-1,2-Dichloroethene	**<120**	ug/kg	120	120	1		04/04/20 00:44	156-60-5	
1,2-Dichloropropane	**<120**	ug/kg	120	120	1		04/04/20 00:44	78-87-5	
cis-1,3-Dichloropropene	**<239**	ug/kg	239	239	1		04/04/20 00:44	10061-01-5	
trans-1,3-Dichloropropene	**<239**	ug/kg	239	239	1		04/04/20 00:44	10061-02-6	
Diethyl ether (Ethyl ether)	**<478**	ug/kg	478	478	1		04/04/20 00:44	60-29-7	
Diisopropyl ether	**<598**	ug/kg	598	598	1		04/04/20 00:44	108-20-3	N2
Ethylbenzene	**<120**	ug/kg	120	120	1		04/04/20 00:44	100-41-4	
Ethyl-tert-butyl ether	**<598**	ug/kg	598	598	1		04/04/20 00:44	637-92-3	N2
Hexachloroethane	**<718**	ug/kg	718	718	1		04/04/20 00:44	67-72-1	N2
2-Hexanone	**<5980**	ug/kg	5980	5980	1		04/04/20 00:44	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: MW-115 (2-3') **Lab ID: 50253160027** Collected: 03/24/20 12:15 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<239**	ug/kg	2390	239	1		04/04/20 00:44	74-88-4	
Isopropylbenzene (Cumene)	**<598**	ug/kg	598	598	1		04/04/20 00:44	98-82-8	
p-Isopropyltoluene	**<59.8**	ug/kg	120	59.8	1		04/04/20 00:44	99-87-6	
Methylene Chloride	**<239**	ug/kg	239	239	1		04/04/20 00:44	75-09-2	
2-Methylnaphthalene	**<789**	ug/kg	789	789	1		04/04/20 00:44	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<5980**	ug/kg	5980	5980	1		04/04/20 00:44	108-10-1	
Methyl-tert-butyl ether	**<598**	ug/kg	598	598	1		04/04/20 00:44	1634-04-4	
Naphthalene	**<789**	ug/kg	789	789	1		04/04/20 00:44	91-20-3	
n-Propylbenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	103-65-1	
Styrene	**<120**	ug/kg	120	120	1		04/04/20 00:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<239**	ug/kg	239	239	1		04/04/20 00:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<120**	ug/kg	120	120	1		04/04/20 00:44	79-34-5	
Tetrachloroethene	**<120**	ug/kg	120	120	1		04/04/20 00:44	127-18-4	
Tetrahydrofuran	**<2390**	ug/kg	2390	2390	1		04/04/20 00:44	109-99-9	N2
Toluene	**<239**	ug/kg	239	239	1		04/04/20 00:44	108-88-3	
1,2,3-Trichlorobenzene	**<598**	ug/kg	598	598	1		04/04/20 00:44	87-61-6	
1,2,4-Trichlorobenzene	**<598**	ug/kg	598	598	1		04/04/20 00:44	120-82-1	
1,1,1-Trichloroethane	**<120**	ug/kg	120	120	1		04/04/20 00:44	71-55-6	
1,1,2-Trichloroethane	**<120**	ug/kg	120	120	1		04/04/20 00:44	79-00-5	
Trichloroethene	**<120**	ug/kg	120	120	1		04/04/20 00:44	79-01-6	
Trichlorofluoromethane	**<239**	ug/kg	239	239	1		04/04/20 00:44	75-69-4	
1,2,3-Trichloropropane	**<239**	ug/kg	239	239	1		04/04/20 00:44	96-18-4	
1,2,3-Trimethylbenzene	**<598**	ug/kg	598	598	1		04/04/20 00:44	526-73-8	N2
1,2,4-Trimethylbenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	95-63-6	
1,3,5-Trimethylbenzene	**<239**	ug/kg	239	239	1		04/04/20 00:44	108-67-8	
Vinyl chloride	**<95.7**	ug/kg	95.7	95.7	1		04/04/20 00:44	75-01-4	
m&p-Xylene	**<59.8**	ug/kg	120	59.8	1		04/04/20 00:44	179601-23-1	
o-Xylene	**<59.8**	ug/kg	120	59.8	1		04/04/20 00:44	95-47-6	
Surrogates									
Dibromofluoromethane (S)	110	%.	62-137		1		04/04/20 00:44	1868-53-7	
Toluene-d8 (S)	115	%.	64-139		1		04/04/20 00:44	2037-26-5	
4-Bromofluorobenzene (S)	111	%.	60-142		1		04/04/20 00:44	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**15.2**	%	0.10	0.10	1		04/01/20 09:04		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:04	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**17.7**	mg/kg	1.0		1		04/23/20 07:38	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Trip Blank **Lab ID: 50253160028** Collected: 03/23/20 08:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		04/04/20 01:16	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		04/04/20 01:16	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:16	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:16	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		04/04/20 01:16	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		04/04/20 01:16	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		04/04/20 01:16	74-83-9	L1
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		04/04/20 01:16	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		04/04/20 01:16	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		04/04/20 01:16	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		04/04/20 01:16	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		04/04/20 01:16	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		04/04/20 01:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		04/04/20 01:16	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		04/04/20 01:16	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		04/04/20 01:16	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		04/04/20 01:16	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/04/20 01:16	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/04/20 01:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		04/04/20 01:16	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:16	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:16	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		04/04/20 01:16	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		04/04/20 01:16	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Trip Blank **Lab ID: 50253160028** Collected: 03/23/20 08:30 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		04/04/20 01:16	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		04/04/20 01:16	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:16	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		04/04/20 01:16	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		04/04/20 01:16	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		04/04/20 01:16	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:16	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		04/04/20 01:16	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		04/04/20 01:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		04/04/20 01:16	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		04/04/20 01:16	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/04/20 01:16	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/04/20 01:16	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:16	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		04/04/20 01:16	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		04/04/20 01:16	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		04/04/20 01:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:16	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		04/04/20 01:16	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:16	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		04/04/20 01:16	1868-53-7	
Toluene-d8 (S)	106	%.	64-139		1		04/04/20 01:16	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	60-142		1		04/04/20 01:16	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Field Blank **Lab ID: 50253160029** Collected: 03/23/20 11:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		04/04/20 01:49	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		04/04/20 01:49	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:49	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:49	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		04/04/20 01:49	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		04/04/20 01:49	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		04/04/20 01:49	74-83-9	L1
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		04/04/20 01:49	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		04/04/20 01:49	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		04/04/20 01:49	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		04/04/20 01:49	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		04/04/20 01:49	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		04/04/20 01:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		04/04/20 01:49	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		04/04/20 01:49	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		04/04/20 01:49	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		04/04/20 01:49	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/04/20 01:49	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/04/20 01:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		04/04/20 01:49	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:49	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:49	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		04/04/20 01:49	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		04/04/20 01:49	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Sample: Field Blank **Lab ID: 50253160029** Collected: 03/23/20 11:00 Received: 03/27/20 08:10 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		04/04/20 01:49	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		04/04/20 01:49	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:49	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		04/04/20 01:49	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		04/04/20 01:49	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		04/04/20 01:49	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/04/20 01:49	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		04/04/20 01:49	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		04/04/20 01:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		04/04/20 01:49	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		04/04/20 01:49	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/04/20 01:49	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/04/20 01:49	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/04/20 01:49	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		04/04/20 01:49	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		04/04/20 01:49	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		04/04/20 01:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/04/20 01:49	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		04/04/20 01:49	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:49	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/04/20 01:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%.	62-137		1		04/04/20 01:49	1868-53-7	
Toluene-d8 (S)	115	%.	64-139		1		04/04/20 01:49	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		04/04/20 01:49	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554715
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2558031 Matrix: Solid
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/kg	<2500	2500	2500	03/30/20 22:02	
Methanol	ug/kg	<4400	4400	4400	03/30/20 22:02	
n-Butanol	ug/kg	<4400	4400	4400	03/30/20 22:02	

LABORATORY CONTROL SAMPLE: 2558032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/kg	100000	95500	96	79-113	
Methanol	ug/kg	100000	94400	94	75-111	
n-Butanol	ug/kg	100000	91500	91	80-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2558033 2558034

Parameter	Units	50253160027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/kg	<2950	118000	118000	104000	105000	88	89	46-120	0	20	
Methanol	ug/kg	<5190	118000	118000	98300	102000	83	86	42-119	3	20	
n-Butanol	ug/kg	<5190	118000	118000	97500	99200	83	84	10-142	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 555036
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008

METHOD BLANK: 2559577 Matrix: Solid
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<59.2	106	59.2	04/06/20 08:06	

LABORATORY CONTROL SAMPLE: 2559578

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	519	476	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2559579 2559580

Parameter	Units	50253160002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	70.6J	553	527	547	524	86	86	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 555037 | Analysis Method: EPA 7471
QC Batch Method: EPA 7471 | Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2559581 | Matrix: Solid
Associated Lab Samples: 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<57.1	102	57.1	04/06/20 08:58	

LABORATORY CONTROL SAMPLE: 2559582

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	507	451	89	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2559583 2559584

Parameter	Units	50252963002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	ND	655	661	606	637	88	92	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554464
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2557029
Matrix: Solid
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/kg	<2000	2000	2000	04/05/20 13:42	
Barium	ug/kg	<1000	1000	1000	04/05/20 13:42	
Chromium	ug/kg	<2000	2000	2000	04/05/20 13:42	
Lead	ug/kg	<10000	10000	10000	04/05/20 13:42	

LABORATORY CONTROL SAMPLE: 2557030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/kg	50000	52200	104	80-120	
Barium	ug/kg	50000	54100	108	80-120	
Chromium	ug/kg	50000	51800	104	80-120	
Lead	ug/kg	50000	51500	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2557031 2557032

Parameter	Units	50253160001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/kg	<2110	53400	53600	55100	56300	101	103	75-125	2	20	
Barium	ug/kg	13300	53400	53600	69500	70000	105	106	75-125	1	20	
Chromium	ug/kg	5920	53400	53600	59000	59100	99	99	75-125	0	20	
Lead	ug/kg	<10500	53400	53600	54900	55000	96	96	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554556
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2557353 Matrix: Solid
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/kg	<193	193	193	03/31/20 07:00	
Selenium	ug/kg	<193	193	193	03/31/20 07:00	
Silver	ug/kg	<96.7	96.7	96.7	03/31/20 07:00	

LABORATORY CONTROL SAMPLE: 2557354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/kg	3710	3460	93	80-120	
Selenium	ug/kg	3710	3380	91	80-120	
Silver	ug/kg	3710	3640	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2557355 2557356

Parameter	Units	50253160001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/kg	<210	4010	4210	3650	3880	89	90	75-125	6	20	
Selenium	ug/kg	<1050	4010	4210	3460	3720	83	85	75-125	7	20	
Silver	ug/kg	<105	4010	4210	3720	3960	92	94	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554837
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027, 50253160028, 50253160029

METHOD BLANK: 2558476
Matrix: Solid
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027, 50253160028, 50253160029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	04/03/20 16:33	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	04/03/20 16:33	
1,2,3-Trichloropropane	ug/kg	<100	100	100	04/03/20 16:33	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	04/03/20 16:33	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	04/03/20 16:33	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	04/03/20 16:33	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,2-Dichlorobenzene	ug/kg	<100	100	100	04/03/20 16:33	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	04/03/20 16:33	
1,3-Dichlorobenzene	ug/kg	<100	100	100	04/03/20 16:33	
1,4-Dichlorobenzene	ug/kg	<100	100	100	04/03/20 16:33	
2-Butanone (MEK)	ug/kg	<750	750	750	04/03/20 16:33	
2-Hexanone	ug/kg	<2500	2500	2500	04/03/20 16:33	
2-Methylnaphthalene	ug/kg	<330	330	330	04/03/20 16:33	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	04/03/20 16:33	
Acetone	ug/kg	<1000	1000	1000	04/03/20 16:33	
Acrylonitrile	ug/kg	<100	100	100	04/03/20 16:33	
Benzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Bromobenzene	ug/kg	<100	100	100	04/03/20 16:33	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	04/03/20 16:33	
Bromodichloromethane	ug/kg	<100	100	100	04/03/20 16:33	
Bromoform	ug/kg	<100	100	100	04/03/20 16:33	
Bromomethane	ug/kg	<200	200	200	04/03/20 16:33	
Carbon disulfide	ug/kg	<250	250	250	04/03/20 16:33	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Chloroethane	ug/kg	<250	250	250	04/03/20 16:33	
Chloroform	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Chloromethane	ug/kg	<250	250	250	04/03/20 16:33	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

METHOD BLANK: 2558476 Matrix: Solid

Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027, 50253160028, 50253160029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	04/03/20 16:33	
Cyclohexane	ug/kg	<500	500	500	04/03/20 16:33	N2
Dibromochloromethane	ug/kg	<100	100	100	04/03/20 16:33	
Dibromomethane	ug/kg	<250	250	250	04/03/20 16:33	
Dichlorodifluoromethane	ug/kg	<250	250	250	04/03/20 16:33	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	04/03/20 16:33	
Diisopropyl ether	ug/kg	<250	250	250	04/03/20 16:33	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	04/03/20 16:33	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Hexachloroethane	ug/kg	<300	300	300	04/03/20 16:33	N2
Iodomethane	ug/kg	<100	1000	100	04/03/20 16:33	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	04/03/20 16:33	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	04/03/20 16:33	
Methyl-tert-butyl ether	ug/kg	<250	250	250	04/03/20 16:33	
Methylene Chloride	ug/kg	<100	100	100	04/03/20 16:33	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
n-Propylbenzene	ug/kg	<100	100	100	04/03/20 16:33	
Naphthalene	ug/kg	<330	330	330	04/03/20 16:33	
o-Xylene	ug/kg	<25.0	50.0	25.0	04/03/20 16:33	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	04/03/20 16:33	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Styrene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
tert-Amylmethyl ether	ug/kg	<250	250	250	04/03/20 16:33	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	04/03/20 16:33	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Tetrahydrofuran	ug/kg	<1000	1000	1000	04/03/20 16:33	N2
Toluene	ug/kg	<100	100	100	04/03/20 16:33	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	04/03/20 16:33	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	04/03/20 16:33	
Trichloroethene	ug/kg	<50.0	50.0	50.0	04/03/20 16:33	
Trichlorofluoromethane	ug/kg	<100	100	100	04/03/20 16:33	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	04/03/20 16:33	
4-Bromofluorobenzene (S)	%.	92	60-142		04/03/20 16:33	
Dibromofluoromethane (S)	%.	102	62-137		04/03/20 16:33	
Toluene-d8 (S)	%.	104	64-139		04/03/20 16:33	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

LABORATORY CONTROL SAMPLE: 2558477

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	103	103	82-119	
1,1,1-Trichloroethane	ug/kg	100	109	109	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	83.3	83	54-137	
1,1,2-Trichloroethane	ug/kg	100	96.1	96	77-122	
1,1-Dichloroethane	ug/kg	100	112	112	68-126	
1,1-Dichloroethene	ug/kg	100	108	108	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	109	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	94	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	111	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	103	103	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	96.3	96	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	103	103	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	99	79-117	
1,2-Dichloroethane	ug/kg	100	95.5	96	74-116	
1,2-Dichloropropane	ug/kg	100	106	106	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	101	101	76-122	
1,3-Dichlorobenzene	ug/kg	100	102	102	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	99	76-115	
2-Butanone (MEK)	ug/kg	500	<750	85	65-126	
2-Hexanone	ug/kg	500	<2500	91	54-141	
2-Methylnaphthalene	ug/kg	100	<330	96	47-148	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	90	60-133	
Acetone	ug/kg	500	<1000	84	49-139	
Acrylonitrile	ug/kg	400	372	93	66-133	
Benzene	ug/kg	100	104	104	71-126	
Bromobenzene	ug/kg	100	104	104	77-119	
Bromochloromethane	ug/kg	100	93.5	94	60-117	
Bromodichloromethane	ug/kg	100	<100	96	79-122	
Bromoform	ug/kg	100	<100	91	64-121	
Bromomethane	ug/kg	100	219	219	10-200	L1
Carbon disulfide	ug/kg	100	<250	109	54-129	
Carbon tetrachloride	ug/kg	100	109	109	78-120	
Chlorobenzene	ug/kg	100	102	102	81-117	
Chloroethane	ug/kg	100	<250	93	54-134	
Chloroform	ug/kg	100	101	101	80-119	
Chloromethane	ug/kg	100	<250	110	31-118	
cis-1,2-Dichloroethene	ug/kg	100	101	101	77-125	
cis-1,3-Dichloropropene	ug/kg	100	108	108	74-133	
Cyclohexane	ug/kg	100	<500	105	49-128	N2
Dibromochloromethane	ug/kg	100	103	103	78-124	
Dibromomethane	ug/kg	100	<250	99	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	118	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	100	50-150	
Ethylbenzene	ug/kg	100	105	105	74-127	
Iodomethane	ug/kg	200	198J	99	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	113	85-121	
m&p-Xylene	ug/kg	200	216	108	72-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

LABORATORY CONTROL SAMPLE: 2558477

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl-tert-butyl ether	ug/kg	100	<250	103	78-135	
Methylene Chloride	ug/kg	100	101	101	73-119	
n-Butylbenzene	ug/kg	100	104	104	69-126	
n-Propylbenzene	ug/kg	100	<100	99	73-124	
Naphthalene	ug/kg	100	<330	98	71-128	
o-Xylene	ug/kg	100	108	108	74-128	
p-Isopropyltoluene	ug/kg	100	107	107	74-124	
sec-Butylbenzene	ug/kg	100	102	102	72-124	
Styrene	ug/kg	100	109	109	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	75	50-150	
tert-Butylbenzene	ug/kg	100	78.5	78	54-104	
Tetrachloroethene	ug/kg	100	108	108	74-120	
Tetrahydrofuran	ug/kg	100	<1000	100	53-135	N2
Toluene	ug/kg	100	<100	100	71-124	
trans-1,2-Dichloroethene	ug/kg	100	111	111	73-131	
trans-1,3-Dichloropropene	ug/kg	100	101	101	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	366J	91	22-132	
Trichloroethene	ug/kg	100	104	104	75-121	
Trichlorofluoromethane	ug/kg	100	117	117	64-135	
Vinyl chloride	ug/kg	100	105	105	51-137	
4-Bromofluorobenzene (S)	%.			106	60-142	
Dibromofluoromethane (S)	%.			100	62-137	
Toluene-d8 (S)	%.			98	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 555383
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2561405 Matrix: Solid
Associated Lab Samples: 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	<327	327	327	04/03/20 15:31	
Acenaphthene	ug/kg	<327	327	327	04/03/20 15:31	
Acenaphthylene	ug/kg	<327	327	327	04/03/20 15:31	
Anthracene	ug/kg	<327	327	327	04/03/20 15:31	
Benzo(a)anthracene	ug/kg	<327	327	327	04/03/20 15:31	
Benzo(a)pyrene	ug/kg	<327	327	327	04/03/20 15:31	
Benzo(b)fluoranthene	ug/kg	<327	327	327	04/03/20 15:31	
Benzo(g,h,i)perylene	ug/kg	<327	327	327	04/03/20 15:31	
Benzo(k)fluoranthene	ug/kg	<327	327	327	04/03/20 15:31	
Chrysene	ug/kg	<327	327	327	04/03/20 15:31	
Dibenz(a,h)anthracene	ug/kg	<327	327	327	04/03/20 15:31	
Fluoranthene	ug/kg	<327	327	327	04/03/20 15:31	
Fluorene	ug/kg	<327	327	327	04/03/20 15:31	
Indeno(1,2,3-cd)pyrene	ug/kg	<327	327	327	04/03/20 15:31	
Naphthalene	ug/kg	<327	327	327	04/03/20 15:31	
Phenanthrene	ug/kg	<327	327	327	04/03/20 15:31	
Pyrene	ug/kg	<327	327	327	04/03/20 15:31	
2-Fluorobiphenyl (S)	%.	77	37-111		04/03/20 15:31	
p-Terphenyl-d14 (S)	%.	96	29-124		04/03/20 15:31	

LABORATORY CONTROL SAMPLE: 2561406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	330	<327	75	50-117	
Acenaphthene	ug/kg	330	<327	80	54-116	
Acenaphthylene	ug/kg	330	<327	84	55-119	
Anthracene	ug/kg	330	<327	89	51-122	
Benzo(a)anthracene	ug/kg	330	<327	80	66-125	
Benzo(a)pyrene	ug/kg	330	<327	83	61-133	
Benzo(b)fluoranthene	ug/kg	330	<327	86	49-141	
Benzo(g,h,i)perylene	ug/kg	330	<327	86	53-130	
Benzo(k)fluoranthene	ug/kg	330	<327	90	51-135	
Chrysene	ug/kg	330	<327	82	63-125	
Dibenz(a,h)anthracene	ug/kg	330	<327	90	59-130	
Fluoranthene	ug/kg	330	<327	87	65-128	
Fluorene	ug/kg	330	<327	83	57-122	
Indeno(1,2,3-cd)pyrene	ug/kg	330	<327	91	62-122	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

LABORATORY CONTROL SAMPLE: 2561406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	330	<327	74	48-109	
Phenanthrene	ug/kg	330	<327	81	57-120	
Pyrene	ug/kg	330	<327	79	53-127	
2-Fluorobiphenyl (S)	%.			70	37-111	
p-Terphenyl-d14 (S)	%.			81	29-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2561407 2561408

Parameter	Units	50253160018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	<348	351	350	<348	<347	69	77	22-135	10	20	
Acenaphthene	ug/kg	<348	351	350	<348	<347	74	81	34-123	8	20	
Acenaphthylene	ug/kg	<348	351	350	<348	<347	78	86	34-127	9	20	
Anthracene	ug/kg	<348	351	350	<348	<347	83	91	15-142	9	20	
Benzo(a)anthracene	ug/kg	<348	351	350	<348	<347	74	81	23-148	8	20	
Benzo(a)pyrene	ug/kg	<348	351	350	<348	<347	76	81	19-149	7	20	
Benzo(b)fluoranthene	ug/kg	<348	351	350	<348	<347	81	86	13-153	6	20	
Benzo(g,h,i)perylene	ug/kg	<348	351	350	<348	<347	75	81	10-144	7	20	
Benzo(k)fluoranthene	ug/kg	<348	351	350	<348	<347	80	88	18-142	9	20	
Chrysene	ug/kg	<348	351	350	<348	<347	73	80	22-146	8	20	
Dibenz(a,h)anthracene	ug/kg	<348	351	350	<348	<347	83	90	28-133	8	20	
Fluoranthene	ug/kg	<348	351	350	<348	<347	80	88	13-162	9	20	
Fluorene	ug/kg	<348	351	350	<348	<347	77	84	32-134	8	20	
Indeno(1,2,3-cd)pyrene	ug/kg	<348	351	350	<348	<347	83	89	15-141	7	20	
Naphthalene	ug/kg	<348	351	350	<348	<347	67	75	19-131	11	20	
Phenanthrene	ug/kg	<348	351	350	<348	<347	77	83	16-149	7	20	
Pyrene	ug/kg	<348	351	350	<348	<347	71	77	13-152	7	20	
2-Fluorobiphenyl (S)	%.						62	69	37-111			
p-Terphenyl-d14 (S)	%.						71	77	29-124			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 555879
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50253160022

METHOD BLANK: 2563686 Matrix: Solid
Associated Lab Samples: 50253160022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	<328	328	328	04/07/20 14:00	
Acenaphthene	ug/kg	<328	328	328	04/07/20 14:00	
Acenaphthylene	ug/kg	<328	328	328	04/07/20 14:00	
Anthracene	ug/kg	<328	328	328	04/07/20 14:00	
Benzo(a)anthracene	ug/kg	<328	328	328	04/07/20 14:00	
Benzo(a)pyrene	ug/kg	<328	328	328	04/07/20 14:00	
Benzo(b)fluoranthene	ug/kg	<328	328	328	04/07/20 14:00	
Benzo(g,h,i)perylene	ug/kg	<328	328	328	04/07/20 14:00	
Benzo(k)fluoranthene	ug/kg	<328	328	328	04/07/20 14:00	
Chrysene	ug/kg	<328	328	328	04/07/20 14:00	
Dibenz(a,h)anthracene	ug/kg	<328	328	328	04/07/20 14:00	
Fluoranthene	ug/kg	<328	328	328	04/07/20 14:00	
Fluorene	ug/kg	<328	328	328	04/07/20 14:00	
Indeno(1,2,3-cd)pyrene	ug/kg	<328	328	328	04/07/20 14:00	
Naphthalene	ug/kg	<328	328	328	04/07/20 14:00	
Phenanthrene	ug/kg	<328	328	328	04/07/20 14:00	
Pyrene	ug/kg	<328	328	328	04/07/20 14:00	
2-Fluorobiphenyl (S)	%.	89	37-111		04/07/20 14:00	
p-Terphenyl-d14 (S)	%.	107	29-124		04/07/20 14:00	

LABORATORY CONTROL SAMPLE: 2563687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	330	338	103	50-117	
Acenaphthene	ug/kg	330	347	105	54-116	
Acenaphthylene	ug/kg	330	376	114	55-119	
Anthracene	ug/kg	330	387	117	51-122	
Benzo(a)anthracene	ug/kg	330	348	105	66-125	
Benzo(a)pyrene	ug/kg	330	348	106	61-133	
Benzo(b)fluoranthene	ug/kg	330	357	108	49-141	
Benzo(g,h,i)perylene	ug/kg	330	351	106	53-130	
Benzo(k)fluoranthene	ug/kg	330	360	109	51-135	
Chrysene	ug/kg	330	336	102	63-125	
Dibenz(a,h)anthracene	ug/kg	330	370	112	59-130	
Fluoranthene	ug/kg	330	374	113	65-128	
Fluorene	ug/kg	330	360	109	57-122	
Indeno(1,2,3-cd)pyrene	ug/kg	330	373	113	62-122	
Naphthalene	ug/kg	330	328	99	48-109	
Phenanthrene	ug/kg	330	344	104	57-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

LABORATORY CONTROL SAMPLE: 2563687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	330	329	100	53-127	
2-Fluorobiphenyl (S)	%.			86	37-111	
p-Terphenyl-d14 (S)	%.			94	29-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2563688 2563689

Parameter	Units	50253686012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	ND	375	379	<371	<376	67	87	22-135	27	20	R1
Acenaphthene	ug/kg	ND	375	379	<371	<376	71	90	34-123	25	20	R1
Acenaphthylene	ug/kg	ND	375	379	<371	<376	77	98	34-127	26	20	R1
Anthracene	ug/kg	ND	375	379	<371	<376	80	95	15-142	18	20	
Benzo(a)anthracene	ug/kg	ND	375	379	<371	<376	71	83	23-148	16	20	
Benzo(a)pyrene	ug/kg	ND	375	379	<371	<376	71	79	19-149	12	20	
Benzo(b)fluoranthene	ug/kg	ND	375	379	<371	<376	75	87	13-153	15	20	
Benzo(g,h,i)perylene	ug/kg	ND	375	379	<371	<376	67	76	10-144	13	20	
Benzo(k)fluoranthene	ug/kg	ND	375	379	<371	<376	71	84	18-142	17	20	
Chrysene	ug/kg	ND	375	379	<371	<376	64	79	22-146	22	20	R1
Dibenz(a,h)anthracene	ug/kg	ND	375	379	<371	<376	74	86	28-133	15	20	
Fluoranthene	ug/kg	ND	375	379	<371	<376	77	91	13-162	17	20	
Fluorene	ug/kg	ND	375	379	<371	<376	73	92	32-134	24	20	R1
Indeno(1,2,3-cd)pyrene	ug/kg	ND	375	379	<371	<376	73	83	15-141	14	20	
Naphthalene	ug/kg	ND	375	379	<371	<376	67	88	19-131	28	20	R1
Phenanthrene	ug/kg	ND	375	379	<371	<376	73	87	16-149	19	20	
Pyrene	ug/kg	ND	375	379	<371	<376	69	80	13-152	16	20	
2-Fluorobiphenyl (S)	%.						58	72	37-111			
p-Terphenyl-d14 (S)	%.						69	78	29-124			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554953
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008

SAMPLE DUPLICATE: 2559123

Parameter	Units	50253218007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.9	17.9	6	5	R1

SAMPLE DUPLICATE: 2559124

Parameter	Units	50253160004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.8	11.1	6	5	R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 554954
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160009, 50253160010, 50253160011, 50253160012, 50253160013, 50253160014, 50253160015, 50253160016, 50253160017, 50253160018, 50253160019, 50253160020, 50253160021, 50253160022, 50253160023, 50253160024, 50253160025, 50253160026, 50253160027

SAMPLE DUPLICATE: 2559125

Parameter	Units	50253160009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.3	9.1	9	5	R1

SAMPLE DUPLICATE: 2559126

Parameter	Units	50253160025 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.4	10.3	0	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253160

QC Batch: 557592
QC Batch Method: EPA 3060A
Analysis Method: EPA 7196A
Analysis Description: 7196 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160025, 50253160026, 50253160027

METHOD BLANK: 2571804 Matrix: Solid
Associated Lab Samples: 50253160001, 50253160002, 50253160003, 50253160004, 50253160005, 50253160006, 50253160007, 50253160008, 50253160009, 50253160010, 50253160011, 50253160012, 50253160020, 50253160021, 50253160022, 50253160025, 50253160026, 50253160027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	<2.0	2.0	2.0	04/18/20 09:57	

LABORATORY CONTROL SAMPLE: 2571805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	990	909	92	80-120	

MATRIX SPIKE SAMPLE: 2571806

Parameter	Units	50253160001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	<2.2	1080	999	93	75-125	

MATRIX SPIKE SAMPLE: 2571807

Parameter	Units	50253160001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	<2.2	43.1	44.2	101	75-125	

SAMPLE DUPLICATE: 2571808

Parameter	Units	50253160002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	<2.1	<2.1		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale
Pace Project No.: 50253160

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B0	Analyte was detected in an associated blank at a concentration greater than the MDL.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253160013	**MW-104 (14-15')**	EPA 8015 Alcohol-Glycol	554715		
50253160014	**MW-105 (12-13')**	EPA 8015 Alcohol-Glycol	554715		
50253160015	**MW-106 (5-6')**	EPA 8015 Alcohol-Glycol	554715		
50253160016	**MW-107 (6-7')**	EPA 8015 Alcohol-Glycol	554715		
50253160017	**MW-108 (4-5')**	EPA 8015 Alcohol-Glycol	554715		
50253160018	**MW-109 (4-5')**	EPA 8015 Alcohol-Glycol	554715		
50253160019	**MW-110 (4-5')**	EPA 8015 Alcohol-Glycol	554715		
50253160020	**MW-113 (7-8')**	EPA 8015 Alcohol-Glycol	554715		
50253160021	**MW-114 (8-9')**	EPA 8015 Alcohol-Glycol	554715		
50253160022	**MW-115 (7-8')**	EPA 8015 Alcohol-Glycol	554715		
50253160023	**Dup-1**	EPA 8015 Alcohol-Glycol	554715		
50253160024	**Dup-2**	EPA 8015 Alcohol-Glycol	554715		
50253160025	**MW-113 (2-3')**	EPA 8015 Alcohol-Glycol	554715		
50253160026	**MW-114 (3-4')**	EPA 8015 Alcohol-Glycol	554715		
50253160027	**MW-115 (2-3')**	EPA 8015 Alcohol-Glycol	554715		
50253160001	**MW-101 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160002	**MW-102 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160003	**MW-103 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160004	**MW-104 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160005	**MW-105 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160006	**MW-106 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160007	**MW-107 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160008	**MW-108 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160009	**MW-109 (1-2')**	EPA 3050	554464	EPA 6010	555575
50253160010	**MW-110 (1-2')**	EPA 3050	554464	EPA 6010	555575
50253160011	**MW-111 (3-4')**	EPA 3050	554464	EPA 6010	555575
50253160012	**MW-112 (3-4')**	EPA 3050	554464	EPA 6010	555575
50253160020	**MW-113 (7-8')**	EPA 3050	554464	EPA 6010	555575
50253160021	**MW-114 (8-9')**	EPA 3050	554464	EPA 6010	555575
50253160022	**MW-115 (7-8')**	EPA 3050	554464	EPA 6010	555575
50253160023	**Dup-1**	EPA 3050	554464	EPA 6010	555575
50253160024	**Dup-2**	EPA 3050	554464	EPA 6010	555575
50253160025	**MW-113 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160026	**MW-114 (3-4')**	EPA 3050	554464	EPA 6010	555575
50253160027	**MW-115 (2-3')**	EPA 3050	554464	EPA 6010	555575
50253160001	**MW-101 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160002	**MW-102 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160003	**MW-103 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160004	**MW-104 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160005	**MW-105 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160006	**MW-106 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160007	**MW-107 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160008	**MW-108 (2-3')**	EPA 3050B	554556	EPA 6020	554706
50253160009	**MW-109 (1-2')**	EPA 3050B	554556	EPA 6020	554706
50253160010	**MW-110 (1-2')**	EPA 3050B	554556	EPA 6020	554706
50253160011	**MW-111 (3-4')**	EPA 3050B	554556	EPA 6020	554706
50253160012	**MW-112 (3-4')**	EPA 3050B	554556	EPA 6020	554706
50253160020	**MW-113 (7-8')**	EPA 3050B	554556	EPA 6020	554706

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253160021	MW-114 (8-9')	EPA 3050B	554556	EPA 6020	554706
50253160022	MW-115 (7-8')	EPA 3050B	554556	EPA 6020	554706
50253160023	Dup-1	EPA 3050B	554556	EPA 6020	554706
50253160024	Dup-2	EPA 3050B	554556	EPA 6020	554706
50253160025	MW-113 (2-3')	EPA 3050B	554556	EPA 6020	554706
50253160026	MW-114 (3-4')	EPA 3050B	554556	EPA 6020	554706
50253160027	MW-115 (2-3')	EPA 3050B	554556	EPA 6020	554706
50253160001	MW-101 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160002	MW-102 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160003	MW-103 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160004	MW-104 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160005	MW-105 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160006	MW-106 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160007	MW-107 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160008	MW-108 (2-3')	EPA 7471	555036	EPA 7471	555601
50253160009	MW-109 (1-2')	EPA 7471	555037	EPA 7471	555602
50253160010	MW-110 (1-2')	EPA 7471	555037	EPA 7471	555602
50253160011	MW-111 (3-4')	EPA 7471	555037	EPA 7471	555602
50253160012	MW-112 (3-4')	EPA 7471	555037	EPA 7471	555602
50253160020	MW-113 (7-8')	EPA 7471	555037	EPA 7471	555602
50253160021	MW-114 (8-9')	EPA 7471	555037	EPA 7471	555602
50253160022	MW-115 (7-8')	EPA 7471	555037	EPA 7471	555602
50253160023	Dup-1	EPA 7471	555037	EPA 7471	555602
50253160024	Dup-2	EPA 7471	555037	EPA 7471	555602
50253160025	MW-113 (2-3')	EPA 7471	555037	EPA 7471	555602
50253160026	MW-114 (3-4')	EPA 7471	555037	EPA 7471	555602
50253160027	MW-115 (2-3')	EPA 7471	555037	EPA 7471	555602
50253160013	MW-104 (14-15')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160014	MW-105 (12-13')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160015	MW-106 (5-6')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160016	MW-107 (6-7')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160017	MW-108 (4-5')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160018	MW-109 (4-5')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160019	MW-110 (4-5')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160020	MW-113 (7-8')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160021	MW-114 (8-9')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160022	MW-115 (7-8')	EPA 3546	555879	EPA 8270 by SIM	555928
50253160023	Dup-1	EPA 3546	555383	EPA 8270 by SIM	555486
50253160024	Dup-2	EPA 3546	555383	EPA 8270 by SIM	555486
50253160025	MW-113 (2-3')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160026	MW-114 (3-4')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160027	MW-115 (2-3')	EPA 3546	555383	EPA 8270 by SIM	555486
50253160013	MW-104 (14-15')	EPA 8260	554837		
50253160014	MW-105 (12-13')	EPA 8260	554837		
50253160015	MW-106 (5-6')	EPA 8260	554837		
50253160016	MW-107 (6-7')	EPA 8260	554837		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253160017	**MW-108 (4-5')**	EPA 8260	554837		
50253160018	**MW-109 (4-5')**	EPA 8260	554837		
50253160019	**MW-110 (4-5')**	EPA 8260	554837		
50253160020	**MW-113 (7-8')**	EPA 8260	554837		
50253160021	**MW-114 (8-9')**	EPA 8260	554837		
50253160022	**MW-115 (7-8')**	EPA 8260	554837		
50253160023	**Dup-1**	EPA 8260	554837		
50253160024	**Dup-2**	EPA 8260	554837		
50253160025	**MW-113 (2-3')**	EPA 8260	554837		
50253160026	**MW-114 (3-4')**	EPA 8260	554837		
50253160027	**MW-115 (2-3')**	EPA 8260	554837		
50253160028	**Trip Blank**	EPA 8260	554837		
50253160029	**Field Blank**	EPA 8260	554837		
50253160001	**MW-101 (2-3')**	SM 2540G	554953		
50253160002	**MW-102 (2-3')**	SM 2540G	554953		
50253160003	**MW-103 (2-3')**	SM 2540G	554953		
50253160004	**MW-104 (2-3')**	SM 2540G	554953		
50253160005	**MW-105 (2-3')**	SM 2540G	554953		
50253160006	**MW-106 (2-3')**	SM 2540G	554953		
50253160007	**MW-107 (2-3')**	SM 2540G	554953		
50253160008	**MW-108 (2-3')**	SM 2540G	554953		
50253160009	**MW-109 (1-2')**	SM 2540G	554954		
50253160010	**MW-110 (1-2')**	SM 2540G	554954		
50253160011	**MW-111 (3-4')**	SM 2540G	554954		
50253160012	**MW-112 (3-4')**	SM 2540G	554954		
50253160013	**MW-104 (14-15')**	SM 2540G	554954		
50253160014	**MW-105 (12-13')**	SM 2540G	554954		
50253160015	**MW-106 (5-6')**	SM 2540G	554954		
50253160016	**MW-107 (6-7')**	SM 2540G	554954		
50253160017	**MW-108 (4-5')**	SM 2540G	554954		
50253160018	**MW-109 (4-5')**	SM 2540G	554954		
50253160019	**MW-110 (4-5')**	SM 2540G	554954		
50253160020	**MW-113 (7-8')**	SM 2540G	554954		
50253160021	**MW-114 (8-9')**	SM 2540G	554954		
50253160022	**MW-115 (7-8')**	SM 2540G	554954		
50253160023	**Dup-1**	SM 2540G	554954		
50253160024	**Dup-2**	SM 2540G	554954		
50253160025	**MW-113 (2-3')**	SM 2540G	554954		
50253160026	**MW-114 (3-4')**	SM 2540G	554954		
50253160027	**MW-115 (2-3')**	SM 2540G	554954		
50253160001	**MW-101 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160002	**MW-102 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160003	**MW-103 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160004	**MW-104 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160005	**MW-105 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160006	**MW-106 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160007	**MW-107 (2-3')**	EPA 3060A	557592	EPA 7196A	557788

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253160

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253160008	**MW-108 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160009	**MW-109 (1-2')**	EPA 3060A	557592	EPA 7196A	557788
50253160010	**MW-110 (1-2')**	EPA 3060A	557592	EPA 7196A	557788
50253160011	**MW-111 (3-4')**	EPA 3060A	557592	EPA 7196A	557788
50253160012	**MW-112 (3-4')**	EPA 3060A	557592	EPA 7196A	557788
50253160020	**MW-113 (7-8')**	EPA 3060A	557592	EPA 7196A	557788
50253160021	**MW-114 (8-9')**	EPA 3060A	557592	EPA 7196A	557788
50253160022	**MW-115 (7-8')**	EPA 3060A	557592	EPA 7196A	557788
50253160025	**MW-113 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160026	**MW-114 (3-4')**	EPA 3060A	557592	EPA 7196A	557788
50253160027	**MW-115 (2-3')**	EPA 3060A	557592	EPA 7196A	557788
50253160001	**MW-101 (2-3')**	Trivalent Chromium Calculation	558525		
50253160002	**MW-102 (2-3')**	Trivalent Chromium Calculation	558525		
50253160003	**MW-103 (2-3')**	Trivalent Chromium Calculation	558525		
50253160004	**MW-104 (2-3')**	Trivalent Chromium Calculation	558525		
50253160005	**MW-105 (2-3')**	Trivalent Chromium Calculation	558525		
50253160006	**MW-106 (2-3')**	Trivalent Chromium Calculation	558525		
50253160007	**MW-107 (2-3')**	Trivalent Chromium Calculation	558525		
50253160008	**MW-108 (2-3')**	Trivalent Chromium Calculation	558525		
50253160009	**MW-109 (1-2')**	Trivalent Chromium Calculation	558525		
50253160010	**MW-110 (1-2')**	Trivalent Chromium Calculation	558525		
50253160011	**MW-111 (3-4')**	Trivalent Chromium Calculation	558525		
50253160012	**MW-112 (3-4')**	Trivalent Chromium Calculation	558525		
50253160020	**MW-113 (7-8')**	Trivalent Chromium Calculation	558525		
50253160021	**MW-114 (8-9')**	Trivalent Chromium Calculation	558525		
50253160022	**MW-115 (7-8')**	Trivalent Chromium Calculation	558525		
50253160025	**MW-113 (2-3')**	Trivalent Chromium Calculation	558525		
50253160026	**MW-114 (3-4')**	Trivalent Chromium Calculation	558525		
50253160027	**MW-115 (2-3')**	Trivalent Chromium Calculation	558525		

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CHAIN-OF-CUSTODY / Analytical Reques

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant field

WO# : 50253160

50253160

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs by 8260	PAH/Metals/Alcohols	TCLP VOC/Met,Flash,pH,Ign	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	RCRA 8 Metals 6000/7470				Residual Chlorine (Y/N)	
1	MW-101 (2-3')	S	G			3/23	1440		1	✓																✓				
2	MW-102 (2-3')					3/23	1350		1	✓																✓				
3	MW-103 (2-3')					3/23	1047		1	✓																✓				
4	MW-104 (2-3')					3/23	1020		1	✓																✓				
5	MW-105 (2-3')					3/23	1010		1	✓																✓				
6	MW-106 (2-3')					3/25	0910		1	✓																✓				
7	MW-107 (2-3')					3/25	0950		1	✓																✓				
8	MW-108 (2-3')						0909		1	✓																✓				
9	MW-109 ([redacted]) (1-2')						0935		1	✓																✓				
10	MW-110 (1-2')						1000		1	✓																✓				
11	MW-111 (3-4')						1030		1	✓																✓				
12	MW-112 (3-4')						1050		1	✓																✓				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	/ATC	3/26/20	1716		3-27-20	0810	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Ian Adolphus				
SIGNATURE of SAMPLER:		DATE Signed:	3/26/20		

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

WO# : 50253160

PM: BJH Due Date: 04/07/20

CLIENT: GR-ATC

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	VOCs by 8260	PAH/Metals/Alcohols	TCLP VOC/Met,Flash,pH, Ign	VOC by 8260	PAH by 8270SIM	Alcohols by 8015D	Metals, Total	RCRA 8 Metals 6010B/7470				Residual Chlorine (Y/N)	
1	MW-104 ~~(14-15)~~	S	G			3/23	1230		3	✓						✓			✓					✓	✓						
2	MW-105 (12-13')	S	G			3/23	1215												✓					✓	✓						
3	MW-106 (5-6')	S	G			3/25	0922												✓					✓	✓						
4	MW-107 (6-7')	S	G			3/25	0855												✓					✓	✓						
5	MW-108 (4-5')	S	G			3/25	0915												✓					✓	✓						
6	MW-109 (4-5')	S	G			3/25	0940												✓					✓	✓						
7	MW-110 (4-5')	S	G			3/25	1005												✓					✓	✓						
8	MW-113 ~~(7-8')~~	S	G			3/24	0945												✓					✓	✓		✓				
9	MW-114 (8-9')	S	G			3/24	1110												✓					✓	✓		✓				
10	MW-115 (7-8')	S	G			3/24	1220												✓					✓	✓		✓				
11	Dup.1	S	G			3/23	1200		2										✓					✓	✓		✓				
12	Dup.2	S	G			3/24	1115		2	✓						✓			✓					✓	✓		✓				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	ATC	3/26/20	1716		3.27.20	0810	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adelphus

SIGNATURE of SAMPLER: DATE Signed: 3/26/20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO# : 50253160

PM: BJH Due Date: 04/07/20

CLIENT: GR-ATC

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone: (248)982-5378	Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	
	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	VOCs by 8260	PAH/Metals/Alcohols	TCLP VOC/Met,Flash,pH,Ign	VOC by 8260	PAH by 8270SIM	Alcohols by 8015D	Metals, Total	RCRA 8 Metals						Residual Chlorine (Y/N)	
1	MW-113(2-3')	S	G			3/23	1550		3	✓						✓			✓				✓	✓		✓							
2	MW-114 (3-4')					3/24	1100		3	✓						✓			✓				✓	✓		✓							
3	MW-115 (2-3')					3/24	1215		3	✓						✓			✓				✓	✓		✓							
4	Trip Blank					3/23	0830		1							✓			✓														
5	~~Trip~~ Field Blank					3/23	1100		1							✓			✓														
6																																	
7																																	
8																																	
9																																	
10																																	
11																																	
12																																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	ATC	3/26/20	1716		3/27/20	0810	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adolphus

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/26/20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical
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Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 3.27.20	**Evaluated by:** WDC
Client: ATC	
Project Manager: BJH	**Profile ID:**
Rush TAT Requested: YES NO	**Due Date:**
Lab Notified of Rush or Short Holds: YES NO	**Non Conformance Form Required:** YES NO

WO#: 50253160
PM: BJH **Due Date: 04/07/20**
CLIENT: GR-ATC

Samples Received Via: FedEx UPS Client Pace Courier Other: _____ **Comments:**

Custody Seals Present and Intact:	YES	NO	NA
Received Sample Information Form(s): Drinking Waters Only	YES	NO	NA
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	N/A
Short Holds Present (< 72 Hours):	YES	NO	
Samples Received in Hold:	YES	NO	
Custody Signatures Present:	YES	NO	
Collector Signature Present:	YES	NO	
Packing Material Used:	YES	NO	
Samples Collected Today and On Ice:	YES	NO	N/A

IR Gun #: 280 281 **Digital Thermometer #:** 282 283

Ice Type: WET Bagged / WET Loose BLUE NONE **1.** Cooler Temp Upon Receipt: 3.6|4.1 °C

Ice Location: TOP BOTTOM MIDDLE DISPERSED Temp should be 0-6°C (Initial/Corrected)

Temp Blank Received:	YES	NO	
Containers Intact:	YES	NO	
Correct Containers:	YES	NO	
Sufficient Volume:	YES	NO	
Sample pH Acceptable: All containers needing preservation are found to be in complaince with EPA recommendation. Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	N/A
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	N/A
VOA Headspace Acceptable (<6mm):	YES	NO	N/A
Trip Blank Received: HCl MeOH TSP OTHER	YES	NO	

Comments:

2. Cooler Temp Upon Receipt: _____ °C

3. Cooler Temp Upon Receipt: _____ °C

4. Cooler Temp Upon Receipt: _____ °C

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

April 23, 2020

Joshua Schuyler
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale
Pace Project No.: 50253312

Dear Joshua Schuyler:

Enclosed are the analytical results for sample(s) received by the laboratory on March 31, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

Revised Report. This report replaces the original dated 040920, it has been revised to add Chrome Speciation, per client request.

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
April Hehir

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50253312001	**MW-116 (2-3')**	Solid	03/30/20 10:30	03/31/20 08:15
50253312002	**MW-116 (7-8')**	Solid	03/30/20 10:40	03/31/20 08:15
50253312003	**MW-117 (2-3')**	Solid	03/30/20 11:10	03/31/20 08:15
50253312004	**MW-117 (6-7')**	Solid	03/30/20 11:20	03/31/20 08:15
50253312005	**MW-118 (2-3')**	Solid	03/30/20 12:00	03/31/20 08:15
50253312006	**MW-118 (10-11')**	Solid	03/30/20 12:10	03/31/20 08:15
50253312007	**Dup-1**	Solid	03/30/20 12:00	03/31/20 08:15
50253312008	**Trip Blank**	Solid	03/30/20 08:30	03/31/20 08:15
50253312009	**Field Blank**	Solid	03/30/20 11:00	03/31/20 08:15

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50253312001	**MW-116 (2-3')**	EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312002	**MW-116 (7-8')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312003	**MW-117 (2-3')**	EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312004	**MW-117 (6-7')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312005	**MW-118 (2-3')**	EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312006	**MW-118 (10-11')**	EPA 8015 Alcohol-Glycol	CPH	3

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SWJ	1
		EPA 7196A	SWJ	1
		Trivalent Chromium Calculation	SLB	1
50253312007	**Dup-1**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	JPK, KJE	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SWJ	1
50253312008	**Trip Blank**	EPA 8260	JPV	75
50253312009	**Field Blank**	EPA 8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-116 (2-3') **Lab ID: 50253312001** Collected: 03/30/20 10:30 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2120**	ug/kg	2120	2120	1	04/06/20 15:14	04/07/20 13:58	7440-38-2	
Barium	**13500**	ug/kg	1060	1060	1	04/06/20 15:14	04/07/20 13:58	7440-39-3	
Chromium	**8780**	ug/kg	2150	2150	1	04/08/20 13:34	04/09/20 03:23	7440-47-3	
Lead	**<10600**	ug/kg	10600	10600	1	04/06/20 15:14	04/07/20 13:58	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Selenium	**312**	ug/kg	208	208	1	04/06/20 00:53	04/06/20 10:59	7782-49-2	
Silver	**<104**	ug/kg	104	104	1	04/06/20 00:53	04/06/20 10:59	7440-22-4	
Cadmium	**<208**	ug/kg	208	208	1	04/06/20 00:53	04/06/20 10:59	7440-43-9	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<64.9**	ug/kg	116	64.9	1	04/08/20 12:06	04/09/20 08:16	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**10.7**	%	0.10	0.10	1		04/04/20 11:26		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:41	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**8.8**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-116 (7-8') **Lab ID: 50253312002** Collected: 03/30/20 10:40 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5110**	ug/kg	5110	5110	1		04/05/20 13:34	71-36-3	
Ethanol	**<2900**	ug/kg	2900	2900	1		04/05/20 13:34	64-17-5	B0
Methanol	**9010**	ug/kg	5110	5110	1		04/05/20 13:34	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2170**	ug/kg	2170	2170	1	04/06/20 15:14	04/07/20 14:00	7440-38-2	
Barium	**7980**	ug/kg	1080	1080	1	04/06/20 15:14	04/07/20 14:00	7440-39-3	
Chromium	**3900**	ug/kg	1970	1970	1	04/08/20 13:34	04/09/20 03:25	7440-47-3	
Lead	**<10800**	ug/kg	10800	10800	1	04/06/20 15:14	04/07/20 14:00	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<217**	ug/kg	217	217	1	04/06/20 00:53	04/06/20 11:40	7440-43-9	
Selenium	**<217**	ug/kg	217	217	1	04/06/20 00:53	04/06/20 11:40	7782-49-2	
Silver	**<109**	ug/kg	109	109	1	04/06/20 00:53	04/06/20 11:40	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<62.5**	ug/kg	112	62.5	1	04/08/20 12:06	04/09/20 08:18	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	83-32-9	
Acenaphthylene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	208-96-8	
Anthracene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	120-12-7	
Benzo(a)anthracene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	56-55-3	
Benzo(a)pyrene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	50-32-8	
Benzo(b)fluoranthene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	205-99-2	
Benzo(g,h,i)perylene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	191-24-2	
Benzo(k)fluoranthene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	207-08-9	
Chrysene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	218-01-9	
Dibenz(a,h)anthracene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	53-70-3	
Fluoranthene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	206-44-0	
Fluorene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	86-73-7	
Indeno(1,2,3-cd)pyrene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	193-39-5	
2-Methylnaphthalene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	91-57-6	
Naphthalene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	91-20-3	
Phenanthrene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	85-01-8	
Pyrene	**<382**	ug/kg	382	382	1	04/07/20 01:03	04/07/20 13:26	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%.	37-111		1	04/07/20 01:03	04/07/20 13:26	321-60-8	
p-Terphenyl-d14 (S)	75	%.	29-124		1	04/07/20 01:03	04/07/20 13:26	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-116 (7-8') **Lab ID: 50253312002** Collected: 03/30/20 10:40 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1330**	ug/kg	1330	1330	1		04/06/20 16:44	67-64-1	
Acrylonitrile	**<133**	ug/kg	133	133	1		04/06/20 16:44	107-13-1	
tert-Amylmethyl ether	**<333**	ug/kg	333	333	1		04/06/20 16:44	994-05-8	N2
Benzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	71-43-2	
Bromobenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	108-86-1	
Bromochloromethane	**<33.3**	ug/kg	66.5	33.3	1		04/06/20 16:44	74-97-5	
Bromodichloromethane	**<133**	ug/kg	133	133	1		04/06/20 16:44	75-27-4	
Bromoform	**<133**	ug/kg	133	133	1		04/06/20 16:44	75-25-2	
Bromomethane	**<266**	ug/kg	266	266	1		04/06/20 16:44	74-83-9	L1
2-Butanone (MEK)	**<998**	ug/kg	998	998	1		04/06/20 16:44	78-93-3	
tert-Butyl Alcohol	**<3330**	ug/kg	3330	3330	1		04/06/20 16:44	75-65-0	
n-Butylbenzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	104-51-8	
sec-Butylbenzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	135-98-8	
tert-Butylbenzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	98-06-6	
Carbon disulfide	**<333**	ug/kg	333	333	1		04/06/20 16:44	75-15-0	
Carbon tetrachloride	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	56-23-5	
Chlorobenzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	108-90-7	
Chloroethane	**<333**	ug/kg	333	333	1		04/06/20 16:44	75-00-3	
Chloroform	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	67-66-3	
Chloromethane	**<333**	ug/kg	333	333	1		04/06/20 16:44	74-87-3	
Cyclohexane	**<665**	ug/kg	665	665	1		04/06/20 16:44	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	96-12-8	
Dibromochloromethane	**<133**	ug/kg	133	133	1		04/06/20 16:44	124-48-1	
1,2-Dibromoethane (EDB)	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	106-93-4	
Dibromomethane	**<333**	ug/kg	333	333	1		04/06/20 16:44	74-95-3	
1,2-Dichlorobenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	95-50-1	
1,3-Dichlorobenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	541-73-1	
1,4-Dichlorobenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	106-46-7	
trans-1,4-Dichloro-2-butene	**<133**	ug/kg	1330	133	1		04/06/20 16:44	110-57-6	
Dichlorodifluoromethane	**<333**	ug/kg	333	333	1		04/06/20 16:44	75-71-8	
1,1-Dichloroethane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	75-34-3	
1,2-Dichloroethane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	107-06-2	
1,1-Dichloroethene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	75-35-4	
cis-1,2-Dichloroethene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	156-59-2	
trans-1,2-Dichloroethene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	156-60-5	
1,2-Dichloropropane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	78-87-5	
cis-1,3-Dichloropropene	**<133**	ug/kg	133	133	1		04/06/20 16:44	10061-01-5	
trans-1,3-Dichloropropene	**<133**	ug/kg	133	133	1		04/06/20 16:44	10061-02-6	
Diethyl ether (Ethyl ether)	**<266**	ug/kg	266	266	1		04/06/20 16:44	60-29-7	
Diisopropyl ether	**<333**	ug/kg	333	333	1		04/06/20 16:44	108-20-3	N2
Ethylbenzene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	100-41-4	
Ethyl-tert-butyl ether	**<333**	ug/kg	333	333	1		04/06/20 16:44	637-92-3	N2
Hexachloroethane	**<399**	ug/kg	399	399	1		04/06/20 16:44	67-72-1	N2
2-Hexanone	**<3330**	ug/kg	3330	3330	1		04/06/20 16:44	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-116 (7-8') **Lab ID: 50253312002** Collected: 03/30/20 10:40 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<133**	ug/kg	1330	133	1		04/06/20 16:44	74-88-4	
Isopropylbenzene (Cumene)	**<333**	ug/kg	333	333	1		04/06/20 16:44	98-82-8	
p-Isopropyltoluene	**<33.3**	ug/kg	66.5	33.3	1		04/06/20 16:44	99-87-6	
Methylene Chloride	**<133**	ug/kg	133	133	1		04/06/20 16:44	75-09-2	
2-Methylnaphthalene	**<439**	ug/kg	439	439	1		04/06/20 16:44	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3330**	ug/kg	3330	3330	1		04/06/20 16:44	108-10-1	
Methyl-tert-butyl ether	**<333**	ug/kg	333	333	1		04/06/20 16:44	1634-04-4	
Naphthalene	**<439**	ug/kg	439	439	1		04/06/20 16:44	91-20-3	
n-Propylbenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	103-65-1	
Styrene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<133**	ug/kg	133	133	1		04/06/20 16:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	79-34-5	
Tetrachloroethene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	127-18-4	
Tetrahydrofuran	**<1330**	ug/kg	1330	1330	1		04/06/20 16:44	109-99-9	N2
Toluene	**<133**	ug/kg	133	133	1		04/06/20 16:44	108-88-3	
1,2,3-Trichlorobenzene	**<333**	ug/kg	333	333	1		04/06/20 16:44	87-61-6	
1,2,4-Trichlorobenzene	**<333**	ug/kg	333	333	1		04/06/20 16:44	120-82-1	
1,1,1-Trichloroethane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	71-55-6	
1,1,2-Trichloroethane	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	79-00-5	
Trichloroethene	**<66.5**	ug/kg	66.5	66.5	1		04/06/20 16:44	79-01-6	
Trichlorofluoromethane	**<133**	ug/kg	133	133	1		04/06/20 16:44	75-69-4	
1,2,3-Trichloropropane	**<133**	ug/kg	133	133	1		04/06/20 16:44	96-18-4	
1,2,3-Trimethylbenzene	**<333**	ug/kg	333	333	1		04/06/20 16:44	526-73-8	N2
1,2,4-Trimethylbenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	95-63-6	
1,3,5-Trimethylbenzene	**<133**	ug/kg	133	133	1		04/06/20 16:44	108-67-8	
Vinyl chloride	**<53.2**	ug/kg	53.2	53.2	1		04/06/20 16:44	75-01-4	
m&p-Xylene	**<33.3**	ug/kg	66.5	33.3	1		04/06/20 16:44	179601-23-1	
o-Xylene	**<33.3**	ug/kg	66.5	33.3	1		04/06/20 16:44	95-47-6	
Surrogates									
Dibromofluoromethane (S)	116	%.	62-137		1		04/06/20 16:44	1868-53-7	
Toluene-d8 (S)	120	%.	64-139		1		04/06/20 16:44	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	60-142		1		04/06/20 16:44	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**13.8**	%	0.10	0.10	1		04/04/20 11:26		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A								
	Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:42	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation								
	Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**3.9**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-117 (2-3') **Lab ID: 50253312003** Collected: 03/30/20 11:10 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2130**	ug/kg	2130	2130	1	04/06/20 15:14	04/07/20 14:03	7440-38-2	
Barium	**8430**	ug/kg	1060	1060	1	04/06/20 15:14	04/07/20 14:03	7440-39-3	
Chromium	**5790**	ug/kg	1890	1890	1	04/08/20 13:34	04/09/20 03:27	7440-47-3	
Lead	**<10600**	ug/kg	10600	10600	1	04/06/20 15:14	04/07/20 14:03	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<220**	ug/kg	220	220	1	04/06/20 00:53	04/06/20 11:54	7440-43-9	
Selenium	**369**	ug/kg	220	220	1	04/06/20 00:53	04/06/20 11:54	7782-49-2	
Silver	**<110**	ug/kg	110	110	1	04/06/20 00:53	04/06/20 11:54	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<65.4**	ug/kg	117	65.4	1	04/08/20 12:06	04/09/20 08:20	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**10.1**	%	0.10	0.10	1		04/04/20 11:26		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:43	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**5.8**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-117 (6-7') **Lab ID: 50253312004** Collected: 03/30/20 11:20 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5000**	ug/kg	5000	5000	1		04/05/20 13:49	71-36-3	
Ethanol	**<2840**	ug/kg	2840	2840	1		04/05/20 13:49	64-17-5	B0
Methanol	**5230**	ug/kg	5000	5000	1		04/05/20 13:49	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2190**	ug/kg	2190	2190	1	04/06/20 15:14	04/07/20 14:13	7440-38-2	
Barium	**6150**	ug/kg	1090	1090	1	04/06/20 15:14	04/07/20 14:13	7440-39-3	
Chromium	**4070**	ug/kg	2030	2030	1	04/08/20 13:34	04/09/20 03:29	7440-47-3	
Lead	**<10900**	ug/kg	10900	10900	1	04/06/20 15:14	04/07/20 14:13	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<212**	ug/kg	212	212	1	04/06/20 00:53	04/06/20 11:58	7440-43-9	
Selenium	**<1060**	ug/kg	1060	1060	5	04/06/20 00:53	04/06/20 10:13	7782-49-2	D3
Silver	**<106**	ug/kg	106	106	1	04/06/20 00:53	04/06/20 11:58	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<64.3**	ug/kg	115	64.3	1	04/08/20 12:06	04/09/20 08:22	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	83-32-9	
Acenaphthylene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	208-96-8	
Anthracene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	120-12-7	
Benzo(a)anthracene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	56-55-3	
Benzo(a)pyrene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	50-32-8	
Benzo(b)fluoranthene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	205-99-2	
Benzo(g,h,i)perylene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	191-24-2	
Benzo(k)fluoranthene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	207-08-9	
Chrysene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	218-01-9	
Dibenz(a,h)anthracene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	53-70-3	
Fluoranthene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	206-44-0	
Fluorene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	86-73-7	
Indeno(1,2,3-cd)pyrene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	193-39-5	
2-Methylnaphthalene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	91-57-6	
Naphthalene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	91-20-3	
Phenanthrene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	85-01-8	
Pyrene	**<375**	ug/kg	375	375	1	04/07/20 01:03	04/07/20 15:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%.	37-111		1	04/07/20 01:03	04/07/20 15:08	321-60-8	
p-Terphenyl-d14 (S)	73	%.	29-124		1	04/07/20 01:03	04/07/20 15:08	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-117 (6-7') **Lab ID: 50253312004** Collected: 03/30/20 11:20 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<2380**	ug/kg	2380	2380	1		04/06/20 17:16	67-64-1	
Acrylonitrile	**<238**	ug/kg	238	238	1		04/06/20 17:16	107-13-1	
tert-Amylmethyl ether	**<595**	ug/kg	595	595	1		04/06/20 17:16	994-05-8	N2
Benzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	71-43-2	
Bromobenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	108-86-1	
Bromochloromethane	**<59.5**	ug/kg	119	59.5	1		04/06/20 17:16	74-97-5	
Bromodichloromethane	**<238**	ug/kg	238	238	1		04/06/20 17:16	75-27-4	
Bromoform	**<238**	ug/kg	238	238	1		04/06/20 17:16	75-25-2	
Bromomethane	**<476**	ug/kg	476	476	1		04/06/20 17:16	74-83-9	L1
2-Butanone (MEK)	**<1790**	ug/kg	1790	1790	1		04/06/20 17:16	78-93-3	
tert-Butyl Alcohol	**<5950**	ug/kg	5950	5950	1		04/06/20 17:16	75-65-0	
n-Butylbenzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	104-51-8	
sec-Butylbenzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	135-98-8	
tert-Butylbenzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	98-06-6	
Carbon disulfide	**<595**	ug/kg	595	595	1		04/06/20 17:16	75-15-0	
Carbon tetrachloride	**<119**	ug/kg	119	119	1		04/06/20 17:16	56-23-5	
Chlorobenzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	108-90-7	
Chloroethane	**<595**	ug/kg	595	595	1		04/06/20 17:16	75-00-3	
Chloroform	**<119**	ug/kg	119	119	1		04/06/20 17:16	67-66-3	
Chloromethane	**<595**	ug/kg	595	595	1		04/06/20 17:16	74-87-3	
Cyclohexane	**<1190**	ug/kg	1190	1190	1		04/06/20 17:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<119**	ug/kg	119	119	1		04/06/20 17:16	96-12-8	
Dibromochloromethane	**<238**	ug/kg	238	238	1		04/06/20 17:16	124-48-1	
1,2-Dibromoethane (EDB)	**<119**	ug/kg	119	119	1		04/06/20 17:16	106-93-4	
Dibromomethane	**<595**	ug/kg	595	595	1		04/06/20 17:16	74-95-3	
1,2-Dichlorobenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	95-50-1	
1,3-Dichlorobenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	541-73-1	
1,4-Dichlorobenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<238**	ug/kg	2380	238	1		04/06/20 17:16	110-57-6	
Dichlorodifluoromethane	**<595**	ug/kg	595	595	1		04/06/20 17:16	75-71-8	
1,1-Dichloroethane	**<119**	ug/kg	119	119	1		04/06/20 17:16	75-34-3	
1,2-Dichloroethane	**<119**	ug/kg	119	119	1		04/06/20 17:16	107-06-2	
1,1-Dichloroethene	**<119**	ug/kg	119	119	1		04/06/20 17:16	75-35-4	
cis-1,2-Dichloroethene	**<119**	ug/kg	119	119	1		04/06/20 17:16	156-59-2	
trans-1,2-Dichloroethene	**<119**	ug/kg	119	119	1		04/06/20 17:16	156-60-5	
1,2-Dichloropropane	**<119**	ug/kg	119	119	1		04/06/20 17:16	78-87-5	
cis-1,3-Dichloropropene	**<238**	ug/kg	238	238	1		04/06/20 17:16	10061-01-5	
trans-1,3-Dichloropropene	**<238**	ug/kg	238	238	1		04/06/20 17:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<476**	ug/kg	476	476	1		04/06/20 17:16	60-29-7	
Diisopropyl ether	**<595**	ug/kg	595	595	1		04/06/20 17:16	108-20-3	N2
Ethylbenzene	**<119**	ug/kg	119	119	1		04/06/20 17:16	100-41-4	
Ethyl-tert-butyl ether	**<595**	ug/kg	595	595	1		04/06/20 17:16	637-92-3	N2
Hexachloroethane	**<714**	ug/kg	714	714	1		04/06/20 17:16	67-72-1	N2
2-Hexanone	**<5950**	ug/kg	5950	5950	1		04/06/20 17:16	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-117 (6-7') **Lab ID: 50253312004** Collected: 03/30/20 11:20 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<238**	ug/kg	2380	238	1		04/06/20 17:16	74-88-4	
Isopropylbenzene (Cumene)	**<595**	ug/kg	595	595	1		04/06/20 17:16	98-82-8	
p-Isopropyltoluene	**<59.5**	ug/kg	119	59.5	1		04/06/20 17:16	99-87-6	
Methylene Chloride	**<238**	ug/kg	238	238	1		04/06/20 17:16	75-09-2	
2-Methylnaphthalene	**<786**	ug/kg	786	786	1		04/06/20 17:16	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<5950**	ug/kg	5950	5950	1		04/06/20 17:16	108-10-1	
Methyl-tert-butyl ether	**<595**	ug/kg	595	595	1		04/06/20 17:16	1634-04-4	
Naphthalene	**<786**	ug/kg	786	786	1		04/06/20 17:16	91-20-3	
n-Propylbenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	103-65-1	
Styrene	**<119**	ug/kg	119	119	1		04/06/20 17:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<238**	ug/kg	238	238	1		04/06/20 17:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<119**	ug/kg	119	119	1		04/06/20 17:16	79-34-5	
Tetrachloroethene	**<119**	ug/kg	119	119	1		04/06/20 17:16	127-18-4	
Tetrahydrofuran	**<2380**	ug/kg	2380	2380	1		04/06/20 17:16	109-99-9	N2
Toluene	**<238**	ug/kg	238	238	1		04/06/20 17:16	108-88-3	
1,2,3-Trichlorobenzene	**<595**	ug/kg	595	595	1		04/06/20 17:16	87-61-6	
1,2,4-Trichlorobenzene	**<595**	ug/kg	595	595	1		04/06/20 17:16	120-82-1	
1,1,1-Trichloroethane	**<119**	ug/kg	119	119	1		04/06/20 17:16	71-55-6	
1,1,2-Trichloroethane	**<119**	ug/kg	119	119	1		04/06/20 17:16	79-00-5	
Trichloroethene	**<119**	ug/kg	119	119	1		04/06/20 17:16	79-01-6	
Trichlorofluoromethane	**<238**	ug/kg	238	238	1		04/06/20 17:16	75-69-4	
1,2,3-Trichloropropane	**<238**	ug/kg	238	238	1		04/06/20 17:16	96-18-4	
1,2,3-Trimethylbenzene	**<595**	ug/kg	595	595	1		04/06/20 17:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	95-63-6	
1,3,5-Trimethylbenzene	**<238**	ug/kg	238	238	1		04/06/20 17:16	108-67-8	
Vinyl chloride	**<95.2**	ug/kg	95.2	95.2	1		04/06/20 17:16	75-01-4	
m&p-Xylene	**<59.5**	ug/kg	119	59.5	1		04/06/20 17:16	179601-23-1	
o-Xylene	**<59.5**	ug/kg	119	59.5	1		04/06/20 17:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%.	62-137		1		04/06/20 17:16	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		04/06/20 17:16	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	60-142		1		04/06/20 17:16	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**12.0**	%	0.10	0.10	1		04/04/20 11:26		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.3**	mg/kg	2.3	2.3	1	04/17/20 09:08	04/18/20 10:43	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**4.1**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-118 (2-3') **Lab ID: 50253312005** Collected: 03/30/20 12:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**17000**	ug/kg	1970	1970	1	04/06/20 15:14	04/07/20 14:19	7440-38-2	
Barium	**7340**	ug/kg	987	987	1	04/06/20 15:14	04/07/20 14:19	7440-39-3	
Chromium	**4900**	ug/kg	1850	1850	1	04/08/20 13:34	04/09/20 03:31	7440-47-3	
Lead	**<9870**	ug/kg	9870	9870	1	04/06/20 15:14	04/07/20 14:19	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<200**	ug/kg	200	200	1	04/06/20 00:53	04/06/20 12:08	7440-43-9	
Selenium	**<200**	ug/kg	200	200	1	04/06/20 00:53	04/06/20 12:08	7782-49-2	
Silver	**<99.8**	ug/kg	99.8	99.8	1	04/06/20 00:53	04/06/20 12:08	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<64.0**	ug/kg	114	64.0	1	04/08/20 12:06	04/09/20 08:24	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**6.9**	%	0.10	0.10	1		04/04/20 11:27		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.2**	mg/kg	2.2	2.2	1	04/17/20 09:08	04/18/20 10:44	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**4.9**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-118 (10-11') **Lab ID: 50253312006** Collected: 03/30/20 12:10 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4690**	ug/kg	4690	4690	1		04/05/20 13:58	71-36-3	
Ethanol	**<2660**	ug/kg	2660	2660	1		04/05/20 13:58	64-17-5	B0
Methanol	**17100**	ug/kg	4690	4690	1		04/05/20 13:58	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<1980**	ug/kg	1980	1980	1	04/06/20 15:14	04/07/20 14:22	7440-38-2	
Barium	**6390**	ug/kg	992	992	1	04/06/20 15:14	04/07/20 14:22	7440-39-3	
Chromium	**4510**	ug/kg	1900	1900	1	04/08/20 13:34	04/09/20 03:34	7440-47-3	
Lead	**<9920**	ug/kg	9920	9920	1	04/06/20 15:14	04/07/20 14:22	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<197**	ug/kg	197	197	1	04/06/20 00:53	04/06/20 12:21	7440-43-9	
Selenium	**<197**	ug/kg	197	197	1	04/06/20 00:53	04/06/20 12:21	7782-49-2	
Silver	**<98.4**	ug/kg	98.4	98.4	1	04/06/20 00:53	04/06/20 12:21	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<58.3**	ug/kg	104	58.3	1	04/08/20 12:06	04/09/20 08:27	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	83-32-9	
Acenaphthylene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	208-96-8	
Anthracene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	120-12-7	
Benzo(a)anthracene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	56-55-3	
Benzo(a)pyrene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	50-32-8	
Benzo(b)fluoranthene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	205-99-2	
Benzo(g,h,i)perylene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	191-24-2	
Benzo(k)fluoranthene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	207-08-9	
Chrysene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	218-01-9	
Dibenz(a,h)anthracene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	53-70-3	
Fluoranthene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	206-44-0	
Fluorene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	193-39-5	
2-Methylnaphthalene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	91-57-6	
Naphthalene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	91-20-3	
Phenanthrene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	85-01-8	
Pyrene	**<350**	ug/kg	350	350	1	04/07/20 01:03	04/07/20 15:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%.	37-111		1	04/07/20 01:03	04/07/20 15:25	321-60-8	
p-Terphenyl-d14 (S)	75	%.	29-124		1	04/07/20 01:03	04/07/20 15:25	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-118 (10-11') **Lab ID: 50253312006** Collected: 03/30/20 12:10 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1730**	ug/kg	1730	1730	1		04/06/20 17:49	67-64-1	
Acrylonitrile	**<173**	ug/kg	173	173	1		04/06/20 17:49	107-13-1	
tert-Amylmethyl ether	**<433**	ug/kg	433	433	1		04/06/20 17:49	994-05-8	N2
Benzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	71-43-2	
Bromobenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	108-86-1	
Bromochloromethane	**<43.3**	ug/kg	86.6	43.3	1		04/06/20 17:49	74-97-5	
Bromodichloromethane	**<173**	ug/kg	173	173	1		04/06/20 17:49	75-27-4	
Bromoform	**<173**	ug/kg	173	173	1		04/06/20 17:49	75-25-2	
Bromomethane	**<347**	ug/kg	347	347	1		04/06/20 17:49	74-83-9	L1
2-Butanone (MEK)	**<1300**	ug/kg	1300	1300	1		04/06/20 17:49	78-93-3	
tert-Butyl Alcohol	**<4330**	ug/kg	4330	4330	1		04/06/20 17:49	75-65-0	
n-Butylbenzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	104-51-8	
sec-Butylbenzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	135-98-8	
tert-Butylbenzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	98-06-6	
Carbon disulfide	**<433**	ug/kg	433	433	1		04/06/20 17:49	75-15-0	
Carbon tetrachloride	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	56-23-5	
Chlorobenzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	108-90-7	
Chloroethane	**<433**	ug/kg	433	433	1		04/06/20 17:49	75-00-3	
Chloroform	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	67-66-3	
Chloromethane	**<433**	ug/kg	433	433	1		04/06/20 17:49	74-87-3	
Cyclohexane	**<866**	ug/kg	866	866	1		04/06/20 17:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	96-12-8	
Dibromochloromethane	**<173**	ug/kg	173	173	1		04/06/20 17:49	124-48-1	
1,2-Dibromoethane (EDB)	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	106-93-4	
Dibromomethane	**<433**	ug/kg	433	433	1		04/06/20 17:49	74-95-3	
1,2-Dichlorobenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	95-50-1	
1,3-Dichlorobenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	541-73-1	
1,4-Dichlorobenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<173**	ug/kg	1730	173	1		04/06/20 17:49	110-57-6	
Dichlorodifluoromethane	**<433**	ug/kg	433	433	1		04/06/20 17:49	75-71-8	
1,1-Dichloroethane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	75-34-3	
1,2-Dichloroethane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	107-06-2	
1,1-Dichloroethene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	75-35-4	
cis-1,2-Dichloroethene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	156-59-2	
trans-1,2-Dichloroethene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	156-60-5	
1,2-Dichloropropane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	78-87-5	
cis-1,3-Dichloropropene	**<173**	ug/kg	173	173	1		04/06/20 17:49	10061-01-5	
trans-1,3-Dichloropropene	**<173**	ug/kg	173	173	1		04/06/20 17:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<347**	ug/kg	347	347	1		04/06/20 17:49	60-29-7	
Diisopropyl ether	**<433**	ug/kg	433	433	1		04/06/20 17:49	108-20-3	N2
Ethylbenzene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	100-41-4	
Ethyl-tert-butyl ether	**<433**	ug/kg	433	433	1		04/06/20 17:49	637-92-3	N2
Hexachloroethane	**<520**	ug/kg	520	520	1		04/06/20 17:49	67-72-1	N2
2-Hexanone	**<4330**	ug/kg	4330	4330	1		04/06/20 17:49	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: MW-118 (10-11') **Lab ID: 50253312006** Collected: 03/30/20 12:10 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<173**	ug/kg	1730	173	1		04/06/20 17:49	74-88-4	
Isopropylbenzene (Cumene)	**<433**	ug/kg	433	433	1		04/06/20 17:49	98-82-8	
p-Isopropyltoluene	**<43.3**	ug/kg	86.6	43.3	1		04/06/20 17:49	99-87-6	
Methylene Chloride	**<173**	ug/kg	173	173	1		04/06/20 17:49	75-09-2	
2-Methylnaphthalene	**<572**	ug/kg	572	572	1		04/06/20 17:49	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<4330**	ug/kg	4330	4330	1		04/06/20 17:49	108-10-1	
Methyl-tert-butyl ether	**<433**	ug/kg	433	433	1		04/06/20 17:49	1634-04-4	
Naphthalene	**<572**	ug/kg	572	572	1		04/06/20 17:49	91-20-3	
n-Propylbenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	103-65-1	
Styrene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<173**	ug/kg	173	173	1		04/06/20 17:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	79-34-5	
Tetrachloroethene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	127-18-4	
Tetrahydrofuran	**<1730**	ug/kg	1730	1730	1		04/06/20 17:49	109-99-9	N2
Toluene	**<173**	ug/kg	173	173	1		04/06/20 17:49	108-88-3	
1,2,3-Trichlorobenzene	**<433**	ug/kg	433	433	1		04/06/20 17:49	87-61-6	
1,2,4-Trichlorobenzene	**<433**	ug/kg	433	433	1		04/06/20 17:49	120-82-1	
1,1,1-Trichloroethane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	71-55-6	
1,1,2-Trichloroethane	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	79-00-5	
Trichloroethene	**<86.6**	ug/kg	86.6	86.6	1		04/06/20 17:49	79-01-6	
Trichlorofluoromethane	**<173**	ug/kg	173	173	1		04/06/20 17:49	75-69-4	
1,2,3-Trichloropropane	**<173**	ug/kg	173	173	1		04/06/20 17:49	96-18-4	
1,2,3-Trimethylbenzene	**<433**	ug/kg	433	433	1		04/06/20 17:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	95-63-6	
1,3,5-Trimethylbenzene	**<173**	ug/kg	173	173	1		04/06/20 17:49	108-67-8	
Vinyl chloride	**<69.3**	ug/kg	69.3	69.3	1		04/06/20 17:49	75-01-4	
m&p-Xylene	**<43.3**	ug/kg	86.6	43.3	1		04/06/20 17:49	179601-23-1	
o-Xylene	**<43.3**	ug/kg	86.6	43.3	1		04/06/20 17:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		04/06/20 17:49	1868-53-7	
Toluene-d8 (S)	106	%.	64-139		1		04/06/20 17:49	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	60-142		1		04/06/20 17:49	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**6.2**	%	0.10	0.10	1		04/04/20 11:27		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	04/17/20 09:08	04/18/20 10:44	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**4.5**	mg/kg	1.0		1		04/23/20 07:45	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Dup-1 **Lab ID: 50253312007** Collected: 03/30/20 12:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4980**	ug/kg	4980	4980	1		04/05/20 14:08	71-36-3	
Ethanol	**<2830**	ug/kg	2830	2830	1		04/05/20 14:08	64-17-5	B0
Methanol	**5610**	ug/kg	4980	4980	1		04/05/20 14:08	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2090**	ug/kg	2090	2090	1	04/06/20 15:14	04/07/20 14:24	7440-38-2	
Barium	**14200**	ug/kg	1050	1050	1	04/06/20 15:14	04/07/20 14:24	7440-39-3	
Chromium	**8540**	ug/kg	2230	2230	1	04/08/20 13:34	04/09/20 03:40	7440-47-3	
Lead	**<10500**	ug/kg	10500	10500	1	04/06/20 15:14	04/07/20 14:24	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<209**	ug/kg	209	209	1	04/06/20 00:53	04/06/20 12:26	7440-43-9	
Selenium	**296**	ug/kg	209	209	1	04/06/20 00:53	04/06/20 12:26	7782-49-2	
Silver	**<104**	ug/kg	104	104	1	04/06/20 00:53	04/06/20 12:26	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<61.3**	ug/kg	109	61.3	1	04/08/20 12:06	04/09/20 08:29	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	83-32-9	
Acenaphthylene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	208-96-8	
Anthracene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	120-12-7	
Benzo(a)anthracene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	56-55-3	
Benzo(a)pyrene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	50-32-8	
Benzo(b)fluoranthene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	205-99-2	
Benzo(g,h,i)perylene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	191-24-2	
Benzo(k)fluoranthene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	207-08-9	
Chrysene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	218-01-9	
Dibenz(a,h)anthracene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	53-70-3	
Fluoranthene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	206-44-0	
Fluorene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	193-39-5	
2-Methylnaphthalene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	91-57-6	
Naphthalene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	91-20-3	
Phenanthrene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	85-01-8	
Pyrene	**<371**	ug/kg	371	371	1	04/07/20 01:03	04/07/20 15:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%.	37-111		1	04/07/20 01:03	04/07/20 15:42	321-60-8	
p-Terphenyl-d14 (S)	73	%.	29-124		1	04/07/20 01:03	04/07/20 15:42	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Dup-1 **Lab ID: 50253312007** Collected: 03/30/20 12:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1180**	ug/kg	1180	1180	1		04/06/20 18:22	67-64-1	
Acrylonitrile	**<118**	ug/kg	118	118	1		04/06/20 18:22	107-13-1	
tert-Amylmethyl ether	**<294**	ug/kg	294	294	1		04/06/20 18:22	994-05-8	N2
Benzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	71-43-2	
Bromobenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	108-86-1	
Bromochloromethane	**<29.4**	ug/kg	58.9	29.4	1		04/06/20 18:22	74-97-5	
Bromodichloromethane	**<118**	ug/kg	118	118	1		04/06/20 18:22	75-27-4	
Bromoform	**<118**	ug/kg	118	118	1		04/06/20 18:22	75-25-2	
Bromomethane	**<236**	ug/kg	236	236	1		04/06/20 18:22	74-83-9	L1
2-Butanone (MEK)	**<883**	ug/kg	883	883	1		04/06/20 18:22	78-93-3	
tert-Butyl Alcohol	**<2940**	ug/kg	2940	2940	1		04/06/20 18:22	75-65-0	
n-Butylbenzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	104-51-8	
sec-Butylbenzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	135-98-8	
tert-Butylbenzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	98-06-6	
Carbon disulfide	**<294**	ug/kg	294	294	1		04/06/20 18:22	75-15-0	
Carbon tetrachloride	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	56-23-5	
Chlorobenzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	108-90-7	
Chloroethane	**<294**	ug/kg	294	294	1		04/06/20 18:22	75-00-3	
Chloroform	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	67-66-3	
Chloromethane	**<294**	ug/kg	294	294	1		04/06/20 18:22	74-87-3	
Cyclohexane	**<589**	ug/kg	589	589	1		04/06/20 18:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	96-12-8	
Dibromochloromethane	**<118**	ug/kg	118	118	1		04/06/20 18:22	124-48-1	
1,2-Dibromoethane (EDB)	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	106-93-4	
Dibromomethane	**<294**	ug/kg	294	294	1		04/06/20 18:22	74-95-3	
1,2-Dichlorobenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	95-50-1	
1,3-Dichlorobenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	541-73-1	
1,4-Dichlorobenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<118**	ug/kg	1180	118	1		04/06/20 18:22	110-57-6	
Dichlorodifluoromethane	**<294**	ug/kg	294	294	1		04/06/20 18:22	75-71-8	
1,1-Dichloroethane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	75-34-3	
1,2-Dichloroethane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	107-06-2	
1,1-Dichloroethene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	75-35-4	
cis-1,2-Dichloroethene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	156-59-2	
trans-1,2-Dichloroethene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	156-60-5	
1,2-Dichloropropane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	78-87-5	
cis-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		04/06/20 18:22	10061-01-5	
trans-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		04/06/20 18:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<236**	ug/kg	236	236	1		04/06/20 18:22	60-29-7	
Diisopropyl ether	**<294**	ug/kg	294	294	1		04/06/20 18:22	108-20-3	N2
Ethylbenzene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	100-41-4	
Ethyl-tert-butyl ether	**<294**	ug/kg	294	294	1		04/06/20 18:22	637-92-3	N2
Hexachloroethane	**<353**	ug/kg	353	353	1		04/06/20 18:22	67-72-1	N2
2-Hexanone	**<2940**	ug/kg	2940	2940	1		04/06/20 18:22	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Dup-1 **Lab ID: 50253312007** Collected: 03/30/20 12:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<118**	ug/kg	1180	118	1		04/06/20 18:22	74-88-4	
Isopropylbenzene (Cumene)	**<294**	ug/kg	294	294	1		04/06/20 18:22	98-82-8	
p-Isopropyltoluene	**<29.4**	ug/kg	58.9	29.4	1		04/06/20 18:22	99-87-6	
Methylene Chloride	**<118**	ug/kg	118	118	1		04/06/20 18:22	75-09-2	
2-Methylnaphthalene	**<389**	ug/kg	389	389	1		04/06/20 18:22	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2940**	ug/kg	2940	2940	1		04/06/20 18:22	108-10-1	
Methyl-tert-butyl ether	**<294**	ug/kg	294	294	1		04/06/20 18:22	1634-04-4	
Naphthalene	**<389**	ug/kg	389	389	1		04/06/20 18:22	91-20-3	
n-Propylbenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	103-65-1	
Styrene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<118**	ug/kg	118	118	1		04/06/20 18:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	79-34-5	
Tetrachloroethene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	127-18-4	
Tetrahydrofuran	**<1180**	ug/kg	1180	1180	1		04/06/20 18:22	109-99-9	N2
Toluene	**<118**	ug/kg	118	118	1		04/06/20 18:22	108-88-3	
1,2,3-Trichlorobenzene	**<294**	ug/kg	294	294	1		04/06/20 18:22	87-61-6	
1,2,4-Trichlorobenzene	**<294**	ug/kg	294	294	1		04/06/20 18:22	120-82-1	
1,1,1-Trichloroethane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	71-55-6	
1,1,2-Trichloroethane	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	79-00-5	
Trichloroethene	**<58.9**	ug/kg	58.9	58.9	1		04/06/20 18:22	79-01-6	
Trichlorofluoromethane	**<118**	ug/kg	118	118	1		04/06/20 18:22	75-69-4	
1,2,3-Trichloropropane	**<118**	ug/kg	118	118	1		04/06/20 18:22	96-18-4	
1,2,3-Trimethylbenzene	**<294**	ug/kg	294	294	1		04/06/20 18:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	95-63-6	
1,3,5-Trimethylbenzene	**<118**	ug/kg	118	118	1		04/06/20 18:22	108-67-8	
Vinyl chloride	**<47.1**	ug/kg	47.1	47.1	1		04/06/20 18:22	75-01-4	
m&p-Xylene	**<29.4**	ug/kg	58.9	29.4	1		04/06/20 18:22	179601-23-1	
o-Xylene	**<29.4**	ug/kg	58.9	29.4	1		04/06/20 18:22	95-47-6	
Surrogates									
Dibromofluoromethane (S)	113	%.	62-137		1		04/06/20 18:22	1868-53-7	
Toluene-d8 (S)	121	%.	64-139		1		04/06/20 18:22	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	60-142		1		04/06/20 18:22	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**11.6**	%	0.10	0.10	1		04/04/20 11:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Trip Blank **Lab ID: 50253312008** Collected: 03/30/20 08:30 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		04/06/20 18:54	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		04/06/20 18:54	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		04/06/20 18:54	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 18:54	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		04/06/20 18:54	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		04/06/20 18:54	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		04/06/20 18:54	74-83-9	L1
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		04/06/20 18:54	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		04/06/20 18:54	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		04/06/20 18:54	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		04/06/20 18:54	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		04/06/20 18:54	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		04/06/20 18:54	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		04/06/20 18:54	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		04/06/20 18:54	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		04/06/20 18:54	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		04/06/20 18:54	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/06/20 18:54	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/06/20 18:54	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		04/06/20 18:54	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		04/06/20 18:54	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/06/20 18:54	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		04/06/20 18:54	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		04/06/20 18:54	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Trip Blank **Lab ID: 50253312008** Collected: 03/30/20 08:30 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		04/06/20 18:54	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		04/06/20 18:54	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 18:54	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		04/06/20 18:54	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		04/06/20 18:54	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		04/06/20 18:54	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/06/20 18:54	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		04/06/20 18:54	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		04/06/20 18:54	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		04/06/20 18:54	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		04/06/20 18:54	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/06/20 18:54	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/06/20 18:54	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 18:54	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		04/06/20 18:54	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		04/06/20 18:54	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		04/06/20 18:54	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/06/20 18:54	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		04/06/20 18:54	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 18:54	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 18:54	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99	%.	62-137		1		04/06/20 18:54	1868-53-7	
Toluene-d8 (S)	107	%.	64-139		1		04/06/20 18:54	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	60-142		1		04/06/20 18:54	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Field Blank **Lab ID: 50253312009** Collected: 03/30/20 11:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		04/06/20 19:27	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		04/06/20 19:27	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		04/06/20 19:27	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 19:27	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		04/06/20 19:27	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		04/06/20 19:27	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		04/06/20 19:27	74-83-9	L1
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		04/06/20 19:27	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		04/06/20 19:27	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		04/06/20 19:27	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		04/06/20 19:27	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		04/06/20 19:27	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		04/06/20 19:27	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		04/06/20 19:27	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		04/06/20 19:27	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		04/06/20 19:27	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		04/06/20 19:27	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/06/20 19:27	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		04/06/20 19:27	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		04/06/20 19:27	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		04/06/20 19:27	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/06/20 19:27	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		04/06/20 19:27	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		04/06/20 19:27	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Sample: Field Blank **Lab ID: 50253312009** Collected: 03/30/20 11:00 Received: 03/31/20 08:15 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		04/06/20 19:27	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		04/06/20 19:27	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 19:27	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		04/06/20 19:27	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		04/06/20 19:27	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		04/06/20 19:27	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		04/06/20 19:27	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		04/06/20 19:27	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		04/06/20 19:27	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		04/06/20 19:27	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		04/06/20 19:27	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/06/20 19:27	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		04/06/20 19:27	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		04/06/20 19:27	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		04/06/20 19:27	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		04/06/20 19:27	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		04/06/20 19:27	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		04/06/20 19:27	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		04/06/20 19:27	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 19:27	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		04/06/20 19:27	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99	%.	62-137		1		04/06/20 19:27	1868-53-7	
Toluene-d8 (S)	106	%.	64-139		1		04/06/20 19:27	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	60-142		1		04/06/20 19:27	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555572
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007

METHOD BLANK: 2562713 Matrix: Solid
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/kg	<2500	2500	2500	04/05/20 13:24	
Methanol	ug/kg	<4400	4400	4400	04/05/20 13:24	
n-Butanol	ug/kg	<4400	4400	4400	04/05/20 13:24	

LABORATORY CONTROL SAMPLE: 2562714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/kg	50000	49300	99	79-113	
Methanol	ug/kg	50000	49000	98	75-111	
n-Butanol	ug/kg	50000	47300	95	80-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2562715 2562716

Parameter	Units	50253312007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/kg	<2830	56500	56500	48800	48100	86	85	46-120	1	20	
Methanol	ug/kg	5610	56500	56500	53500	52600	85	83	42-119	2	20	
n-Butanol	ug/kg	<4980	56500	56500	47100	46200	83	82	10-142	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555646
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

METHOD BLANK: 2562911 Matrix: Solid
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<54.7	97.7	54.7	04/09/20 07:44	

LABORATORY CONTROL SAMPLE: 2562912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	490	492	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2562913 2562914

Parameter	Units	50253306002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	ND	564	579	596	594	103	100	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555146
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

METHOD BLANK: 2560143 Matrix: Solid
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/kg	<2000	2000	2000	04/07/20 13:15	
Barium	ug/kg	<1000	1000	1000	04/07/20 13:15	
Lead	ug/kg	<10000	10000	10000	04/07/20 13:15	

LABORATORY CONTROL SAMPLE: 2560144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/kg	50000	51300	103	80-120	
Barium	ug/kg	50000	51500	103	80-120	
Lead	ug/kg	50000	51200	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2560145 2560146

Parameter	Units	50253312003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/kg	<2130	51700	55300	51200	55400	96	97	75-125	8	20	
Barium	ug/kg	8430	51700	55300	61000	65000	102	102	75-125	6	20	
Lead	ug/kg	<10600	51700	55300	52000	55800	94	95	75-125	7	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 556033
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

METHOD BLANK: 2564381 Matrix: Solid
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium	ug/kg	<2000	2000	2000	04/09/20 03:20	

LABORATORY CONTROL SAMPLE: 2564382

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/kg	50000	48600	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2564383 2564384

Parameter	Units	50253859003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/kg	15.7 mg/kg	55900	57800	65200	65300	89	86	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555596
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

METHOD BLANK: 2562771 Matrix: Solid
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/kg	<200	200	200	04/06/20 09:22	
Selenium	ug/kg	<200	200	200	04/06/20 09:22	
Silver	ug/kg	<100	100	100	04/06/20 09:22	

LABORATORY CONTROL SAMPLE: 2562772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/kg	4000	3830	96	80-120	
Selenium	ug/kg	4000	3850	96	80-120	
Silver	ug/kg	4000	4030	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2562773 2562774

Parameter	Units	50253312001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/kg	<208	4270	4230	3990	4000	92	93	75-125	0	20	
Selenium	ug/kg	312	4270	4230	3810	3640	82	79	75-125	5	20	
Silver	ug/kg	<104	4270	4230	4080	4080	95	96	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555668
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007, 50253312008, 50253312009

METHOD BLANK: 2562950 Matrix: Solid
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007, 50253312008, 50253312009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	04/06/20 12:22	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	04/06/20 12:22	
1,2,3-Trichloropropane	ug/kg	<100	100	100	04/06/20 12:22	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	04/06/20 12:22	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	04/06/20 12:22	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	04/06/20 12:22	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,2-Dichlorobenzene	ug/kg	<100	100	100	04/06/20 12:22	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	04/06/20 12:22	
1,3-Dichlorobenzene	ug/kg	<100	100	100	04/06/20 12:22	
1,4-Dichlorobenzene	ug/kg	<100	100	100	04/06/20 12:22	
2-Butanone (MEK)	ug/kg	<750	750	750	04/06/20 12:22	
2-Hexanone	ug/kg	<2500	2500	2500	04/06/20 12:22	
2-Methylnaphthalene	ug/kg	<330	330	330	04/06/20 12:22	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	04/06/20 12:22	
Acetone	ug/kg	<1000	1000	1000	04/06/20 12:22	
Acrylonitrile	ug/kg	<100	100	100	04/06/20 12:22	
Benzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Bromobenzene	ug/kg	<100	100	100	04/06/20 12:22	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	04/06/20 12:22	
Bromodichloromethane	ug/kg	<100	100	100	04/06/20 12:22	
Bromoform	ug/kg	<100	100	100	04/06/20 12:22	
Bromomethane	ug/kg	<200	200	200	04/06/20 12:22	
Carbon disulfide	ug/kg	<250	250	250	04/06/20 12:22	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Chloroethane	ug/kg	<250	250	250	04/06/20 12:22	
Chloroform	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Chloromethane	ug/kg	<250	250	250	04/06/20 12:22	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	04/06/20 12:22	
Cyclohexane	ug/kg	<500	500	500	04/06/20 12:22	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

METHOD BLANK: 2562950 Matrix: Solid
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007, 50253312008, 50253312009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	04/06/20 12:22	
Dibromomethane	ug/kg	<250	250	250	04/06/20 12:22	
Dichlorodifluoromethane	ug/kg	<250	250	250	04/06/20 12:22	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	04/06/20 12:22	
Diisopropyl ether	ug/kg	<250	250	250	04/06/20 12:22	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	04/06/20 12:22	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Hexachloroethane	ug/kg	<300	300	300	04/06/20 12:22	N2
Iodomethane	ug/kg	<100	1000	100	04/06/20 12:22	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	04/06/20 12:22	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	04/06/20 12:22	
Methyl-tert-butyl ether	ug/kg	<250	250	250	04/06/20 12:22	
Methylene Chloride	ug/kg	<100	100	100	04/06/20 12:22	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
n-Propylbenzene	ug/kg	<100	100	100	04/06/20 12:22	
Naphthalene	ug/kg	<330	330	330	04/06/20 12:22	
o-Xylene	ug/kg	<25.0	50.0	25.0	04/06/20 12:22	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	04/06/20 12:22	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Styrene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
tert-Amylmethyl ether	ug/kg	<250	250	250	04/06/20 12:22	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	04/06/20 12:22	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Tetrahydrofuran	ug/kg	<1000	1000	1000	04/06/20 12:22	N2
Toluene	ug/kg	<100	100	100	04/06/20 12:22	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	04/06/20 12:22	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	04/06/20 12:22	
Trichloroethene	ug/kg	<50.0	50.0	50.0	04/06/20 12:22	
Trichlorofluoromethane	ug/kg	<100	100	100	04/06/20 12:22	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	04/06/20 12:22	
4-Bromofluorobenzene (S)	%.	98	60-142		04/06/20 12:22	
Dibromofluoromethane (S)	%.	102	62-137		04/06/20 12:22	
Toluene-d8 (S)	%.	104	64-139		04/06/20 12:22	

LABORATORY CONTROL SAMPLE: 2562951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	102	102	82-119	
1,1,1-Trichloroethane	ug/kg	100	110	110	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	81.9	82	54-137	
1,1,2-Trichloroethane	ug/kg	100	94.1	94	77-122	
1,1-Dichloroethane	ug/kg	100	114	114	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

LABORATORY CONTROL SAMPLE: 2562951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	111	111	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	107	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	92	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	113	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	101	101	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	105	105	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	99.3	99	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	99	79-117	
1,2-Dichloroethane	ug/kg	100	97.8	98	74-116	
1,2-Dichloropropane	ug/kg	100	107	107	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	99	76-122	
1,3-Dichlorobenzene	ug/kg	100	102	102	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	97	76-115	
2-Butanone (MEK)	ug/kg	500	<750	91	65-126	
2-Hexanone	ug/kg	500	<2500	93	54-141	
2-Methylnaphthalene	ug/kg	100	<330	96	47-148	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	93	60-133	
Acetone	ug/kg	500	<1000	96	49-139	
Acrylonitrile	ug/kg	400	394	99	66-133	
Benzene	ug/kg	100	105	105	71-126	
Bromobenzene	ug/kg	100	104	104	77-119	
Bromochloromethane	ug/kg	100	92.8	93	60-117	
Bromodichloromethane	ug/kg	100	<100	98	79-122	
Bromoform	ug/kg	100	<100	92	64-121	
Bromomethane	ug/kg	100	218	218	10-200	L1
Carbon disulfide	ug/kg	100	<250	113	54-129	
Carbon tetrachloride	ug/kg	100	108	108	78-120	
Chlorobenzene	ug/kg	100	101	101	81-117	
Chloroethane	ug/kg	100	<250	93	54-134	
Chloroform	ug/kg	100	101	101	80-119	
Chloromethane	ug/kg	100	<250	114	31-118	
cis-1,2-Dichloroethene	ug/kg	100	101	101	77-125	
cis-1,3-Dichloropropene	ug/kg	100	110	110	74-133	
Cyclohexane	ug/kg	100	<500	109	49-128	N2
Dibromochloromethane	ug/kg	100	102	102	78-124	
Dibromomethane	ug/kg	100	<250	100	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	121	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	104	50-150	
Ethylbenzene	ug/kg	100	104	104	74-127	
Iodomethane	ug/kg	200	206J	103	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	112	85-121	
m&p-Xylene	ug/kg	200	212	106	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	106	78-135	
Methylene Chloride	ug/kg	100	<100	98	73-119	
n-Butylbenzene	ug/kg	100	102	102	69-126	
n-Propylbenzene	ug/kg	100	<100	98	73-124	
Naphthalene	ug/kg	100	<330	97	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

LABORATORY CONTROL SAMPLE: 2562951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	108	108	74-128	
p-Isopropyltoluene	ug/kg	100	105	105	74-124	
sec-Butylbenzene	ug/kg	100	100	100	72-124	
Styrene	ug/kg	100	108	108	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	100	50-150	
tert-Butylbenzene	ug/kg	100	77.0	77	54-104	
Tetrachloroethene	ug/kg	100	107	107	74-120	
Tetrahydrofuran	ug/kg	100	<1000	102	53-135	N2
Toluene	ug/kg	100	100	100	71-124	
trans-1,2-Dichloroethene	ug/kg	100	113	113	73-131	
trans-1,3-Dichloropropene	ug/kg	100	101	101	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	376J	94	22-132	
Trichloroethene	ug/kg	100	105	105	75-121	
Trichlorofluoromethane	ug/kg	100	118	118	64-135	
Vinyl chloride	ug/kg	100	106	106	51-137	
4-Bromofluorobenzene (S)	%.			108	60-142	
Dibromofluoromethane (S)	%.			101	62-137	
Toluene-d8 (S)	%.			101	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555767
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007

METHOD BLANK: 2563279 Matrix: Solid
Associated Lab Samples: 50253312002, 50253312004, 50253312006, 50253312007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	<328	328	328	04/07/20 10:02	
Acenaphthene	ug/kg	<328	328	328	04/07/20 10:02	
Acenaphthylene	ug/kg	<328	328	328	04/07/20 10:02	
Anthracene	ug/kg	<328	328	328	04/07/20 10:02	
Benzo(a)anthracene	ug/kg	<328	328	328	04/07/20 10:02	
Benzo(a)pyrene	ug/kg	<328	328	328	04/07/20 10:02	
Benzo(b)fluoranthene	ug/kg	<328	328	328	04/07/20 10:02	
Benzo(g,h,i)perylene	ug/kg	<328	328	328	04/07/20 10:02	
Benzo(k)fluoranthene	ug/kg	<328	328	328	04/07/20 10:02	
Chrysene	ug/kg	<328	328	328	04/07/20 10:02	
Dibenz(a,h)anthracene	ug/kg	<328	328	328	04/07/20 10:02	
Fluoranthene	ug/kg	<328	328	328	04/07/20 10:02	
Fluorene	ug/kg	<328	328	328	04/07/20 10:02	
Indeno(1,2,3-cd)pyrene	ug/kg	<328	328	328	04/07/20 10:02	
Naphthalene	ug/kg	<328	328	328	04/07/20 10:02	
Phenanthrene	ug/kg	<328	328	328	04/07/20 10:02	
Pyrene	ug/kg	<328	328	328	04/07/20 10:02	
2-Fluorobiphenyl (S)	%.	85	37-111		04/07/20 10:02	
p-Terphenyl-d14 (S)	%.	98	29-124		04/07/20 10:02	

LABORATORY CONTROL SAMPLE: 2563280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	332	<329	96	50-117	
Acenaphthene	ug/kg	332	<329	97	54-116	
Acenaphthylene	ug/kg	332	347	104	55-119	
Anthracene	ug/kg	332	363	109	51-122	
Benzo(a)anthracene	ug/kg	332	<329	96	66-125	
Benzo(a)pyrene	ug/kg	332	330	99	61-133	
Benzo(b)fluoranthene	ug/kg	332	<329	95	49-141	
Benzo(g,h,i)perylene	ug/kg	332	333	100	53-130	
Benzo(k)fluoranthene	ug/kg	332	374	112	51-135	
Chrysene	ug/kg	332	<329	95	63-125	
Dibenz(a,h)anthracene	ug/kg	332	349	105	59-130	
Fluoranthene	ug/kg	332	351	106	65-128	
Fluorene	ug/kg	332	330	99	57-122	
Indeno(1,2,3-cd)pyrene	ug/kg	332	351	106	62-122	
Naphthalene	ug/kg	332	<329	94	48-109	
Phenanthrene	ug/kg	332	<329	99	57-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

LABORATORY CONTROL SAMPLE: 2563280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	332	<329	94	53-127	
2-Fluorobiphenyl (S)	%.			81	37-111	
p-Terphenyl-d14 (S)	%.			87	29-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2563281 2563282

Parameter	Units	50253312002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	<382	384	383	<380	<379	82	83	22-135	1	20	
Acenaphthene	ug/kg	<382	384	383	<380	<379	84	84	34-123	1	20	
Acenaphthylene	ug/kg	<382	384	383	<380	<379	92	92	34-127	0	20	
Anthracene	ug/kg	<382	384	383	<380	<379	90	90	15-142	1	20	
Benzo(a)anthracene	ug/kg	<382	384	383	<380	<379	74	76	23-148	2	20	
Benzo(a)pyrene	ug/kg	<382	384	383	<380	<379	71	74	19-149	3	20	
Benzo(b)fluoranthene	ug/kg	<382	384	383	<380	<379	71	73	13-153	3	20	
Benzo(g,h,i)perylene	ug/kg	<382	384	383	<380	<379	71	71	10-144	0	20	
Benzo(k)fluoranthene	ug/kg	<382	384	383	<380	<379	77	74	18-142	4	20	
Chrysene	ug/kg	<382	384	383	<380	<379	74	72	22-146	3	20	
Dibenz(a,h)anthracene	ug/kg	<382	384	383	<380	<379	76	76	28-133	1	20	
Fluoranthene	ug/kg	<382	384	383	<380	<379	85	85	13-162	0	20	
Fluorene	ug/kg	<382	384	383	<380	<379	86	85	32-134	1	20	
Indeno(1,2,3-cd)pyrene	ug/kg	<382	384	383	<380	<379	73	75	15-141	2	20	
Naphthalene	ug/kg	<382	384	383	<380	<379	82	82	19-131	0	20	
Phenanthrene	ug/kg	<382	384	383	<380	<379	81	81	16-149	0	20	
Pyrene	ug/kg	<382	384	383	<380	<379	74	75	13-152	1	20	
2-Fluorobiphenyl (S)	%.						67	70	37-111			
p-Terphenyl-d14 (S)	%.						64	74	29-124			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 555559
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006, 50253312007

SAMPLE DUPLICATE: 2562594

Parameter	Units	50253555001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.2	22.0	4	5	

SAMPLE DUPLICATE: 2562595

Parameter	Units	50253402001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.4	19.1	2	5	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50253312

QC Batch: 557593 | Analysis Method: EPA 7196A
QC Batch Method: EPA 3060A | Analysis Description: 7196 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006

METHOD BLANK: 2571809 Matrix: Solid
Associated Lab Samples: 50253312001, 50253312002, 50253312003, 50253312004, 50253312005, 50253312006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	<2.0	2.0	2.0	04/18/20 10:41	

LABORATORY CONTROL SAMPLE: 2571810

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	1000	936	93	80-120	

MATRIX SPIKE SAMPLE: 2571811

Parameter	Units	50253312001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	<2.2	1090	1040	95	75-125	

MATRIX SPIKE SAMPLE: 2571812

Parameter	Units	50253312001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	<2.2	44.2	39.4	86	75-125	

SAMPLE DUPLICATE: 2571813

Parameter	Units	50253312002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	<2.3	<2.3		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale
Pace Project No.: 50253312

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B0	Analyte was detected in an associated blank at a concentration greater than the MDL.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253312002	**MW-116 (7-8')**	EPA 8015 Alcohol-Glycol	555572		
50253312004	**MW-117 (6-7')**	EPA 8015 Alcohol-Glycol	555572		
50253312006	**MW-118 (10-11')**	EPA 8015 Alcohol-Glycol	555572		
50253312007	**Dup-1**	EPA 8015 Alcohol-Glycol	555572		
50253312001	**MW-116 (2-3')**	EPA 3050	555146	EPA 6010	555838
50253312001	**MW-116 (2-3')**	EPA 3050	556033	EPA 6010	556261
50253312002	**MW-116 (7-8')**	EPA 3050	555146	EPA 6010	555838
50253312002	**MW-116 (7-8')**	EPA 3050	556033	EPA 6010	556261
50253312003	**MW-117 (2-3')**	EPA 3050	555146	EPA 6010	555838
50253312003	**MW-117 (2-3')**	EPA 3050	556033	EPA 6010	556261
50253312004	**MW-117 (6-7')**	EPA 3050	555146	EPA 6010	555838
50253312004	**MW-117 (6-7')**	EPA 3050	556033	EPA 6010	556261
50253312005	**MW-118 (2-3')**	EPA 3050	555146	EPA 6010	555838
50253312005	**MW-118 (2-3')**	EPA 3050	556033	EPA 6010	556261
50253312006	**MW-118 (10-11')**	EPA 3050	555146	EPA 6010	555838
50253312006	**MW-118 (10-11')**	EPA 3050	556033	EPA 6010	556261
50253312007	**Dup-1**	EPA 3050	555146	EPA 6010	555838
50253312007	**Dup-1**	EPA 3050	556033	EPA 6010	556261
50253312001	**MW-116 (2-3')**	EPA 3050B	555596	EPA 6020	555608
50253312002	**MW-116 (7-8')**	EPA 3050B	555596	EPA 6020	555608
50253312003	**MW-117 (2-3')**	EPA 3050B	555596	EPA 6020	555608
50253312004	**MW-117 (6-7')**	EPA 3050B	555596	EPA 6020	555608
50253312005	**MW-118 (2-3')**	EPA 3050B	555596	EPA 6020	555608
50253312006	**MW-118 (10-11')**	EPA 3050B	555596	EPA 6020	555608
50253312007	**Dup-1**	EPA 3050B	555596	EPA 6020	555608
50253312001	**MW-116 (2-3')**	EPA 7471	555646	EPA 7471	556274
50253312002	**MW-116 (7-8')**	EPA 7471	555646	EPA 7471	556274
50253312003	**MW-117 (2-3')**	EPA 7471	555646	EPA 7471	556274
50253312004	**MW-117 (6-7')**	EPA 7471	555646	EPA 7471	556274
50253312005	**MW-118 (2-3')**	EPA 7471	555646	EPA 7471	556274
50253312006	**MW-118 (10-11')**	EPA 7471	555646	EPA 7471	556274
50253312007	**Dup-1**	EPA 7471	555646	EPA 7471	556274
50253312002	**MW-116 (7-8')**	EPA 3546	555767	EPA 8270 by SIM	555844
50253312004	**MW-117 (6-7')**	EPA 3546	555767	EPA 8270 by SIM	555844
50253312006	**MW-118 (10-11')**	EPA 3546	555767	EPA 8270 by SIM	555844
50253312007	**Dup-1**	EPA 3546	555767	EPA 8270 by SIM	555844
50253312002	**MW-116 (7-8')**	EPA 8260	555668		
50253312004	**MW-117 (6-7')**	EPA 8260	555668		
50253312006	**MW-118 (10-11')**	EPA 8260	555668		
50253312007	**Dup-1**	EPA 8260	555668		

REPORT OF LABORATORY ANALYSIS

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Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50253312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50253312008	**Trip Blank**	EPA 8260	555668		
50253312009	**Field Blank**	EPA 8260	555668		
50253312001	**MW-116 (2-3')**	SM 2540G	555559		
50253312002	**MW-116 (7-8')**	SM 2540G	555559		
50253312003	**MW-117 (2-3')**	SM 2540G	555559		
50253312004	**MW-117 (6-7')**	SM 2540G	555559		
50253312005	**MW-118 (2-3')**	SM 2540G	555559		
50253312006	**MW-118 (10-11')**	SM 2540G	555559		
50253312007	**Dup-1**	SM 2540G	555559		
50253312001	**MW-116 (2-3')**	EPA 3060A	557593	EPA 7196A	557789
50253312002	**MW-116 (7-8')**	EPA 3060A	557593	EPA 7196A	557789
50253312003	**MW-117 (2-3')**	EPA 3060A	557593	EPA 7196A	557789
50253312004	**MW-117 (6-7')**	EPA 3060A	557593	EPA 7196A	557789
50253312005	**MW-118 (2-3')**	EPA 3060A	557593	EPA 7196A	557789
50253312006	**MW-118 (10-11')**	EPA 3060A	557593	EPA 7196A	557789
50253312001	**MW-116 (2-3')**	Trivalent Chromium Calculation	558526		
50253312002	**MW-116 (7-8')**	Trivalent Chromium Calculation	558526		
50253312003	**MW-117 (2-3')**	Trivalent Chromium Calculation	558526		
50253312004	**MW-117 (6-7')**	Trivalent Chromium Calculation	558526		
50253312005	**MW-118 (2-3')**	Trivalent Chromium Calculation	558526		
50253312006	**MW-118 (10-11')**	Trivalent Chromium Calculation	558526		

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CHAIN-OF-CUSTODY / Analytical Request D

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

WO# : 50253312

50253312

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	
	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs by 8260	PAH/Metals/Alcohols	TCLP VOC/Met,Flash,pH,Ign	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	RCRA 8 Metals (with Hg)			Residual Chlorine (Y/N)	
1	MW-116(2-3')	SL	G			3/30	1030		1	✓																✓				
2	MW-116(7-8)						1040		3	✓						✓			✓				✓	✓		✓				
3	MW-117(2-3')						1110		1	✓																✓				
4	MW-117(6-7')						1120		3	✓						✓			✓				✓	✓		✓				
5	MW-118(2-3')						1200		1	✓																✓				
6	MW-118(10-11')						1210		3	✓						✓			✓				✓	✓		✓				
7	Dup.1						1200		3	✓						✓			✓				✓	✓		✓				
8	Trip Blnk						0830		1							✓			✓											
9	Field Blnk						1100		1							✓			✓											
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed					3/31/20	0815	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adolphues

SIGNATURE of SAMPLER:

DATE Signed: 3/30/20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 3.31.20	Evaluated by: WDC	WO#: 50253312	
Client: ATC		PM: BJH Due Date: 04/09/20	
Project Manager: BJH	Profile ID:	CLIENT: GR-ATC	
Rush TAT Requested: YES NO	Due Date:		
Lab Notified of Rush or Short Holds: YES NO		Non Conformance Form Required: YES NO	
Samples Received Via: FedEx UPS Client Pace Courier Other: _____			Comments:

Custody Seals Present and Intact:	YES	NO	NA	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	NA	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	NA	
Short Holds Present (< 72 Hours):	YES	NO		
Samples Received in Hold:	YES	NO		
Custody Signatures Present:	YES	NO		
Collector Signature Present:	YES	NO		
Packing Material Used:	YES	NO		
Samples Collected Today and On Ice:	YES	NO	N/A	

IR Gun #: 280 281	Digital Thermometer #: 282 283
Ice Type: WET Bagged / WET Loose BLUE NONE	1. Cooler Temp Upon Receipt: 4.1/4.9 °C
Ice Location: TOP BOTTOM MIDDLE DISPERSED	Temp should be 0-6°C (Initial/Corrected)

Temp Blank Received:	YES	NO		
Containers Intact:	YES	NO		
Correct Containers:	YES	NO		
Sufficient Volume:	YES	NO		
Sample pH Acceptable: All containers needing preservation are found to be in complaince with EPA recommendation Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	N/A	
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	N/A	
VOA Headspace Acceptable (<6mm):	YES	NO	N/A	
Trip Blank Received: HCl MeOH TSP OTHER	YES	NO		

Comments:	2. Cooler Temp Upon Receipt: _____ °C
	3. Cooler Temp Upon Receipt: _____ °C
	4. Cooler Temp Upon Receipt: _____ °C

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

May 04, 2020

Joshua Schuyler
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale
Pace Project No.: 50255203

Dear Joshua Schuyler:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
April Hehir

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50255203001	**MW-121_2-3**	Solid	04/21/20 11:00	04/22/20 09:50
50255203002	**MW-121_9-10**	Solid	04/21/20 11:05	04/22/20 09:50
50255203003	**MW-120_2-3**	Solid	04/21/20 12:15	04/22/20 09:50
50255203004	**MW-120_4-5**	Solid	04/21/20 12:20	04/22/20 09:50
50255203005	**MW-119_2-3**	Solid	04/21/20 13:05	04/22/20 09:50
50255203006	**MW-119_6-7**	Solid	04/21/20 13:15	04/22/20 09:50
50255203007	**MW-115 Comp**	Solid	04/21/20 17:30	04/22/20 09:50

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50255203001	**MW-121_2-3**	EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SKK	1
50255203002	**MW-121_9-10**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SKK	1
50255203003	**MW-120_2-3**	EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SKK	1
50255203004	**MW-120_4-5**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SKK	1
50255203005	**MW-119_2-3**	EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		SM 2540G	SKK	1
50255203006	**MW-119_6-7**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	FRW	4
		EPA 6020	DMT	3
		EPA 7471	ILP	1
		EPA 8270 by SIM	LWG	19
		EPA 8260	JPV	75
		SM 2540G	SKK	1
50255203007	**MW-115 Comp**	EPA 6010	KJE	3

PASI-I = Pace Analytical Services - Indianapolis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-121_2-3 **Lab ID: 50255203001** Collected: 04/21/20 11:00 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**3120**	ug/kg	2010	2010	1	05/01/20 06:05	05/01/20 13:19	7440-38-2	
Barium	**19700**	ug/kg	1000	1000	1	05/01/20 06:05	05/01/20 13:19	7440-39-3	
Chromium	**7240**	ug/kg	2010	2010	1	05/01/20 06:05	05/01/20 13:19	7440-47-3	
Lead	**<10000**	ug/kg	10000	10000	1	05/01/20 06:05	05/01/20 13:19	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<213**	ug/kg	213	213	1	04/27/20 08:45	04/29/20 08:40	7440-43-9	
Selenium	**<1070**	ug/kg	1070	1070	5	04/27/20 08:45	04/29/20 15:31	7782-49-2	D3
Silver	**<107**	ug/kg	107	107	1	04/27/20 08:45	04/29/20 08:40	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<55.9**	ug/kg	99.9	55.9	1	04/30/20 10:22	05/01/20 09:36	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**8.1**	%	0.10	0.10	1		04/24/20 12:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-121_9-10 **Lab ID: 50255203002** Collected: 04/21/20 11:05 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5020**	ug/kg	5020	5020	1		04/24/20 00:00	71-36-3	
Ethanol	**<2850**	ug/kg	2850	2850	1		04/24/20 00:00	64-17-5	
Methanol	**60100**	ug/kg	5020	5020	1		04/24/20 00:00	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2200**	ug/kg	2200	2200	1	05/01/20 06:05	05/01/20 13:21	7440-38-2	
Barium	**7690**	ug/kg	1100	1100	1	05/01/20 06:05	05/01/20 13:21	7440-39-3	
Chromium	**3040**	ug/kg	2200	2200	1	05/01/20 06:05	05/01/20 13:21	7440-47-3	
Lead	**<11000**	ug/kg	11000	11000	1	05/01/20 06:05	05/01/20 13:21	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<220**	ug/kg	220	220	1	04/27/20 08:45	04/29/20 09:40	7440-43-9	
Selenium	**<1100**	ug/kg	1100	1100	5	04/27/20 08:45	04/29/20 16:03	7782-49-2	D3
Silver	**<110**	ug/kg	110	110	1	04/27/20 08:45	04/29/20 09:40	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<62.3**	ug/kg	111	62.3	1	04/30/20 10:22	05/01/20 09:39	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	83-32-9	
Acenaphthylene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	208-96-8	
Anthracene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	120-12-7	
Benzo(a)anthracene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	56-55-3	
Benzo(a)pyrene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	50-32-8	
Benzo(b)fluoranthene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	205-99-2	
Benzo(g,h,i)perylene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	191-24-2	
Benzo(k)fluoranthene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	207-08-9	
Chrysene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	218-01-9	
Dibenz(a,h)anthracene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	53-70-3	
Fluoranthene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	206-44-0	
Fluorene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	86-73-7	
Indeno(1,2,3-cd)pyrene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	193-39-5	
2-Methylnaphthalene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	91-57-6	
Naphthalene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	91-20-3	
Phenanthrene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	85-01-8	
Pyrene	**<369**	ug/kg	369	369	1	04/29/20 11:05	04/29/20 18:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	86	%.	37-111		1	04/29/20 11:05	04/29/20 18:10	321-60-8	
p-Terphenyl-d14 (S)	82	%.	29-124		1	04/29/20 11:05	04/29/20 18:10	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-121_9-10 **Lab ID: 50255203002** Collected: 04/21/20 11:05 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1370**	ug/kg	1370	1370	1		04/24/20 02:48	67-64-1	
Acrylonitrile	**<137**	ug/kg	137	137	1		04/24/20 02:48	107-13-1	
tert-Amylmethyl ether	**<343**	ug/kg	343	343	1		04/24/20 02:48	994-05-8	N2
Benzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	71-43-2	
Bromobenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	108-86-1	
Bromochloromethane	**<34.3**	ug/kg	68.5	34.3	1		04/24/20 02:48	74-97-5	
Bromodichloromethane	**<137**	ug/kg	137	137	1		04/24/20 02:48	75-27-4	
Bromoform	**<137**	ug/kg	137	137	1		04/24/20 02:48	75-25-2	
Bromomethane	**<274**	ug/kg	274	274	1		04/24/20 02:48	74-83-9	
2-Butanone (MEK)	**<1030**	ug/kg	1030	1030	1		04/24/20 02:48	78-93-3	
tert-Butyl Alcohol	**<3430**	ug/kg	3430	3430	1		04/24/20 02:48	75-65-0	
n-Butylbenzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	104-51-8	
sec-Butylbenzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	135-98-8	
tert-Butylbenzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	98-06-6	
Carbon disulfide	**<343**	ug/kg	343	343	1		04/24/20 02:48	75-15-0	
Carbon tetrachloride	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	56-23-5	
Chlorobenzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	108-90-7	
Chloroethane	**<343**	ug/kg	343	343	1		04/24/20 02:48	75-00-3	
Chloroform	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	67-66-3	
Chloromethane	**<343**	ug/kg	343	343	1		04/24/20 02:48	74-87-3	
Cyclohexane	**<685**	ug/kg	685	685	1		04/24/20 02:48	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	96-12-8	
Dibromochloromethane	**<137**	ug/kg	137	137	1		04/24/20 02:48	124-48-1	
1,2-Dibromoethane (EDB)	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	106-93-4	
Dibromomethane	**<343**	ug/kg	343	343	1		04/24/20 02:48	74-95-3	
1,2-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	95-50-1	
1,3-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	541-73-1	
1,4-Dichlorobenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	106-46-7	
trans-1,4-Dichloro-2-butene	**<137**	ug/kg	1370	137	1		04/24/20 02:48	110-57-6	
Dichlorodifluoromethane	**<343**	ug/kg	343	343	1		04/24/20 02:48	75-71-8	
1,1-Dichloroethane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	75-34-3	
1,2-Dichloroethane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	107-06-2	
1,1-Dichloroethene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	75-35-4	
cis-1,2-Dichloroethene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	156-59-2	
trans-1,2-Dichloroethene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	156-60-5	
1,2-Dichloropropane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	78-87-5	
cis-1,3-Dichloropropene	**<137**	ug/kg	137	137	1		04/24/20 02:48	10061-01-5	
trans-1,3-Dichloropropene	**<137**	ug/kg	137	137	1		04/24/20 02:48	10061-02-6	
Diethyl ether (Ethyl ether)	**<274**	ug/kg	274	274	1		04/24/20 02:48	60-29-7	
Diisopropyl ether	**<343**	ug/kg	343	343	1		04/24/20 02:48	108-20-3	N2
Ethylbenzene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	100-41-4	
Ethyl-tert-butyl ether	**<343**	ug/kg	343	343	1		04/24/20 02:48	637-92-3	N2
Hexachloroethane	**<411**	ug/kg	411	411	1		04/24/20 02:48	67-72-1	N2
2-Hexanone	**<3430**	ug/kg	3430	3430	1		04/24/20 02:48	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-121_9-10 **Lab ID: 50255203002** Collected: 04/21/20 11:05 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<137**	ug/kg	1370	137	1		04/24/20 02:48	74-88-4	
Isopropylbenzene (Cumene)	**<343**	ug/kg	343	343	1		04/24/20 02:48	98-82-8	
p-Isopropyltoluene	**<34.3**	ug/kg	68.5	34.3	1		04/24/20 02:48	99-87-6	
Methylene Chloride	**<137**	ug/kg	137	137	1		04/24/20 02:48	75-09-2	
2-Methylnaphthalene	**<452**	ug/kg	452	452	1		04/24/20 02:48	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3430**	ug/kg	3430	3430	1		04/24/20 02:48	108-10-1	
Methyl-tert-butyl ether	**<343**	ug/kg	343	343	1		04/24/20 02:48	1634-04-4	
Naphthalene	**<452**	ug/kg	452	452	1		04/24/20 02:48	91-20-3	
n-Propylbenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	103-65-1	
Styrene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	100-42-5	
1,1,1,2-Tetrachloroethane	**<137**	ug/kg	137	137	1		04/24/20 02:48	630-20-6	
1,1,2,2-Tetrachloroethane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	79-34-5	
Tetrachloroethene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	127-18-4	
Tetrahydrofuran	**<1370**	ug/kg	1370	1370	1		04/24/20 02:48	109-99-9	N2
Toluene	**<137**	ug/kg	137	137	1		04/24/20 02:48	108-88-3	
1,2,3-Trichlorobenzene	**<343**	ug/kg	343	343	1		04/24/20 02:48	87-61-6	
1,2,4-Trichlorobenzene	**<343**	ug/kg	343	343	1		04/24/20 02:48	120-82-1	
1,1,1-Trichloroethane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	71-55-6	
1,1,2-Trichloroethane	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	79-00-5	
Trichloroethene	**<68.5**	ug/kg	68.5	68.5	1		04/24/20 02:48	79-01-6	
Trichlorofluoromethane	**<137**	ug/kg	137	137	1		04/24/20 02:48	75-69-4	
1,2,3-Trichloropropane	**<137**	ug/kg	137	137	1		04/24/20 02:48	96-18-4	
1,2,3-Trimethylbenzene	**<343**	ug/kg	343	343	1		04/24/20 02:48	526-73-8	N2
1,2,4-Trimethylbenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	95-63-6	
1,3,5-Trimethylbenzene	**<137**	ug/kg	137	137	1		04/24/20 02:48	108-67-8	
Vinyl chloride	**<54.8**	ug/kg	54.8	54.8	1		04/24/20 02:48	75-01-4	
m&p-Xylene	**<34.3**	ug/kg	68.5	34.3	1		04/24/20 02:48	179601-23-1	
o-Xylene	**<34.3**	ug/kg	68.5	34.3	1		04/24/20 02:48	95-47-6	
Surrogates									
Dibromofluoromethane (S)	113	%.	62-137		1		04/24/20 02:48	1868-53-7	
Toluene-d8 (S)	111	%.	64-139		1		04/24/20 02:48	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	60-142		1		04/24/20 02:48	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**12.4**	%	0.10	0.10	1		04/24/20 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-120_2-3 **Lab ID: 50255203003** Collected: 04/21/20 12:15 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2060**	ug/kg	2060	2060	1	05/01/20 06:05	05/01/20 13:23	7440-38-2	
Barium	**11200**	ug/kg	1030	1030	1	05/01/20 06:05	05/01/20 13:23	7440-39-3	
Chromium	**5240**	ug/kg	2060	2060	1	05/01/20 06:05	05/01/20 13:23	7440-47-3	
Lead	**<10300**	ug/kg	10300	10300	1	05/01/20 06:05	05/01/20 13:23	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<210**	ug/kg	210	210	1	04/27/20 08:45	04/29/20 09:44	7440-43-9	
Selenium	**<1050**	ug/kg	1050	1050	5	04/27/20 08:45	04/29/20 16:08	7782-49-2	D3
Silver	**<105**	ug/kg	105	105	1	04/27/20 08:45	04/29/20 09:44	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<54.8**	ug/kg	97.9	54.8	1	04/30/20 10:22	05/01/20 09:41	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**6.0**	%	0.10	0.10	1		04/24/20 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-120_4-5 **Lab ID: 50255203004** Collected: 04/21/20 12:20 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5410**	ug/kg	5410	5410	1		04/24/20 00:09	71-36-3	
Ethanol	**<3070**	ug/kg	3070	3070	1		04/24/20 00:09	64-17-5	
Methanol	**175000**	ug/kg	5410	5410	1		04/24/20 00:09	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2170**	ug/kg	2170	2170	1	05/01/20 06:05	05/01/20 13:26	7440-38-2	
Barium	**8570**	ug/kg	1090	1090	1	05/01/20 06:05	05/01/20 13:26	7440-39-3	
Chromium	**4410**	ug/kg	2170	2170	1	05/01/20 06:05	05/01/20 13:26	7440-47-3	
Lead	**<10900**	ug/kg	10900	10900	1	05/01/20 06:05	05/01/20 13:26	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<240**	ug/kg	240	240	1	04/27/20 08:45	04/29/20 10:07	7440-43-9	
Selenium	**<1200**	ug/kg	1200	1200	5	04/27/20 08:45	04/29/20 16:13	7782-49-2	D3
Silver	**<120**	ug/kg	120	120	1	04/27/20 08:45	04/29/20 10:07	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<67.3**	ug/kg	120	67.3	1	04/30/20 10:22	05/01/20 09:43	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	83-32-9	
Acenaphthylene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	208-96-8	
Anthracene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	120-12-7	
Benzo(a)anthracene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	56-55-3	
Benzo(a)pyrene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	50-32-8	
Benzo(b)fluoranthene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	205-99-2	
Benzo(g,h,i)perylene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	191-24-2	
Benzo(k)fluoranthene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	207-08-9	
Chrysene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	218-01-9	
Dibenz(a,h)anthracene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	53-70-3	
Fluoranthene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	206-44-0	
Fluorene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	86-73-7	
Indeno(1,2,3-cd)pyrene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	193-39-5	
2-Methylnaphthalene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	91-57-6	
Naphthalene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	91-20-3	
Phenanthrene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	85-01-8	
Pyrene	**<401**	ug/kg	401	401	1	04/29/20 11:05	04/29/20 18:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%.	37-111		1	04/29/20 11:05	04/29/20 18:25	321-60-8	
p-Terphenyl-d14 (S)	62	%.	29-124		1	04/29/20 11:05	04/29/20 18:25	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-120_4-5 **Lab ID: 50255203004** Collected: 04/21/20 12:20 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1470**	ug/kg	1470	1470	1		04/24/20 03:15	67-64-1	
Acrylonitrile	**<147**	ug/kg	147	147	1		04/24/20 03:15	107-13-1	
tert-Amylmethyl ether	**<369**	ug/kg	369	369	1		04/24/20 03:15	994-05-8	N2
Benzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	71-43-2	
Bromobenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	108-86-1	
Bromochloromethane	**<36.9**	ug/kg	73.7	36.9	1		04/24/20 03:15	74-97-5	
Bromodichloromethane	**<147**	ug/kg	147	147	1		04/24/20 03:15	75-27-4	
Bromoform	**<147**	ug/kg	147	147	1		04/24/20 03:15	75-25-2	
Bromomethane	**<295**	ug/kg	295	295	1		04/24/20 03:15	74-83-9	
2-Butanone (MEK)	**<1110**	ug/kg	1110	1110	1		04/24/20 03:15	78-93-3	
tert-Butyl Alcohol	**<3690**	ug/kg	3690	3690	1		04/24/20 03:15	75-65-0	
n-Butylbenzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	104-51-8	
sec-Butylbenzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	135-98-8	
tert-Butylbenzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	98-06-6	
Carbon disulfide	**<369**	ug/kg	369	369	1		04/24/20 03:15	75-15-0	
Carbon tetrachloride	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	56-23-5	
Chlorobenzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	108-90-7	
Chloroethane	**<369**	ug/kg	369	369	1		04/24/20 03:15	75-00-3	
Chloroform	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	67-66-3	
Chloromethane	**<369**	ug/kg	369	369	1		04/24/20 03:15	74-87-3	
Cyclohexane	**<737**	ug/kg	737	737	1		04/24/20 03:15	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	96-12-8	
Dibromochloromethane	**<147**	ug/kg	147	147	1		04/24/20 03:15	124-48-1	
1,2-Dibromoethane (EDB)	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	106-93-4	
Dibromomethane	**<369**	ug/kg	369	369	1		04/24/20 03:15	74-95-3	
1,2-Dichlorobenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	95-50-1	
1,3-Dichlorobenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	541-73-1	
1,4-Dichlorobenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	106-46-7	
trans-1,4-Dichloro-2-butene	**<147**	ug/kg	1470	147	1		04/24/20 03:15	110-57-6	
Dichlorodifluoromethane	**<369**	ug/kg	369	369	1		04/24/20 03:15	75-71-8	
1,1-Dichloroethane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	75-34-3	
1,2-Dichloroethane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	107-06-2	
1,1-Dichloroethene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	75-35-4	
cis-1,2-Dichloroethene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	156-59-2	
trans-1,2-Dichloroethene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	156-60-5	
1,2-Dichloropropane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	78-87-5	
cis-1,3-Dichloropropene	**<147**	ug/kg	147	147	1		04/24/20 03:15	10061-01-5	
trans-1,3-Dichloropropene	**<147**	ug/kg	147	147	1		04/24/20 03:15	10061-02-6	
Diethyl ether (Ethyl ether)	**<295**	ug/kg	295	295	1		04/24/20 03:15	60-29-7	
Diisopropyl ether	**<369**	ug/kg	369	369	1		04/24/20 03:15	108-20-3	N2
Ethylbenzene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	100-41-4	
Ethyl-tert-butyl ether	**<369**	ug/kg	369	369	1		04/24/20 03:15	637-92-3	N2
Hexachloroethane	**<442**	ug/kg	442	442	1		04/24/20 03:15	67-72-1	N2
2-Hexanone	**<3690**	ug/kg	3690	3690	1		04/24/20 03:15	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-120_4-5 **Lab ID: 50255203004** Collected: 04/21/20 12:20 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<147**	ug/kg	1470	147	1		04/24/20 03:15	74-88-4	
Isopropylbenzene (Cumene)	**<369**	ug/kg	369	369	1		04/24/20 03:15	98-82-8	
p-Isopropyltoluene	**<36.9**	ug/kg	73.7	36.9	1		04/24/20 03:15	99-87-6	
Methylene Chloride	**<147**	ug/kg	147	147	1		04/24/20 03:15	75-09-2	
2-Methylnaphthalene	**<487**	ug/kg	487	487	1		04/24/20 03:15	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3690**	ug/kg	3690	3690	1		04/24/20 03:15	108-10-1	
Methyl-tert-butyl ether	**<369**	ug/kg	369	369	1		04/24/20 03:15	1634-04-4	
Naphthalene	**<487**	ug/kg	487	487	1		04/24/20 03:15	91-20-3	
n-Propylbenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	103-65-1	
Styrene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<147**	ug/kg	147	147	1		04/24/20 03:15	630-20-6	
1,1,2,2-Tetrachloroethane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	79-34-5	
Tetrachloroethene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	127-18-4	
Tetrahydrofuran	**<1470**	ug/kg	1470	1470	1		04/24/20 03:15	109-99-9	N2
Toluene	**<147**	ug/kg	147	147	1		04/24/20 03:15	108-88-3	
1,2,3-Trichlorobenzene	**<369**	ug/kg	369	369	1		04/24/20 03:15	87-61-6	
1,2,4-Trichlorobenzene	**<369**	ug/kg	369	369	1		04/24/20 03:15	120-82-1	
1,1,1-Trichloroethane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	71-55-6	
1,1,2-Trichloroethane	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	79-00-5	
Trichloroethene	**<73.7**	ug/kg	73.7	73.7	1		04/24/20 03:15	79-01-6	
Trichlorofluoromethane	**<147**	ug/kg	147	147	1		04/24/20 03:15	75-69-4	
1,2,3-Trichloropropane	**<147**	ug/kg	147	147	1		04/24/20 03:15	96-18-4	
1,2,3-Trimethylbenzene	**<369**	ug/kg	369	369	1		04/24/20 03:15	526-73-8	N2
1,2,4-Trimethylbenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	95-63-6	
1,3,5-Trimethylbenzene	**<147**	ug/kg	147	147	1		04/24/20 03:15	108-67-8	
Vinyl chloride	**<59.0**	ug/kg	59.0	59.0	1		04/24/20 03:15	75-01-4	
m&p-Xylene	**<36.9**	ug/kg	73.7	36.9	1		04/24/20 03:15	179601-23-1	
o-Xylene	**<36.9**	ug/kg	73.7	36.9	1		04/24/20 03:15	95-47-6	
Surrogates									
Dibromofluoromethane (S)	121	%.	62-137		1		04/24/20 03:15	1868-53-7	
Toluene-d8 (S)	115	%.	64-139		1		04/24/20 03:15	2037-26-5	
4-Bromofluorobenzene (S)	117	%.	60-142		1		04/24/20 03:15	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**18.7**	%	0.10	0.10	1		04/24/20 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-119_2-3 **Lab ID: 50255203005** Collected: 04/21/20 13:05 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**6380**	ug/kg	2360	2360	1	05/01/20 06:05	05/01/20 13:28	7440-38-2	
Barium	**36300**	ug/kg	1180	1180	1	05/01/20 06:05	05/01/20 13:28	7440-39-3	
Chromium	**9240**	ug/kg	2360	2360	1	05/01/20 06:05	05/01/20 13:28	7440-47-3	
Lead	**<11800**	ug/kg	11800	11800	1	05/01/20 06:05	05/01/20 13:28	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**232**	ug/kg	232	232	1	04/27/20 08:45	04/29/20 10:12	7440-43-9	
Selenium	**2540**	ug/kg	2320	2320	10	04/27/20 08:45	04/29/20 16:22	7782-49-2	
Silver	**<116**	ug/kg	116	116	1	04/27/20 08:45	04/29/20 10:12	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<64.3**	ug/kg	115	64.3	1	04/30/20 10:22	05/01/20 09:46	7439-97-6	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**16.0**	%	0.10	0.10	1		04/24/20 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-119_6-7 **Lab ID: 50255203006** Collected: 04/21/20 13:15 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4980**	ug/kg	4980	4980	1		04/24/20 00:19	71-36-3	
Ethanol	**<2830**	ug/kg	2830	2830	1		04/24/20 00:19	64-17-5	
Methanol	**63900**	ug/kg	4980	4980	1		04/24/20 00:19	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Arsenic	**<2230**	ug/kg	2230	2230	1	05/01/20 06:05	05/01/20 13:30	7440-38-2	
Barium	**6180**	ug/kg	1120	1120	1	05/01/20 06:05	05/01/20 13:30	7440-39-3	
Chromium	**5080**	ug/kg	2230	2230	1	05/01/20 06:05	05/01/20 13:30	7440-47-3	
Lead	**<11200**	ug/kg	11200	11200	1	05/01/20 06:05	05/01/20 13:30	7439-92-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cadmium	**<221**	ug/kg	221	221	1	04/27/20 08:45	04/29/20 10:39	7440-43-9	
Selenium	**<1110**	ug/kg	1110	1110	5	04/27/20 08:45	04/29/20 16:26	7782-49-2	D3
Silver	**<111**	ug/kg	111	111	1	04/27/20 08:45	04/29/20 10:39	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<58.3**	ug/kg	104	58.3	1	04/30/20 10:22	05/01/20 09:48	7439-97-6	
8270 PAH Soil	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	83-32-9	
Acenaphthylene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	208-96-8	
Anthracene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	120-12-7	
Benzo(a)anthracene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	56-55-3	
Benzo(a)pyrene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	50-32-8	
Benzo(b)fluoranthene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	205-99-2	
Benzo(g,h,i)perylene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	191-24-2	
Benzo(k)fluoranthene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	207-08-9	
Chrysene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	218-01-9	
Dibenz(a,h)anthracene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	53-70-3	
Fluoranthene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	206-44-0	
Fluorene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	86-73-7	
Indeno(1,2,3-cd)pyrene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	193-39-5	
2-Methylnaphthalene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	91-57-6	
Naphthalene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	91-20-3	
Phenanthrene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	85-01-8	
Pyrene	**<364**	ug/kg	364	364	1	04/29/20 11:05	04/29/20 18:39	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%.	37-111		1	04/29/20 11:05	04/29/20 18:39	321-60-8	
p-Terphenyl-d14 (S)	72	%.	29-124		1	04/29/20 11:05	04/29/20 18:39	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-119_6-7 **Lab ID: 50255203006** Collected: 04/21/20 13:15 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1310**	ug/kg	1310	1310	1		04/24/20 03:41	67-64-1	
Acrylonitrile	**<131**	ug/kg	131	131	1		04/24/20 03:41	107-13-1	
tert-Amylmethyl ether	**<327**	ug/kg	327	327	1		04/24/20 03:41	994-05-8	N2
Benzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	71-43-2	
Bromobenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	108-86-1	
Bromochloromethane	**<32.7**	ug/kg	65.4	32.7	1		04/24/20 03:41	74-97-5	
Bromodichloromethane	**<131**	ug/kg	131	131	1		04/24/20 03:41	75-27-4	
Bromoform	**<131**	ug/kg	131	131	1		04/24/20 03:41	75-25-2	
Bromomethane	**<262**	ug/kg	262	262	1		04/24/20 03:41	74-83-9	
2-Butanone (MEK)	**<981**	ug/kg	981	981	1		04/24/20 03:41	78-93-3	
tert-Butyl Alcohol	**<3270**	ug/kg	3270	3270	1		04/24/20 03:41	75-65-0	
n-Butylbenzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	104-51-8	
sec-Butylbenzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	135-98-8	
tert-Butylbenzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	98-06-6	
Carbon disulfide	**<327**	ug/kg	327	327	1		04/24/20 03:41	75-15-0	
Carbon tetrachloride	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	56-23-5	
Chlorobenzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	108-90-7	
Chloroethane	**<327**	ug/kg	327	327	1		04/24/20 03:41	75-00-3	
Chloroform	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	67-66-3	
Chloromethane	**<327**	ug/kg	327	327	1		04/24/20 03:41	74-87-3	
Cyclohexane	**<654**	ug/kg	654	654	1		04/24/20 03:41	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	96-12-8	
Dibromochloromethane	**<131**	ug/kg	131	131	1		04/24/20 03:41	124-48-1	
1,2-Dibromoethane (EDB)	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	106-93-4	
Dibromomethane	**<327**	ug/kg	327	327	1		04/24/20 03:41	74-95-3	
1,2-Dichlorobenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	95-50-1	
1,3-Dichlorobenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	541-73-1	
1,4-Dichlorobenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	106-46-7	
trans-1,4-Dichloro-2-butene	**<131**	ug/kg	1310	131	1		04/24/20 03:41	110-57-6	
Dichlorodifluoromethane	**<327**	ug/kg	327	327	1		04/24/20 03:41	75-71-8	
1,1-Dichloroethane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	75-34-3	
1,2-Dichloroethane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	107-06-2	
1,1-Dichloroethene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	75-35-4	
cis-1,2-Dichloroethene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	156-59-2	
trans-1,2-Dichloroethene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	156-60-5	
1,2-Dichloropropane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	78-87-5	
cis-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		04/24/20 03:41	10061-01-5	
trans-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		04/24/20 03:41	10061-02-6	
Diethyl ether (Ethyl ether)	**<262**	ug/kg	262	262	1		04/24/20 03:41	60-29-7	
Diisopropyl ether	**<327**	ug/kg	327	327	1		04/24/20 03:41	108-20-3	N2
Ethylbenzene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	100-41-4	
Ethyl-tert-butyl ether	**<327**	ug/kg	327	327	1		04/24/20 03:41	637-92-3	N2
Hexachloroethane	**<393**	ug/kg	393	393	1		04/24/20 03:41	67-72-1	N2
2-Hexanone	**<3270**	ug/kg	3270	3270	1		04/24/20 03:41	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-119_6-7 **Lab ID: 50255203006** Collected: 04/21/20 13:15 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Iodomethane	**<131**	ug/kg	1310	131	1		04/24/20 03:41	74-88-4	
Isopropylbenzene (Cumene)	**<327**	ug/kg	327	327	1		04/24/20 03:41	98-82-8	
p-Isopropyltoluene	**<32.7**	ug/kg	65.4	32.7	1		04/24/20 03:41	99-87-6	
Methylene Chloride	**<131**	ug/kg	131	131	1		04/24/20 03:41	75-09-2	
2-Methylnaphthalene	**<432**	ug/kg	432	432	1		04/24/20 03:41	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<3270**	ug/kg	3270	3270	1		04/24/20 03:41	108-10-1	
Methyl-tert-butyl ether	**<327**	ug/kg	327	327	1		04/24/20 03:41	1634-04-4	
Naphthalene	**<432**	ug/kg	432	432	1		04/24/20 03:41	91-20-3	
n-Propylbenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	103-65-1	
Styrene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	100-42-5	
1,1,1,2-Tetrachloroethane	**<131**	ug/kg	131	131	1		04/24/20 03:41	630-20-6	
1,1,2,2-Tetrachloroethane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	79-34-5	
Tetrachloroethene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	127-18-4	
Tetrahydrofuran	**<1310**	ug/kg	1310	1310	1		04/24/20 03:41	109-99-9	N2
Toluene	**<131**	ug/kg	131	131	1		04/24/20 03:41	108-88-3	
1,2,3-Trichlorobenzene	**<327**	ug/kg	327	327	1		04/24/20 03:41	87-61-6	
1,2,4-Trichlorobenzene	**<327**	ug/kg	327	327	1		04/24/20 03:41	120-82-1	
1,1,1-Trichloroethane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	71-55-6	
1,1,2-Trichloroethane	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	79-00-5	
Trichloroethene	**<65.4**	ug/kg	65.4	65.4	1		04/24/20 03:41	79-01-6	
Trichlorofluoromethane	**<131**	ug/kg	131	131	1		04/24/20 03:41	75-69-4	
1,2,3-Trichloropropane	**<131**	ug/kg	131	131	1		04/24/20 03:41	96-18-4	
1,2,3-Trimethylbenzene	**<327**	ug/kg	327	327	1		04/24/20 03:41	526-73-8	N2
1,2,4-Trimethylbenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	95-63-6	
1,3,5-Trimethylbenzene	**<131**	ug/kg	131	131	1		04/24/20 03:41	108-67-8	
Vinyl chloride	**<52.3**	ug/kg	52.3	52.3	1		04/24/20 03:41	75-01-4	
m&p-Xylene	**<32.7**	ug/kg	65.4	32.7	1		04/24/20 03:41	179601-23-1	
o-Xylene	**<32.7**	ug/kg	65.4	32.7	1		04/24/20 03:41	95-47-6	
Surrogates									
Dibromofluoromethane (S)	115	%.	62-137		1		04/24/20 03:41	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		04/24/20 03:41	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	60-142		1		04/24/20 03:41	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**11.7**	%	0.10	0.10	1		04/24/20 12:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Sample: MW-115 Comp **Lab ID: 50255203007** Collected: 04/21/20 17:30 Received: 04/22/20 09:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 04/23/20 17:01 Initial pH: 8.18; Final pH: 6.1								
	Pace Analytical Services - Indianapolis								
Barium	**<5000**	ug/L	5000	250	1	04/26/20 14:43	04/27/20 13:41	7440-39-3	
Cadmium	**<0.050**	mg/L	0.050	0.025	1	04/26/20 14:43	04/27/20 13:41	7440-43-9	
Lead	**<0.10**	mg/L	0.10	0.050	1	04/26/20 14:43	04/27/20 13:41	7439-92-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558696
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203002, 50255203004, 50255203006

METHOD BLANK: 2576547 Matrix: Solid
Associated Lab Samples: 50255203002, 50255203004, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/kg	<2500	2500	2500	04/23/20 22:46	
Methanol	ug/kg	<4400	4400	4400	04/23/20 22:46	
n-Butanol	ug/kg	<4400	4400	4400	04/23/20 22:46	

LABORATORY CONTROL SAMPLE: 2576548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/kg	50000	48800	98	79-113	
Methanol	ug/kg	50000	47100	94	75-111	
n-Butanol	ug/kg	50000	46100	92	80-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2576549 2576550

Parameter	Units	50255295017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/kg	ND	63800	63800	57600	59500	90	93	46-120	3	20	
Methanol	ug/kg	ND	63800	63800	54200	54800	85	86	42-119	1	20	
n-Butanol	ug/kg	ND	63800	63800	52900	53600	83	84	10-142	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558866
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

METHOD BLANK: 2577548 Matrix: Solid
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<56.0	100	56.0	05/01/20 08:40	

LABORATORY CONTROL SAMPLE: 2577549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	500	485	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2577550 2577551

Parameter	Units	50254690008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	0.19J mg/kg	576	612	755	825	98	103	75-125	9	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 559371
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

METHOD BLANK: 2579518 Matrix: Solid
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/kg	<2000	2000	2000	05/01/20 11:30	
Barium	ug/kg	<1000	1000	1000	05/01/20 11:30	
Chromium	ug/kg	<2000	2000	2000	05/01/20 11:30	
Lead	ug/kg	<10000	10000	10000	05/01/20 11:30	

LABORATORY CONTROL SAMPLE: 2579519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/kg	50000	53200	106	80-120	
Barium	ug/kg	50000	51800	104	80-120	
Chromium	ug/kg	50000	52500	105	80-120	
Lead	ug/kg	50000	50000	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2579520 2579521

Parameter	Units	50255425003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/kg	8.6 mg/kg	58400	59500	68900	68000	103	100	75-125	1	20	
Barium	ug/kg	86.3 mg/kg	58400	59500	155000	151000	118	108	75-125	3	20	
Chromium	ug/kg	42.4 mg/kg	58400	59500	92900	106000	87	106	75-125	13	20	
Lead	ug/kg	59.2 mg/kg	58400	59500	115000	120000	95	102	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558885
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203007

METHOD BLANK: 2577666 Matrix: Water
Associated Lab Samples: 50255203007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<500	500	25.0	04/27/20 12:59	
Cadmium	mg/L	<0.0050	0.0050	0.0025	04/27/20 12:59	
Lead	mg/L	<0.010	0.010	0.0050	04/27/20 12:59	

LABORATORY CONTROL SAMPLE: 2577667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	982	98	80-120	
Cadmium	mg/L	1	1.0	100	80-120	
Lead	mg/L	1	0.98	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2577668 2577669

Parameter	Units	50254582001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	<0.25 mg/L	10000	10000	9920	9770	98	96	50-150	2	20	
Cadmium	mg/L	<0.025	10	10	10.1	9.9	101	99	50-150	2	20	
Lead	mg/L	<0.050	10	10	9.7	9.5	97	95	50-150	2	20	

MATRIX SPIKE SAMPLE: 2577670

Parameter	Units	50254729001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	9720	97	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Lead	mg/L	ND	10	9.3	92	50-150	

MATRIX SPIKE SAMPLE: 2577671

Parameter	Units	50254784001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	<0.25 mg/L	10000	9790	96	50-150	
Cadmium	mg/L	<0.025	10	9.9	99	50-150	
Lead	mg/L	<0.050	10	9.6	96	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

MATRIX SPIKE SAMPLE: 2577672

Parameter	Units	50255242001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	9980	96	50-150	
Cadmium	mg/L	ND	10	10.0	100	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	

MATRIX SPIKE SAMPLE: 2577673

Parameter	Units	50255184001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	11200	97	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Lead	mg/L	1.2	10	10.8	96	50-150	

MATRIX SPIKE SAMPLE: 2577674

Parameter	Units	50255201001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	10100	96	50-150	
Cadmium	mg/L	ND	10	10	100	50-150	
Lead	mg/L	ND	10	9.5	95	50-150	

MATRIX SPIKE SAMPLE: 2577675

Parameter	Units	50255203007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	<5000	10000	9690	96	50-150	
Cadmium	mg/L	<0.050	10	9.9	99	50-150	
Lead	mg/L	<0.10	10	9.4	94	50-150	

MATRIX SPIKE SAMPLE: 2577676

Parameter	Units	50255065001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	0.29J mg/L	10000	9990	97	50-150	
Cadmium	mg/L	<0.025	10	10	100	50-150	
Lead	mg/L	0.42	10	9.8	94	50-150	

MATRIX SPIKE SAMPLE: 2577677

Parameter	Units	50255070001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	<0.25 mg/L	10000	9930	98	50-150	
Cadmium	mg/L	<0.025	10	10.1	101	50-150	
Lead	mg/L	<0.050	10	9.7	97	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

MATRIX SPIKE SAMPLE: 2577678

Parameter	Units	50255126001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	10200	98	50-150	
Cadmium	mg/L	ND	10	10.2	102	50-150	
Lead	mg/L	ND	10	9.6	96	50-150	

MATRIX SPIKE SAMPLE: 2577679

Parameter	Units	50255302001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	ND	10000	10000	98	50-150	
Cadmium	mg/L	ND	10	10.1	101	50-150	
Lead	mg/L	ND	10	9.6	96	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558799
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

METHOD BLANK: 2576938 Matrix: Solid
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cadmium	ug/kg	<191	191	191	04/29/20 08:13	
Selenium	ug/kg	<191	191	191	04/29/20 08:13	
Silver	ug/kg	<95.7	95.7	95.7	04/29/20 08:13	

LABORATORY CONTROL SAMPLE: 2576939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/kg	3940	3870	98	80-120	
Selenium	ug/kg	3940	3670	93	80-120	
Silver	ug/kg	3940	4010	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2576940 2576941

Parameter	Units	50255203001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/kg	<213	4150	4200	3900	3960	94	94	75-125	1	20	
Selenium	ug/kg	<1070	4150	4200	4090	4350	90	95	75-125	6	20	
Silver	ug/kg	<107	4150	4200	3980	4010	96	95	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558637
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203002, 50255203004, 50255203006

METHOD BLANK: 2576137 Matrix: Solid
Associated Lab Samples: 50255203002, 50255203004, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	04/23/20 23:42	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	04/23/20 23:42	
1,2,3-Trichloropropane	ug/kg	<100	100	100	04/23/20 23:42	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	04/23/20 23:42	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	04/23/20 23:42	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	04/23/20 23:42	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,2-Dichlorobenzene	ug/kg	<100	100	100	04/23/20 23:42	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	04/23/20 23:42	
1,3-Dichlorobenzene	ug/kg	<100	100	100	04/23/20 23:42	
1,4-Dichlorobenzene	ug/kg	<100	100	100	04/23/20 23:42	
2-Butanone (MEK)	ug/kg	<750	750	750	04/23/20 23:42	
2-Hexanone	ug/kg	<2500	2500	2500	04/23/20 23:42	
2-Methylnaphthalene	ug/kg	<330	330	330	04/23/20 23:42	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	04/23/20 23:42	
Acetone	ug/kg	<1000	1000	1000	04/23/20 23:42	
Acrylonitrile	ug/kg	<100	100	100	04/23/20 23:42	
Benzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Bromobenzene	ug/kg	<100	100	100	04/23/20 23:42	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	04/23/20 23:42	
Bromodichloromethane	ug/kg	<100	100	100	04/23/20 23:42	
Bromoform	ug/kg	<100	100	100	04/23/20 23:42	
Bromomethane	ug/kg	<200	200	200	04/23/20 23:42	
Carbon disulfide	ug/kg	<250	250	250	04/23/20 23:42	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Chloroethane	ug/kg	<250	250	250	04/23/20 23:42	
Chloroform	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Chloromethane	ug/kg	<250	250	250	04/23/20 23:42	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	04/23/20 23:42	
Cyclohexane	ug/kg	<500	500	500	04/23/20 23:42	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

METHOD BLANK: 2576137 Matrix: Solid
Associated Lab Samples: 50255203002, 50255203004, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	04/23/20 23:42	
Dibromomethane	ug/kg	<250	250	250	04/23/20 23:42	
Dichlorodifluoromethane	ug/kg	<250	250	250	04/23/20 23:42	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	04/23/20 23:42	
Diisopropyl ether	ug/kg	<250	250	250	04/23/20 23:42	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	04/23/20 23:42	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Hexachloroethane	ug/kg	<300	300	300	04/23/20 23:42	N2
Iodomethane	ug/kg	<100	1000	100	04/23/20 23:42	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	04/23/20 23:42	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	04/23/20 23:42	
Methyl-tert-butyl ether	ug/kg	<250	250	250	04/23/20 23:42	
Methylene Chloride	ug/kg	<100	100	100	04/23/20 23:42	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
n-Propylbenzene	ug/kg	<100	100	100	04/23/20 23:42	
Naphthalene	ug/kg	<330	330	330	04/23/20 23:42	
o-Xylene	ug/kg	<25.0	50.0	25.0	04/23/20 23:42	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	04/23/20 23:42	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Styrene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
tert-Amylmethyl ether	ug/kg	<250	250	250	04/23/20 23:42	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	04/23/20 23:42	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Tetrahydrofuran	ug/kg	<1000	1000	1000	04/23/20 23:42	N2
Toluene	ug/kg	<100	100	100	04/23/20 23:42	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	04/23/20 23:42	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	04/23/20 23:42	
Trichloroethene	ug/kg	<50.0	50.0	50.0	04/23/20 23:42	
Trichlorofluoromethane	ug/kg	<100	100	100	04/23/20 23:42	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	04/23/20 23:42	
4-Bromofluorobenzene (S)	%.	92	60-142		04/23/20 23:42	
Dibromofluoromethane (S)	%.	105	62-137		04/23/20 23:42	
Toluene-d8 (S)	%.	101	64-139		04/23/20 23:42	

LABORATORY CONTROL SAMPLE: 2576138

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	97	82-119	
1,1,1-Trichloroethane	ug/kg	100	111	111	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	88.3	88	54-137	
1,1,2-Trichloroethane	ug/kg	100	95.0	95	77-122	
1,1-Dichloroethane	ug/kg	100	106	106	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

LABORATORY CONTROL SAMPLE: 2576138

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	98.5	98	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	100	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	91	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	104	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	102	102	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	110	110	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	95.0	95	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	90	79-117	
1,2-Dichloroethane	ug/kg	100	90.5	91	74-116	
1,2-Dichloropropane	ug/kg	100	94.1	94	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	102	102	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	91	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	90	76-115	
2-Butanone (MEK)	ug/kg	500	<750	95	65-126	
2-Hexanone	ug/kg	500	<2500	100	54-141	
2-Methylnaphthalene	ug/kg	100	<330	101	47-148	N2
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	98	60-133	
Acetone	ug/kg	500	<1000	106	49-139	
Acrylonitrile	ug/kg	400	362	91	66-133	
Benzene	ug/kg	100	96.3	96	71-126	
Bromobenzene	ug/kg	100	<100	91	77-119	
Bromochloromethane	ug/kg	100	87.5	88	60-117	
Bromodichloromethane	ug/kg	100	<100	94	79-122	
Bromoform	ug/kg	100	<100	98	64-121	
Bromomethane	ug/kg	100	<200	88	10-200	
Carbon disulfide	ug/kg	100	<250	100	54-129	
Carbon tetrachloride	ug/kg	100	108	108	78-120	
Chlorobenzene	ug/kg	100	93.2	93	81-117	
Chloroethane	ug/kg	100	<250	114	54-134	
Chloroform	ug/kg	100	98.9	99	80-119	
Chloromethane	ug/kg	100	<250	92	31-118	
cis-1,2-Dichloroethene	ug/kg	100	101	101	77-125	
cis-1,3-Dichloropropene	ug/kg	100	102	102	74-133	
Cyclohexane	ug/kg	100	<500	112	49-128	N2
Dibromochloromethane	ug/kg	100	<100	98	78-124	
Dibromomethane	ug/kg	100	<250	96	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	85	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	94	50-150	
Ethylbenzene	ug/kg	100	98.5	98	74-127	
Iodomethane	ug/kg	200	390J	195	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	101	85-121	
m&p-Xylene	ug/kg	200	193	96	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	101	78-135	
Methylene Chloride	ug/kg	100	100	100	73-119	
n-Butylbenzene	ug/kg	100	104	104	69-126	
n-Propylbenzene	ug/kg	100	<100	99	73-124	
Naphthalene	ug/kg	100	<330	101	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

LABORATORY CONTROL SAMPLE: 2576138

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	98.6	99	74-128	
p-Isopropyltoluene	ug/kg	100	103	103	74-124	
sec-Butylbenzene	ug/kg	100	102	102	72-124	
Styrene	ug/kg	100	99.9	100	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	109	50-150	
tert-Butylbenzene	ug/kg	100	77.5	77	54-104	
Tetrachloroethene	ug/kg	100	98.1	98	74-120	
Tetrahydrofuran	ug/kg	100	<1000	101	53-135	N2
Toluene	ug/kg	100	<100	96	71-124	
trans-1,2-Dichloroethene	ug/kg	100	107	107	73-131	
trans-1,3-Dichloropropene	ug/kg	100	100	100	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	376J	94	22-132	
Trichloroethene	ug/kg	100	92.4	92	75-121	
Trichlorofluoromethane	ug/kg	100	103	103	64-135	
Vinyl chloride	ug/kg	100	96.3	96	51-137	
4-Bromofluorobenzene (S)	%.			102	60-142	
Dibromofluoromethane (S)	%.			102	62-137	
Toluene-d8 (S)	%.			102	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 559382
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203002, 50255203004, 50255203006

METHOD BLANK: 2579558 Matrix: Solid
Associated Lab Samples: 50255203002, 50255203004, 50255203006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	<330	330	330	04/29/20 14:47	
Acenaphthene	ug/kg	<330	330	330	04/29/20 14:47	
Acenaphthylene	ug/kg	<330	330	330	04/29/20 14:47	
Anthracene	ug/kg	<330	330	330	04/29/20 14:47	
Benzo(a)anthracene	ug/kg	<330	330	330	04/29/20 14:47	
Benzo(a)pyrene	ug/kg	<330	330	330	04/29/20 14:47	
Benzo(b)fluoranthene	ug/kg	<330	330	330	04/29/20 14:47	
Benzo(g,h,i)perylene	ug/kg	<330	330	330	04/29/20 14:47	
Benzo(k)fluoranthene	ug/kg	<330	330	330	04/29/20 14:47	
Chrysene	ug/kg	<330	330	330	04/29/20 14:47	
Dibenz(a,h)anthracene	ug/kg	<330	330	330	04/29/20 14:47	
Fluoranthene	ug/kg	<330	330	330	04/29/20 14:47	
Fluorene	ug/kg	<330	330	330	04/29/20 14:47	
Indeno(1,2,3-cd)pyrene	ug/kg	<330	330	330	04/29/20 14:47	
Naphthalene	ug/kg	<330	330	330	04/29/20 14:47	
Phenanthrene	ug/kg	<330	330	330	04/29/20 14:47	
Pyrene	ug/kg	<330	330	330	04/29/20 14:47	
2-Fluorobiphenyl (S)	%.	77	37-111		04/29/20 14:47	
p-Terphenyl-d14 (S)	%.	80	29-124		04/29/20 14:47	

LABORATORY CONTROL SAMPLE: 2579559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	332	<329	83	50-117	
Acenaphthene	ug/kg	332	<329	90	54-116	
Acenaphthylene	ug/kg	332	<329	97	55-119	
Anthracene	ug/kg	332	<329	96	51-122	
Benzo(a)anthracene	ug/kg	332	<329	85	66-125	
Benzo(a)pyrene	ug/kg	332	<329	94	61-133	
Benzo(b)fluoranthene	ug/kg	332	331	100	49-141	
Benzo(g,h,i)perylene	ug/kg	332	<329	93	53-130	
Benzo(k)fluoranthene	ug/kg	332	<329	98	51-135	
Chrysene	ug/kg	332	<329	87	63-125	
Dibenz(a,h)anthracene	ug/kg	332	<329	97	59-130	
Fluoranthene	ug/kg	332	<329	99	65-128	
Fluorene	ug/kg	332	<329	91	57-122	
Indeno(1,2,3-cd)pyrene	ug/kg	332	<329	95	62-122	
Naphthalene	ug/kg	332	<329	80	48-109	
Phenanthrene	ug/kg	332	<329	90	57-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

LABORATORY CONTROL SAMPLE: 2579559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	332	<329	84	53-127	
2-Fluorobiphenyl (S)	%.			79	37-111	
p-Terphenyl-d14 (S)	%.			80	29-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2579560 2579561

Parameter	Units	50255146024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	ND	341	338	<337	336	96	99	22-135	3	20	
Acenaphthene	ug/kg	ND	341	338	344	357	101	105	34-123	4	20	
Acenaphthylene	ug/kg	ND	341	338	371	373	109	110	34-127	1	20	
Anthracene	ug/kg	ND	341	338	350	365	103	108	15-142	4	20	
Benzo(a)anthracene	ug/kg	ND	341	338	<337	<335	87	96	23-148	9	20	
Benzo(a)pyrene	ug/kg	ND	341	338	<337	355	95	105	19-149	9	20	
Benzo(b)fluoranthene	ug/kg	ND	341	338	<337	387	95	114	13-153	18	20	
Benzo(g,h,i)perylene	ug/kg	ND	341	338	<337	<335	88	98	10-144	9	20	
Benzo(k)fluoranthene	ug/kg	ND	341	338	359	356	105	105	18-142	1	20	
Chrysene	ug/kg	ND	341	338	<337	<335	90	98	22-146	8	20	
Dibenz(a,h)anthracene	ug/kg	ND	341	338	<337	356	97	105	28-133	7	20	
Fluoranthene	ug/kg	ND	341	338	353	375	104	111	13-162	6	20	
Fluorene	ug/kg	ND	341	338	346	360	102	106	32-134	4	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	341	338	<337	343	93	101	15-141	8	20	
Naphthalene	ug/kg	ND	341	338	<337	<335	92	95	19-131	2	20	
Phenanthrene	ug/kg	ND	341	338	<337	349	98	103	16-149	5	20	
Pyrene	ug/kg	ND	341	338	<337	<335	89	97	13-152	8	20	
2-Fluorobiphenyl (S)	%.						87	91	37-111			
p-Terphenyl-d14 (S)	%.						83	89	29-124			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255203

QC Batch: 558786
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255203001, 50255203002, 50255203003, 50255203004, 50255203005, 50255203006

SAMPLE DUPLICATE: 2576850

Parameter	Units	50255205004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.2	22.2	0	5	

SAMPLE DUPLICATE: 2577469

Parameter	Units	50255223005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.1	10.1	0	5	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale
Pace Project No.: 50255203

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50255203

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50255203002	**MW-121_9-10**	EPA 8015 Alcohol-Glycol	558696		
50255203004	**MW-120_4-5**	EPA 8015 Alcohol-Glycol	558696		
50255203006	**MW-119_6-7**	EPA 8015 Alcohol-Glycol	558696		
50255203001	**MW-121_2-3**	EPA 3050	559371	EPA 6010	559924
50255203002	**MW-121_9-10**	EPA 3050	559371	EPA 6010	559924
50255203003	**MW-120_2-3**	EPA 3050	559371	EPA 6010	559924
50255203004	**MW-120_4-5**	EPA 3050	559371	EPA 6010	559924
50255203005	**MW-119_2-3**	EPA 3050	559371	EPA 6010	559924
50255203006	**MW-119_6-7**	EPA 3050	559371	EPA 6010	559924
50255203007	**MW-115 Comp**	EPA 3010	558885	EPA 6010	559046
50255203001	**MW-121_2-3**	EPA 3050B	558799	EPA 6020	559125
50255203002	**MW-121_9-10**	EPA 3050B	558799	EPA 6020	559125
50255203003	**MW-120_2-3**	EPA 3050B	558799	EPA 6020	559125
50255203004	**MW-120_4-5**	EPA 3050B	558799	EPA 6020	559125
50255203005	**MW-119_2-3**	EPA 3050B	558799	EPA 6020	559125
50255203006	**MW-119_6-7**	EPA 3050B	558799	EPA 6020	559125
50255203001	**MW-121_2-3**	EPA 7471	558866	EPA 7471	559851
50255203002	**MW-121_9-10**	EPA 7471	558866	EPA 7471	559851
50255203003	**MW-120_2-3**	EPA 7471	558866	EPA 7471	559851
50255203004	**MW-120_4-5**	EPA 7471	558866	EPA 7471	559851
50255203005	**MW-119_2-3**	EPA 7471	558866	EPA 7471	559851
50255203006	**MW-119_6-7**	EPA 7471	558866	EPA 7471	559851
50255203002	**MW-121_9-10**	EPA 3546	559382	EPA 8270 by SIM	559531
50255203004	**MW-120_4-5**	EPA 3546	559382	EPA 8270 by SIM	559531
50255203006	**MW-119_6-7**	EPA 3546	559382	EPA 8270 by SIM	559531
50255203002	**MW-121_9-10**	EPA 8260	558637		
50255203004	**MW-120_4-5**	EPA 8260	558637		
50255203006	**MW-119_6-7**	EPA 8260	558637		
50255203001	**MW-121_2-3**	SM 2540G	558786		
50255203002	**MW-121_9-10**	SM 2540G	558786		
50255203003	**MW-120_2-3**	SM 2540G	558786		
50255203004	**MW-120_4-5**	SM 2540G	558786		
50255203005	**MW-119_2-3**	SM 2540G	558786		
50255203006	**MW-119_6-7**	SM 2540G	558786		

REPORT OF LABORATORY ANALYSIS

Pace Analytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO# : 50255203

50255203

Section A
Required Client Information:
Company: ATC Group Services - Novi
Address: 46555 Humboldt Drive
Novi, MI 48377
Email: joshua.schuyler@atcgs.com
Phone: (248)982-5378 Fax:
Requested Due Date: [redacted]

Section B
Required Project Information:
Report To: Joshua Schuyler
Copy To:
Purchase Order #:
Project Name: 8 Mile Ferndale
Project #: NPDAX19001

Section C
Invoice Information:
Attention: Joshua Schuyler
Company Name: ATC Group Services
Address: 46555 Humboldt Dr. Ste 100 Novi,
Pace Quote:
Pace Project Manager: brian.hall@pacelabs.com,
Pace Profile #: 9157

State / Location: MI

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs by 8260	PAH/Metals/Alcohols	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	RCRA 8 Metals	TCLP-barium, cadmium, lead	Residual Chlorine (Y/N)	
1	MW-121_2-3	SL	G	4/21/20	1100			1	1	X															✓			001
2	MW-121_9-10	SL	G	4/21/20	1105			1	3	1						2			✓						✓			002
3	MW-120_2-3	SL	G	4/21/20	1215			1		X															✓			003
4	MW-120_4-5	SL	G	4/21/20	1220			1		1						2			✓						✓			004
5	MW-119_2-3	SL	G	4/21/20	1305			1		X															✓			005
6	MW-119_6-7	SL	G	4/21/20	1315			1		1						2			✓						✓			006
7	MW-115 COMP	SL	C	4/21/20	1730			1		X																✓		007
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Spencer Overbeck / ATC	4/21/20	1945	[redacted]	4.22.20	1545	5.0	Y	N	Y
				Fedex						
	Fedex	4.22.20	0950	[redacted]	4.22.20	0950	5.0	Y	N	Y

MN 4-22-20

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Spencer Overbeck
SIGNATURE of SAMPLER: [redacted] DATE Signed: 4/21/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50255203

Date/Time and Initials of person examining contents: MN 4.22.20 1550

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: 1768 4585 9991

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☐ No

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer: 1 2 3 4 5 6 A B C D E F MN 4-22-20 Ice Type: ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☑ N/A

Cooler Temperature: _____ Ice Visible in Sample Containers?: ☐ Yes ☑ No ☐ N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: ☐ Yes ☐ No ☑ N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		✓	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: HNO3 H2SO4 NaOH NaOH/ZnAc			✓
USDA Regulated Soils? (ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓				
Chain of Custody Present:	✓					
Chain of Custody Filled Out:	✓		Dissolved Metals field filtered?:			✓
Short Hold Time Analysis (<72hr)?: Analysis:		✓	Headspace Wisconsin Sulfide			✓
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Rush TAT Requested:		✓	Headspace in VOA Vials (>6mm):			✓
Containers Intact?:	✓		Trip Blank Present?:		✓	
Sample Labels (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Custody Seals?:		✓	
Extra labels on Terracore Vials (soils only)?		✓				

Comments:

COC PAGE 1 of 1

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R (methanol only)	DG9H VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	WG 16oz jar				Matrix	pH <2	pH >9	pH>12
1	1																									SL			
2	↓	2																								↓			
3																													
4		2																											
5																													
6	↓	2																								SL			
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpres amber glass
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass

Plastic / Misc.

BP1A	1L NaOH, Asc Acid plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2N	500mL HNO3 plastic
BP2O	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic (field filtered)
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

July 10, 2020

Ryann Scott
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Dear Ryann Scott:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

Revised Report. This report replaces the original dated 063020, it has been revised to add Chromium Speciation to sample -005 and 8270 TICs to sample -008, per client request.

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
Joshua Schuyler, ATC Group Services - Novi

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50260268001	**MW-122 (4-5')**	Solid	06/15/20 13:37	06/18/20 09:25
50260268002	**MW-123 (4-5')**	Solid	06/15/20 13:15	06/18/20 09:25
50260268003	**MW-124 (4-5')**	Solid	06/15/20 12:40	06/18/20 09:25
50260268004	**MW-125 (4-5')**	Solid	06/16/20 11:00	06/18/20 09:25
50260268005	**MW-126 (4-5')**	Solid	06/15/20 10:20	06/18/20 09:25
50260268006	**MW-126 (7.5-8.5')**	Solid	06/15/20 10:30	06/18/20 09:25
50260268007	**MW-127 (6-7')**	Solid	06/15/20 11:30	06/18/20 09:25
50260268008	**MW-127 (10-11')**	Solid	06/15/20 13:00	06/18/20 09:25
50260268009	**MW-128 (4-5')**	Solid	06/15/20 09:45	06/18/20 09:25
50260268010	**MW-128 (8-9')**	Solid	06/15/20 09:47	06/18/20 09:25
50260268011	**MW-129 (3-4')**	Solid	06/15/20 11:56	06/18/20 09:25
50260268012	**MW-130 (4-5')**	Solid	06/15/20 14:22	06/18/20 09:25
50260268013	**MW-131 (2-3')**	Solid	06/15/20 13:55	06/18/20 09:25
50260268014	**Dup. 1**	Solid	06/15/20 12:00	06/18/20 09:25
50260268015	**Dup. 2**	Solid	06/16/20 12:00	06/18/20 09:25
50260268016	**Trip Blank**	Solid	06/15/20 14:29	06/18/20 09:25
50260268017	**Trip Blank**	Solid	06/15/20 14:30	06/18/20 09:25
50260268018	**Field Blank**	Solid	06/15/20 12:00	06/18/20 09:25

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50260268001	**MW-122 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268002	**MW-123 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268003	**MW-124 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268004	**MW-125 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268005	**MW-126 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7196A	DAS	1
		Trivalent Chromium Calculation	DAC1	1
50260268006	**MW-126 (7.5-8.5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268007	**MW-127 (6-7')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268008	**MW-127 (10-11')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	97
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268009	**MW-128 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268010	**MW-128 (8-9')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268011	**MW-129 (3-4')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268012	**MW-130 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268013	**MW-131 (2-3')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268014	**Dup. 1**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268015	**Dup. 2**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540G	RM1	1
50260268016	**Trip Blank**	EPA 8260	JPV	75
50260268017	**Trip Blank**	EPA 8260	JPV	75
50260268018	**Field Blank**	EPA 8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4830**	ug/kg	4830	4830	1		06/22/20 15:32	71-36-3	
Ethanol	**<2750**	ug/kg	2750	2750	1		06/22/20 15:32	64-17-5	
Methanol	**<4830**	ug/kg	4830	4830	1		06/22/20 15:32	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1010**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-36-0	
Arsenic	**2510**	ug/kg	2020	2020	1	06/26/20 14:44	06/29/20 11:52	7440-38-2	
Barium	**48100**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-39-3	
Beryllium	**<506**	ug/kg	506	506	1	06/26/20 14:44	06/29/20 11:52	7440-41-7	
Boron	**<8090**	ug/kg	8090	8090	1	06/26/20 14:44	06/29/20 11:52	7440-42-8	
Calcium	**8920000**	ug/kg	50600	6710	1	06/26/20 14:44	06/29/20 11:52	7440-70-2	
Chromium	**8690**	ug/kg	2020	2020	1	06/26/20 14:44	06/29/20 11:52	7440-47-3	
Copper	**6720**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-50-8	
Iron	**5840000**	ug/kg	25300	7690	1	06/26/20 14:44	06/29/20 11:52	7439-89-6	
Lead	**50700**	ug/kg	10100	10100	1	06/26/20 14:44	06/29/20 11:52	7439-92-1	
Magnesium	**2440000**	ug/kg	25300	4050	1	06/26/20 14:44	06/29/20 11:52	7439-95-4	
Manganese	**89200**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7439-96-5	
Molybdenum	**<1010**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7439-98-7	
Nickel	**4940**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-02-0	
Potassium	**238000**	ug/kg	50600	4950	1	06/26/20 14:44	06/29/20 11:52	7440-09-7	
Sodium	**31000**	ug/kg	25300	13800	1	06/26/20 14:44	06/29/20 11:52	7440-23-5	
Strontium	**12200**	ug/kg	5060	5060	1	06/26/20 14:44	06/29/20 11:52	7440-24-6	
Vanadium	**14200**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-62-2	
Zinc	**48800**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4330000**	ug/kg	109000	109000	100	06/24/20 09:22	06/30/20 00:18	7429-90-5	
Cadmium	**<218**	ug/kg	218	218	1	06/24/20 09:22	06/25/20 13:27	7440-43-9	
Cobalt	**1400**	ug/kg	544	544	1	06/24/20 09:22	06/25/20 13:27	7440-48-4	
Selenium	**262**	ug/kg	218	218	1	06/24/20 09:22	06/25/20 13:27	7782-49-2	
Silver	**157**	ug/kg	109	109	1	06/24/20 09:22	06/25/20 13:27	7440-22-4	
Thallium	**<544**	ug/kg	544	544	1	06/24/20 09:22	06/25/20 13:27	7440-28-0	
Titanium	**237000**	ug/kg	10900	2890	100	06/24/20 09:22	06/30/20 00:18	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**1110**	ug/kg	111	87.4	1	06/26/20 02:49	06/26/20 07:06	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	83-32-9	
Acenaphthylene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-12-7	
Benzo(a)anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	56-55-3	
Benzo(a)pyrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	50-32-8	
Benzo(b)fluoranthene	**427**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	205-99-2	
Benzo(g,h,i)perylene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	191-24-2	
Benzo(k)fluoranthene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	207-08-9	
4-Bromophenylphenyl ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	101-55-3	
Butylbenzylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	85-68-7	
Carbazole	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-74-8	
4-Chloro-3-methylphenol	**<299**	ug/kg	352	299	1	06/23/20 12:30	06/24/20 11:48	59-50-7	
bis(2-Chloroethoxy)methane	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	111-91-1	
bis(2-Chloroethyl) ether	**<171**	ug/kg	352	171	1	06/23/20 12:30	06/24/20 11:48	111-44-4	
bis(2-Chloroisopropyl) ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	108-60-1	
2-Chloronaphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-58-7	
2-Chlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	95-57-8	
4-Chlorophenylphenyl ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	7005-72-3	
Chrysene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	218-01-9	
Dibenz(a,h)anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	53-70-3	
Dibenzofuran	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	132-64-9	
2,4-Dichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-83-2	
Diethylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	84-66-2	
2,4-Dimethylphenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	105-67-9	
Dimethylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	131-11-3	
Di-n-butylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	84-74-2	
4,6-Dinitro-2-methylphenol	**<885**	ug/kg	885	885	1	06/23/20 12:30	06/24/20 11:48	534-52-1	
2,4-Dinitrophenol	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	51-28-5	
2,4-Dinitrotoluene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	121-14-2	
2,6-Dinitrotoluene	**<94.4**	ug/kg	352	94.4	1	06/23/20 12:30	06/24/20 11:48	606-20-2	
Di-n-octylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	117-84-0	
1,2-Diphenylhydrazine	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	122-66-7	
bis(2-Ethylhexyl)phthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	117-81-7	
Fluoranthene	**689**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	206-44-0	
Fluorene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-73-7	
Hexachloro-1,3-butadiene	**<102**	ug/kg	352	102	1	06/23/20 12:30	06/24/20 11:48	87-68-3	
Hexachlorobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	118-74-1	
Hexachlorocyclopentadiene	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48	77-47-4	
Hexachloroethane	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	67-72-1	
Indeno(1,2,3-cd)pyrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	193-39-5	
Isophorone	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	78-59-1	
2-Methylnaphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-57-6	
2-Methylphenol(o-Cresol)	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48		
Naphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-20-3	
2-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-74-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	99-09-2	
4-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	100-01-6	
Nitrobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	98-95-3	
2-Nitrophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-75-5	
4-Nitrophenol	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	100-02-7	
N-Nitrosodimethylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	62-75-9	
N-Nitroso-di-n-propylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	621-64-7	
N-Nitrosodiphenylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-30-6	
Pentachlorophenol	**<1570**	ug/kg	1710	1570	1	06/23/20 12:30	06/24/20 11:48	87-86-5	
Phenanthrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	85-01-8	
Phenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	108-95-2	
Pyrene	**586**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	129-00-0	
1,2,4-Trichlorobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-82-1	
2,4,5-Trichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	95-95-4	
2,4,6-Trichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	62	%.	26-96		1	06/23/20 12:30	06/24/20 11:48	4165-60-0	
Phenol-d5 (S)	74	%.	32-93		1	06/23/20 12:30	06/24/20 11:48	4165-62-2	
2-Fluorophenol (S)	79	%.	24-95		1	06/23/20 12:30	06/24/20 11:48	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 11:48	118-79-6	
2-Fluorobiphenyl (S)	74	%.	36-91		1	06/23/20 12:30	06/24/20 11:48	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 11:48	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1050**	ug/kg	1050	1050	1		06/24/20 03:37	67-64-1	
Acrylonitrile	**<105**	ug/kg	105	105	1		06/24/20 03:37	107-13-1	
tert-Amylmethyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	994-05-8	N2
Benzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	71-43-2	
Bromobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-86-1	
Bromochloromethane	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	74-97-5	
Bromodichloromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-27-4	
Bromoform	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-25-2	
Bromomethane	**<211**	ug/kg	211	211	1		06/24/20 03:37	74-83-9	
2-Butanone (MEK)	**<791**	ug/kg	791	791	1		06/24/20 03:37	78-93-3	
tert-Butyl Alcohol	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	75-65-0	
n-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	104-51-8	
sec-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	135-98-8	
tert-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	98-06-6	
Carbon disulfide	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-15-0	
Carbon tetrachloride	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	56-23-5	
Chlorobenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	108-90-7	
Chloroethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-00-3	
Chloroform	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	74-87-3	
Cyclohexane	**<527**	ug/kg	527	527	1		06/24/20 03:37	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	96-12-8	
Dibromochloromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	124-48-1	
1,2-Dibromoethane (EDB)	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	106-93-4	
Dibromomethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	74-95-3	
1,2-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	95-50-1	
1,3-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	541-73-1	
1,4-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	106-46-7	
trans-1,4-Dichloro-2-butene	**<105**	ug/kg	1050	105	1		06/24/20 03:37	110-57-6	
Dichlorodifluoromethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-71-8	
1,1-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	75-34-3	
1,2-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	107-06-2	
1,1-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	75-35-4	
cis-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	156-59-2	
trans-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	156-60-5	
1,2-Dichloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	78-87-5	
cis-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 03:37	10061-01-5	
trans-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 03:37	10061-02-6	
Diethyl ether (Ethyl ether)	**<211**	ug/kg	211	211	1		06/24/20 03:37	60-29-7	
Diisopropyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	108-20-3	N2
Ethylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	100-41-4	
Ethyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	637-92-3	N2
Hexachloroethane	**<316**	ug/kg	316	316	1		06/24/20 03:37	67-72-1	N2
2-Hexanone	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	591-78-6	
Iodomethane	**<105**	ug/kg	1050	105	1		06/24/20 03:37	74-88-4	
Isopropylbenzene (Cumene)	**<264**	ug/kg	264	264	1		06/24/20 03:37	98-82-8	
p-Isopropyltoluene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	99-87-6	
Methylene Chloride	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-09-2	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1		06/24/20 03:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	108-10-1	
Methyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	1634-04-4	
Naphthalene	**<348**	ug/kg	348	348	1		06/24/20 03:37	91-20-3	
n-Propylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	103-65-1	
Styrene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-34-5	
Tetrachloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	127-18-4	
Tetrahydrofuran	**<1050**	ug/kg	1050	1050	1		06/24/20 03:37	109-99-9	N2
Toluene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-88-3	
1,2,3-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	87-61-6	
1,2,4-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	120-82-1	
1,1,1-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	71-55-6	
1,1,2-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-01-6	
Trichlorofluoromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-69-4	
1,2,3-Trichloropropane	**<105**	ug/kg	105	105	1		06/24/20 03:37	96-18-4	
1,2,3-Trimethylbenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	526-73-8	N2
1,2,4-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	95-63-6	
1,3,5-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-67-8	
Vinyl chloride	**<42.2**	ug/kg	42.2	42.2	1		06/24/20 03:37	75-01-4	
m&p-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	179601-23-1	
o-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 03:37	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 03:37	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 03:37	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**9.0**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:06	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:06	64-17-5	
Methanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:06	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	12674-11-2	
PCB-1221 (Aroclor 1221)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11096-82-5	
PCB-1262 (Aroclor 1262)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	69	%.	25-123		1	06/24/20 21:50	06/25/20 18:06	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<929**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-36-0	
Arsenic	**2530**	ug/kg	1860	1860	1	06/26/20 14:44	06/29/20 11:55	7440-38-2	
Barium	**12700**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-39-3	
Beryllium	**<464**	ug/kg	464	464	1	06/26/20 14:44	06/29/20 11:55	7440-41-7	
Boron	**<7430**	ug/kg	7430	7430	1	06/26/20 14:44	06/29/20 11:55	7440-42-8	
Calcium	**703000**	ug/kg	46400	6160	1	06/26/20 14:44	06/29/20 11:55	7440-70-2	
Chromium	**7230**	ug/kg	1860	1860	1	06/26/20 14:44	06/29/20 11:55	7440-47-3	
Copper	**2000**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-50-8	
Iron	**6680000**	ug/kg	23200	7060	1	06/26/20 14:44	06/29/20 11:55	7439-89-6	
Lead	**<9290**	ug/kg	9290	9290	1	06/26/20 14:44	06/29/20 11:55	7439-92-1	
Magnesium	**834000**	ug/kg	23200	3720	1	06/26/20 14:44	06/29/20 11:55	7439-95-4	
Manganese	**126000**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7439-96-5	
Molybdenum	**<929**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7439-98-7	
Nickel	**3880**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-02-0	
Potassium	**144000**	ug/kg	46400	4540	1	06/26/20 14:44	06/29/20 11:55	7440-09-7	
Sodium	**28100**	ug/kg	23200	12600	1	06/26/20 14:44	06/29/20 11:55	7440-23-5	
Strontium	**<4640**	ug/kg	4640	4640	1	06/26/20 14:44	06/29/20 11:55	7440-24-6	
Vanadium	**13300**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-62-2	
Zinc	**7510**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2870000**	ug/kg	101000	101000	100	06/24/20 09:22	06/30/20 00:41	7429-90-5	
Cadmium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:22	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1720**	ug/kg	506	506	1	06/24/20 09:22	06/25/20 14:22	7440-48-4	
Selenium	**228**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:22	7782-49-2	
Silver	**<101**	ug/kg	101	101	1	06/24/20 09:22	06/25/20 14:22	7440-22-4	
Thallium	**<506**	ug/kg	506	506	1	06/24/20 09:22	06/25/20 14:22	7440-28-0	
Titanium	**228000**	ug/kg	10100	2690	100	06/24/20 09:22	06/30/20 00:41	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<85.3**	ug/kg	108	85.3	1	06/26/20 02:49	06/26/20 07:08	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	83-32-9	
Acenaphthylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	208-96-8	
Anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-12-7	
Benzo(a)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	56-55-3	
Benzo(a)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	50-32-8	
Benzo(b)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	205-99-2	
Benzo(g,h,i)perylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	191-24-2	
Benzo(k)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	207-08-9	
4-Bromophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	101-55-3	
Butylbenzylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	85-68-7	
Carbazole	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-74-8	
4-Chloro-3-methylphenol	**<292**	ug/kg	344	292	1	06/23/20 12:30	06/24/20 12:05	59-50-7	
bis(2-Chloroethoxy)methane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	111-91-1	
bis(2-Chloroethyl) ether	**<167**	ug/kg	344	167	1	06/23/20 12:30	06/24/20 12:05	111-44-4	
bis(2-Chloroisopropyl) ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	108-60-1	
2-Chloronaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-58-7	
2-Chlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	95-57-8	
4-Chlorophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	7005-72-3	
Chrysene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	218-01-9	
Dibenz(a,h)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	53-70-3	
Dibenzofuran	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	132-64-9	
2,4-Dichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-83-2	
Diethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	84-66-2	
2,4-Dimethylphenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	105-67-9	
Dimethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	131-11-3	
Di-n-butylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	84-74-2	
4,6-Dinitro-2-methylphenol	**<864**	ug/kg	864	864	1	06/23/20 12:30	06/24/20 12:05	534-52-1	
2,4-Dinitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	51-28-5	
2,4-Dinitrotoluene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	121-14-2	
2,6-Dinitrotoluene	**<92.2**	ug/kg	344	92.2	1	06/23/20 12:30	06/24/20 12:05	606-20-2	
Di-n-octylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	117-84-0	
1,2-Diphenylhydrazine	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	117-81-7	
Fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	206-44-0	
Fluorene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-73-7	
Hexachloro-1,3-butadiene	**<100**	ug/kg	344	100	1	06/23/20 12:30	06/24/20 12:05	87-68-3	
Hexachlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	118-74-1	
Hexachlorocyclopentadiene	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05	77-47-4	
Hexachloroethane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	67-72-1	
Indeno(1,2,3-cd)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	193-39-5	
Isophorone	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	78-59-1	
2-Methylnaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-57-6	
2-Methylphenol(o-Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05		
Naphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-20-3	
2-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-74-4	
3-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	99-09-2	
4-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	100-01-6	
Nitrobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	98-95-3	
2-Nitrophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-75-5	
4-Nitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	100-02-7	
N-Nitrosodimethylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	62-75-9	
N-Nitroso-di-n-propylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	621-64-7	
N-Nitrosodiphenylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-30-6	
Pentachlorophenol	**<1530**	ug/kg	1670	1530	1	06/23/20 12:30	06/24/20 12:05	87-86-5	
Phenanthrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	85-01-8	
Phenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	108-95-2	
Pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	129-00-0	
1,2,4-Trichlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-82-1	
2,4,5-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	95-95-4	
2,4,6-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	57	%.	26-96		1	06/23/20 12:30	06/24/20 12:05	4165-60-0	
Phenol-d5 (S)	82	%.	32-93		1	06/23/20 12:30	06/24/20 12:05	4165-62-2	
2-Fluorophenol (S)	85	%.	24-95		1	06/23/20 12:30	06/24/20 12:05	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	20-109		1	06/23/20 12:30	06/24/20 12:05	118-79-6	
2-Fluorobiphenyl (S)	68	%.	36-91		1	06/23/20 12:30	06/24/20 12:05	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 12:05	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<957**	ug/kg	957	957	1		06/24/20 04:10	67-64-1	
Acrylonitrile	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	107-13-1	
tert-Amylmethyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	994-05-8	N2
Benzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	71-43-2	
Bromobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	74-97-5	
Bromodichloromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-27-4	
Bromoform	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-25-2	
Bromomethane	**<191**	ug/kg	191	191	1		06/24/20 04:10	74-83-9	
2-Butanone (MEK)	**<718**	ug/kg	718	718	1		06/24/20 04:10	78-93-3	
tert-Butyl Alcohol	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	75-65-0	
n-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	104-51-8	
sec-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	135-98-8	
tert-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	98-06-6	
Carbon disulfide	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-15-0	
Carbon tetrachloride	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	56-23-5	
Chlorobenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	108-90-7	
Chloroethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-00-3	
Chloroform	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	67-66-3	
Chloromethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	74-87-3	
Cyclohexane	**<479**	ug/kg	479	479	1		06/24/20 04:10	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	96-12-8	
Dibromochloromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	124-48-1	
1,2-Dibromoethane (EDB)	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	106-93-4	
Dibromomethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	74-95-3	
1,2-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	95-50-1	
1,3-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	541-73-1	
1,4-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	106-46-7	
trans-1,4-Dichloro-2-butene	**<95.7**	ug/kg	957	95.7	1		06/24/20 04:10	110-57-6	
Dichlorodifluoromethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-71-8	
1,1-Dichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	75-34-3	
1,2-Dichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	107-06-2	
1,1-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	75-35-4	
cis-1,2-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	156-59-2	
trans-1,2-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	156-60-5	
1,2-Dichloropropane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	78-87-5	
cis-1,3-Dichloropropene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	10061-01-5	
trans-1,3-Dichloropropene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	10061-02-6	
Diethyl ether (Ethyl ether)	**<191**	ug/kg	191	191	1		06/24/20 04:10	60-29-7	
Diisopropyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	108-20-3	N2
Ethylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	100-41-4	
Ethyl-tert-butyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	637-92-3	N2
Hexachloroethane	**<287**	ug/kg	287	287	1		06/24/20 04:10	67-72-1	N2
2-Hexanone	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	591-78-6	
Iodomethane	**<95.7**	ug/kg	957	95.7	1		06/24/20 04:10	74-88-4	
Isopropylbenzene (Cumene)	**<239**	ug/kg	239	239	1		06/24/20 04:10	98-82-8	
p-Isopropyltoluene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	99-87-6	
Methylene Chloride	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-09-2	
2-Methylnaphthalene	**<316**	ug/kg	316	316	1		06/24/20 04:10	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	108-10-1	
Methyl-tert-butyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	1634-04-4	
Naphthalene	**<316**	ug/kg	316	316	1		06/24/20 04:10	91-20-3	
n-Propylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	103-65-1	
Styrene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	100-42-5	
1,1,1,2-Tetrachloroethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	630-20-6	
1,1,2,2-Tetrachloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-34-5	
Tetrachloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	127-18-4	
Tetrahydrofuran	**<957**	ug/kg	957	957	1		06/24/20 04:10	109-99-9	N2
Toluene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-88-3	
1,2,3-Trichlorobenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	87-61-6	
1,2,4-Trichlorobenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	120-82-1	
1,1,1-Trichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	71-55-6	
1,1,2-Trichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-00-5	
Trichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-01-6	
Trichlorofluoromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-69-4	
1,2,3-Trichloropropane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	96-18-4	
1,2,3-Trimethylbenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	526-73-8	N2
1,2,4-Trimethylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	95-63-6	
1,3,5-Trimethylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-67-8	
Vinyl chloride	**<38.3**	ug/kg	38.3	38.3	1		06/24/20 04:10	75-01-4	
m&p-Xylene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	179601-23-1	
o-Xylene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 04:10	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 04:10	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	60-142		1		06/24/20 04:10	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.5**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:15	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:15	64-17-5	
Methanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:15	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<957**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-36-0	
Arsenic	**<1910**	ug/kg	1910	1910	1	06/26/20 14:44	06/29/20 11:57	7440-38-2	
Barium	**8540**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-39-3	
Beryllium	**<478**	ug/kg	478	478	1	06/26/20 14:44	06/29/20 11:57	7440-41-7	
Boron	**<7650**	ug/kg	7650	7650	1	06/26/20 14:44	06/29/20 11:57	7440-42-8	
Calcium	**628000**	ug/kg	47800	6340	1	06/26/20 14:44	06/29/20 11:57	7440-70-2	
Chromium	**5880**	ug/kg	1910	1910	1	06/26/20 14:44	06/29/20 11:57	7440-47-3	
Copper	**1580**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-50-8	
Iron	**3940000**	ug/kg	23900	7270	1	06/26/20 14:44	06/29/20 11:57	7439-89-6	
Lead	**<9570**	ug/kg	9570	9570	1	06/26/20 14:44	06/29/20 11:57	7439-92-1	
Magnesium	**739000**	ug/kg	23900	3830	1	06/26/20 14:44	06/29/20 11:57	7439-95-4	
Manganese	**27300**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7439-96-5	
Molybdenum	**<957**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7439-98-7	
Nickel	**3880**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-02-0	
Potassium	**148000**	ug/kg	47800	4680	1	06/26/20 14:44	06/29/20 11:57	7440-09-7	
Sodium	**23200J**	ug/kg	23900	13000	1	06/26/20 14:44	06/29/20 11:57	7440-23-5	
Strontium	**<4780**	ug/kg	4780	4780	1	06/26/20 14:44	06/29/20 11:57	7440-24-6	
Vanadium	**8010**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-62-2	
Zinc	**8190**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**3620000**	ug/kg	102000	102000	100	06/24/20 09:22	06/30/20 00:45	7429-90-5	
Cadmium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:31	7440-43-9	
Cobalt	**1350**	ug/kg	509	509	1	06/24/20 09:22	06/25/20 14:31	7440-48-4	
Selenium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:31	7782-49-2	
Silver	**<102**	ug/kg	102	102	1	06/24/20 09:22	06/25/20 14:31	7440-22-4	
Thallium	**<509**	ug/kg	509	509	1	06/24/20 09:22	06/25/20 14:31	7440-28-0	
Titanium	**220000**	ug/kg	10200	2710	100	06/24/20 09:22	06/30/20 00:45	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<86.7**	ug/kg	110	86.7	1	06/26/20 02:49	06/26/20 07:16	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	83-32-9	
Acenaphthylene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-12-7	
Benzo(a)anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	56-55-3	
Benzo(a)pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	50-32-8	
Benzo(b)fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	205-99-2	
Benzo(g,h,i)perylene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	191-24-2	
Benzo(k)fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	207-08-9	
4-Bromophenylphenyl ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	101-55-3	
Butylbenzylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	85-68-7	
Carbazole	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-74-8	
4-Chloro-3-methylphenol	**<297**	ug/kg	350	297	1	06/23/20 12:30	06/24/20 12:22	59-50-7	
bis(2-Chloroethoxy)methane	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	111-91-1	
bis(2-Chloroethyl) ether	**<170**	ug/kg	350	170	1	06/23/20 12:30	06/24/20 12:22	111-44-4	
bis(2-Chloroisopropyl) ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	108-60-1	
2-Chloronaphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-58-7	
2-Chlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	95-57-8	
4-Chlorophenylphenyl ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	7005-72-3	
Chrysene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	218-01-9	
Dibenz(a,h)anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	53-70-3	
Dibenzofuran	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	132-64-9	
2,4-Dichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-83-2	
Diethylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	84-66-2	
2,4-Dimethylphenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	105-67-9	
Dimethylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	131-11-3	
Di-n-butylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	84-74-2	
4,6-Dinitro-2-methylphenol	**<880**	ug/kg	880	880	1	06/23/20 12:30	06/24/20 12:22	534-52-1	
2,4-Dinitrophenol	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	51-28-5	
2,4-Dinitrotoluene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	121-14-2	
2,6-Dinitrotoluene	**<93.9**	ug/kg	350	93.9	1	06/23/20 12:30	06/24/20 12:22	606-20-2	
Di-n-octylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	117-84-0	
1,2-Diphenylhydrazine	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	122-66-7	
bis(2-Ethylhexyl)phthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	117-81-7	
Fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	206-44-0	
Fluorene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-73-7	
Hexachloro-1,3-butadiene	**<102**	ug/kg	350	102	1	06/23/20 12:30	06/24/20 12:22	87-68-3	
Hexachlorobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	118-74-1	
Hexachlorocyclopentadiene	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22	77-47-4	
Hexachloroethane	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	67-72-1	
Indeno(1,2,3-cd)pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	193-39-5	
Isophorone	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	78-59-1	
2-Methylnaphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-57-6	
2-Methylphenol(o-Cresol)	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22		
Naphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-20-3	
2-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	99-09-2	
4-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	100-01-6	
Nitrobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	98-95-3	
2-Nitrophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-75-5	
4-Nitrophenol	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	100-02-7	
N-Nitrosodimethylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	62-75-9	
N-Nitroso-di-n-propylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	621-64-7	
N-Nitrosodiphenylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-30-6	
Pentachlorophenol	**<1560**	ug/kg	1700	1560	1	06/23/20 12:30	06/24/20 12:22	87-86-5	
Phenanthrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	85-01-8	
Phenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	108-95-2	
Pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	129-00-0	
1,2,4-Trichlorobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-82-1	
2,4,5-Trichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	95-95-4	
2,4,6-Trichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%.	26-96		1	06/23/20 12:30	06/24/20 12:22	4165-60-0	
Phenol-d5 (S)	81	%.	32-93		1	06/23/20 12:30	06/24/20 12:22	4165-62-2	
2-Fluorophenol (S)	83	%.	24-95		1	06/23/20 12:30	06/24/20 12:22	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 12:22	118-79-6	
2-Fluorobiphenyl (S)	79	%.	36-91		1	06/23/20 12:30	06/24/20 12:22	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/23/20 12:30	06/24/20 12:22	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<986**	ug/kg	986	986	1		06/24/20 04:43	67-64-1	
Acrylonitrile	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	107-13-1	
tert-Amylmethyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	994-05-8	N2
Benzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	71-43-2	
Bromobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-86-1	
Bromochloromethane	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	74-97-5	
Bromodichloromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-27-4	
Bromoform	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-25-2	
Bromomethane	**<197**	ug/kg	197	197	1		06/24/20 04:43	74-83-9	
2-Butanone (MEK)	**<740**	ug/kg	740	740	1		06/24/20 04:43	78-93-3	
tert-Butyl Alcohol	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	75-65-0	
n-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	104-51-8	
sec-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	135-98-8	
tert-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	98-06-6	
Carbon disulfide	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-15-0	
Carbon tetrachloride	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	56-23-5	
Chlorobenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	108-90-7	
Chloroethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-00-3	
Chloroform	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	74-87-3	
Cyclohexane	**<493**	ug/kg	493	493	1		06/24/20 04:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	96-12-8	
Dibromochloromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	124-48-1	
1,2-Dibromoethane (EDB)	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	106-93-4	
Dibromomethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	74-95-3	
1,2-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	95-50-1	
1,3-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	541-73-1	
1,4-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<98.6**	ug/kg	986	98.6	1		06/24/20 04:43	110-57-6	
Dichlorodifluoromethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-71-8	
1,1-Dichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	75-34-3	
1,2-Dichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	107-06-2	
1,1-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	75-35-4	
cis-1,2-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	156-59-2	
trans-1,2-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	156-60-5	
1,2-Dichloropropane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	78-87-5	
cis-1,3-Dichloropropene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	10061-01-5	
trans-1,3-Dichloropropene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<197**	ug/kg	197	197	1		06/24/20 04:43	60-29-7	
Diisopropyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	108-20-3	N2
Ethylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	100-41-4	
Ethyl-tert-butyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	637-92-3	N2
Hexachloroethane	**<296**	ug/kg	296	296	1		06/24/20 04:43	67-72-1	N2
2-Hexanone	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	591-78-6	
Iodomethane	**<98.6**	ug/kg	986	98.6	1		06/24/20 04:43	74-88-4	
Isopropylbenzene (Cumene)	**<247**	ug/kg	247	247	1		06/24/20 04:43	98-82-8	
p-Isopropyltoluene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	99-87-6	
Methylene Chloride	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-09-2	
2-Methylnaphthalene	**<326**	ug/kg	326	326	1		06/24/20 04:43	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	108-10-1	
Methyl-tert-butyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	1634-04-4	
Naphthalene	**<326**	ug/kg	326	326	1		06/24/20 04:43	91-20-3	
n-Propylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	103-65-1	
Styrene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-34-5	
Tetrachloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	127-18-4	
Tetrahydrofuran	**<986**	ug/kg	986	986	1		06/24/20 04:43	109-99-9	N2
Toluene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-88-3	
1,2,3-Trichlorobenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	87-61-6	
1,2,4-Trichlorobenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	120-82-1	
1,1,1-Trichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	71-55-6	
1,1,2-Trichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-01-6	
Trichlorofluoromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-69-4	
1,2,3-Trichloropropane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	96-18-4	
1,2,3-Trimethylbenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	95-63-6	
1,3,5-Trimethylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-67-8	
Vinyl chloride	**<39.5**	ug/kg	39.5	39.5	1		06/24/20 04:43	75-01-4	
m&p-Xylene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	179601-23-1	
o-Xylene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%.	62-137		1		06/24/20 04:43	1868-53-7	
Toluene-d8 (S)	97	%.	64-139		1		06/24/20 04:43	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	60-142		1		06/24/20 04:43	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.3**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4670**	ug/kg	4670	4670	1		06/22/20 16:25	71-36-3	
Ethanol	**<2650**	ug/kg	2650	2650	1		06/22/20 16:25	64-17-5	
Methanol	**<4670**	ug/kg	4670	4670	1		06/22/20 16:25	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11096-82-5	
PCB-1262 (Aroclor 1262)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	69	%.	25-123		1	06/24/20 21:50	06/25/20 21:22	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1030**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-36-0	
Arsenic	**2940**	ug/kg	2070	2070	1	06/26/20 14:44	06/29/20 12:07	7440-38-2	
Barium	**33400**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-39-3	
Beryllium	**<517**	ug/kg	517	517	1	06/26/20 14:44	06/29/20 12:07	7440-41-7	
Boron	**<8260**	ug/kg	8260	8260	1	06/26/20 14:44	06/29/20 12:07	7440-42-8	
Calcium	**28700000**	ug/kg	258000	34200	5	06/26/20 14:44	06/29/20 12:43	7440-70-2	
Chromium	**11100**	ug/kg	2070	2070	1	06/26/20 14:44	06/29/20 12:07	7440-47-3	
Copper	**9020**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-50-8	
Iron	**5840000**	ug/kg	25800	7850	1	06/26/20 14:44	06/29/20 12:07	7439-89-6	
Lead	**33800**	ug/kg	10300	10300	1	06/26/20 14:44	06/29/20 12:07	7439-92-1	
Magnesium	**4260000**	ug/kg	25800	4130	1	06/26/20 14:44	06/29/20 12:07	7439-95-4	
Manganese	**122000**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7439-96-5	
Molybdenum	**<1030**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7439-98-7	
Nickel	**6660**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-02-0	
Potassium	**337000**	ug/kg	51700	5050	1	06/26/20 14:44	06/29/20 12:07	7440-09-7	
Sodium	**65200**	ug/kg	25800	14100	1	06/26/20 14:44	06/29/20 12:07	7440-23-5	
Strontium	**29300**	ug/kg	5170	5170	1	06/26/20 14:44	06/29/20 12:07	7440-24-6	
Vanadium	**13200**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-62-2	
Zinc	**50800**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**5130000**	ug/kg	102000	102000	100	06/24/20 09:22	06/30/20 00:50	7429-90-5	
Cadmium	**290**	ug/kg	205	205	1	06/24/20 09:22	06/25/20 14:40	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**2270**	ug/kg	512	512	1	06/24/20 09:22	06/25/20 14:40	7440-48-4	
Selenium	**<1020**	ug/kg	1020	1020	5	06/24/20 09:22	06/30/20 02:36	7782-49-2	D3
Silver	**1840**	ug/kg	102	102	1	06/24/20 09:22	06/25/20 14:40	7440-22-4	
Thallium	**<512**	ug/kg	512	512	1	06/24/20 09:22	06/25/20 14:40	7440-28-0	
Titanium	**284000**	ug/kg	10200	2730	100	06/24/20 09:22	06/30/20 00:50	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**940**	ug/kg	103	81.6	1	06/26/20 02:49	06/26/20 07:18	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	83-32-9	
Acenaphthylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	208-96-8	
Anthracene	**549**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-12-7	
Benzo(a)anthracene	**2190**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	56-55-3	
Benzo(a)pyrene	**1860**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	50-32-8	
Benzo(b)fluoranthene	**2650**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	205-99-2	
Benzo(g,h,i)perylene	**1040**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	191-24-2	
Benzo(k)fluoranthene	**1000**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	207-08-9	
4-Bromophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	101-55-3	
Butylbenzylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	85-68-7	
Carbazole	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-74-8	
4-Chloro-3-methylphenol	**<294**	ug/kg	347	294	1	06/23/20 12:30	06/24/20 12:40	59-50-7	
bis(2-Chloroethoxy)methane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	111-91-1	
bis(2-Chloroethyl) ether	**<168**	ug/kg	347	168	1	06/23/20 12:30	06/24/20 12:40	111-44-4	
bis(2-Chloroisopropyl) ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	108-60-1	
2-Chloronaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-58-7	
2-Chlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	95-57-8	
4-Chlorophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	7005-72-3	
Chrysene	**2070**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	218-01-9	
Dibenz(a,h)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	53-70-3	
Dibenzofuran	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	132-64-9	
2,4-Dichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-83-2	
Diethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	84-66-2	
2,4-Dimethylphenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	105-67-9	
Dimethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	131-11-3	
Di-n-butylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	84-74-2	
4,6-Dinitro-2-methylphenol	**<872**	ug/kg	872	872	1	06/23/20 12:30	06/24/20 12:40	534-52-1	
2,4-Dinitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	51-28-5	
2,4-Dinitrotoluene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	121-14-2	
2,6-Dinitrotoluene	**<93.0**	ug/kg	347	93.0	1	06/23/20 12:30	06/24/20 12:40	606-20-2	
Di-n-octylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	117-84-0	
1,2-Diphenylhydrazine	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	117-81-7	
Fluoranthene	**4260**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	206-44-0	
Fluorene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	347	101	1	06/23/20 12:30	06/24/20 12:40	87-68-3	
Hexachlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40	77-47-4	
Hexachloroethane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	67-72-1	
Indeno(1,2,3-cd)pyrene	**914**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	193-39-5	
Isophorone	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	78-59-1	
2-Methylnaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40		
Naphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-20-3	
2-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-74-4	
3-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	99-09-2	
4-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	100-01-6	
Nitrobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	98-95-3	
2-Nitrophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-75-5	
4-Nitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	100-02-7	
N-Nitrosodimethylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	62-75-9	
N-Nitroso-di-n-propylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	621-64-7	
N-Nitrosodiphenylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-30-6	
Pentachlorophenol	**<1540**	ug/kg	1680	1540	1	06/23/20 12:30	06/24/20 12:40	87-86-5	
Phenanthrene	**2250**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	85-01-8	
Phenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	108-95-2	
Pyrene	**3800**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	129-00-0	
1,2,4-Trichlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-82-1	
2,4,5-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	95-95-4	
2,4,6-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	56	%.	26-96		1	06/23/20 12:30	06/24/20 12:40	4165-60-0	
Phenol-d5 (S)	72	%.	32-93		1	06/23/20 12:30	06/24/20 12:40	4165-62-2	
2-Fluorophenol (S)	72	%.	24-95		1	06/23/20 12:30	06/24/20 12:40	367-12-4	
2,4,6-Tribromophenol (S)	44	%.	20-109		1	06/23/20 12:30	06/24/20 12:40	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/23/20 12:30	06/24/20 12:40	321-60-8	
p-Terphenyl-d14 (S)	85	%.	27-117		1	06/23/20 12:30	06/24/20 12:40	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1050**	ug/kg	1050	1050	1		06/24/20 05:16	67-64-1	
Acrylonitrile	**<105**	ug/kg	105	105	1		06/24/20 05:16	107-13-1	
tert-Amylmethyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	994-05-8	N2
Benzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	71-43-2	
Bromobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	74-97-5	
Bromodichloromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-27-4	
Bromoform	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-25-2	
Bromomethane	**<211**	ug/kg	211	211	1		06/24/20 05:16	74-83-9	
2-Butanone (MEK)	**<791**	ug/kg	791	791	1		06/24/20 05:16	78-93-3	
tert-Butyl Alcohol	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	75-65-0	
n-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	104-51-8	
sec-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	135-98-8	
tert-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	98-06-6	
Carbon disulfide	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-15-0	
Carbon tetrachloride	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	56-23-5	
Chlorobenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	108-90-7	
Chloroethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-00-3	
Chloroform	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	67-66-3	
Chloromethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	74-87-3	
Cyclohexane	**<527**	ug/kg	527	527	1		06/24/20 05:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	96-12-8	
Dibromochloromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	124-48-1	
1,2-Dibromoethane (EDB)	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	106-93-4	
Dibromomethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	74-95-3	
1,2-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	95-50-1	
1,3-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	541-73-1	
1,4-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<105**	ug/kg	1050	105	1		06/24/20 05:16	110-57-6	
Dichlorodifluoromethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-71-8	
1,1-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	75-34-3	
1,2-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	107-06-2	
1,1-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	75-35-4	
cis-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	156-59-2	
trans-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	156-60-5	
1,2-Dichloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	78-87-5	
cis-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 05:16	10061-01-5	
trans-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 05:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<211**	ug/kg	211	211	1		06/24/20 05:16	60-29-7	
Diisopropyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	108-20-3	N2
Ethylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	100-41-4	
Ethyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	637-92-3	N2
Hexachloroethane	**<316**	ug/kg	316	316	1		06/24/20 05:16	67-72-1	N2
2-Hexanone	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	591-78-6	
Iodomethane	**<105**	ug/kg	1050	105	1		06/24/20 05:16	74-88-4	
Isopropylbenzene (Cumene)	**<264**	ug/kg	264	264	1		06/24/20 05:16	98-82-8	
p-Isopropyltoluene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	99-87-6	
Methylene Chloride	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-09-2	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1		06/24/20 05:16	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	108-10-1	
Methyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	1634-04-4	
Naphthalene	**<348**	ug/kg	348	348	1		06/24/20 05:16	91-20-3	
n-Propylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	103-65-1	
Styrene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-34-5	
Tetrachloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	127-18-4	
Tetrahydrofuran	**<1050**	ug/kg	1050	1050	1		06/24/20 05:16	109-99-9	N2
Toluene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-88-3	
1,2,3-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	87-61-6	
1,2,4-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	120-82-1	
1,1,1-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	71-55-6	
1,1,2-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-00-5	
Trichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-01-6	
Trichlorofluoromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-69-4	
1,2,3-Trichloropropane	**<105**	ug/kg	105	105	1		06/24/20 05:16	96-18-4	
1,2,3-Trimethylbenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	95-63-6	
1,3,5-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-67-8	
Vinyl chloride	**<42.2**	ug/kg	42.2	42.2	1		06/24/20 05:16	75-01-4	
m&p-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	179601-23-1	
o-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 05:16	1868-53-7	
Toluene-d8 (S)	102	%.	64-139		1		06/24/20 05:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 05:16	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.7**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4610**	ug/kg	4610	4610	1		06/22/20 16:34	71-36-3	
Ethanol	**<2620**	ug/kg	2620	2620	1		06/22/20 16:34	64-17-5	
Methanol	**<4610**	ug/kg	4610	4610	1		06/22/20 16:34	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<910**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-36-0	
Arsenic	**3710**	ug/kg	1820	1820	1	06/26/20 14:44	06/29/20 12:10	7440-38-2	
Barium	**12300**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-39-3	
Beryllium	**<455**	ug/kg	455	455	1	06/26/20 14:44	06/29/20 12:10	7440-41-7	
Boron	**<7280**	ug/kg	7280	7280	1	06/26/20 14:44	06/29/20 12:10	7440-42-8	
Calcium	**3580000**	ug/kg	45500	6030	1	06/26/20 14:44	06/29/20 12:10	7440-70-2	
Chromium	**24700**	ug/kg	1820	1820	1	06/26/20 14:44	06/29/20 12:10	7440-47-3	
Copper	**23000**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-50-8	
Iron	**58100000**	ug/kg	114000	34600	5	06/26/20 14:44	06/29/20 12:45	7439-89-6	
Lead	**<9100**	ug/kg	9100	9100	1	06/26/20 14:44	06/29/20 12:10	7439-92-1	
Magnesium	**980000**	ug/kg	22700	3640	1	06/26/20 14:44	06/29/20 12:10	7439-95-4	
Manganese	**440000**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7439-96-5	
Molybdenum	**3830**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7439-98-7	
Nickel	**17700**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-02-0	
Potassium	**143000**	ug/kg	45500	4450	1	06/26/20 14:44	06/29/20 12:10	7440-09-7	
Sodium	**24500**	ug/kg	22700	12400	1	06/26/20 14:44	06/29/20 12:10	7440-23-5	
Strontium	**6300**	ug/kg	4550	4550	1	06/26/20 14:44	06/29/20 12:10	7440-24-6	
Vanadium	**8930**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-62-2	
Zinc	**16600**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4740000**	ug/kg	104000	104000	100	06/24/20 09:22	06/30/20 00:55	7429-90-5	
Cadmium	**<208**	ug/kg	208	208	1	06/24/20 09:22	06/25/20 14:54	7440-43-9	
Cobalt	**1290**	ug/kg	521	521	1	06/24/20 09:22	06/25/20 14:54	7440-48-4	
Selenium	**245**	ug/kg	208	208	1	06/24/20 09:22	06/25/20 14:54	7782-49-2	
Silver	**<104**	ug/kg	104	104	1	06/24/20 09:22	06/25/20 14:54	7440-22-4	
Thallium	**<521**	ug/kg	521	521	1	06/24/20 09:22	06/25/20 14:54	7440-28-0	
Titanium	**187000**	ug/kg	10400	2770	100	06/24/20 09:22	06/30/20 00:55	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<78.6**	ug/kg	99.5	78.6	1	06/26/20 02:49	06/26/20 07:25	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	83-32-9	
Acenaphthylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-12-7	
Benzo(a)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	56-55-3	
Benzo(a)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	50-32-8	
Benzo(b)fluoranthene	**461**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	205-99-2	
Benzo(g,h,i)perylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	191-24-2	
Benzo(k)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	207-08-9	
4-Bromophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	101-55-3	
Butylbenzylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	85-68-7	
Carbazole	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-74-8	
4-Chloro-3-methylphenol	**<292**	ug/kg	344	292	1	06/23/20 12:30	06/24/20 12:57	59-50-7	
bis(2-Chloroethoxy)methane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	111-91-1	
bis(2-Chloroethyl) ether	**<167**	ug/kg	344	167	1	06/23/20 12:30	06/24/20 12:57	111-44-4	
bis(2-Chloroisopropyl) ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	108-60-1	
2-Chloronaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-58-7	
2-Chlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	95-57-8	
4-Chlorophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	7005-72-3	
Chrysene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	218-01-9	
Dibenz(a,h)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	53-70-3	
Dibenzofuran	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	132-64-9	
2,4-Dichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-83-2	
Diethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	84-66-2	
2,4-Dimethylphenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	105-67-9	
Dimethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	131-11-3	
Di-n-butylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	84-74-2	
4,6-Dinitro-2-methylphenol	**<864**	ug/kg	864	864	1	06/23/20 12:30	06/24/20 12:57	534-52-1	
2,4-Dinitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	51-28-5	
2,4-Dinitrotoluene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	121-14-2	
2,6-Dinitrotoluene	**<92.1**	ug/kg	344	92.1	1	06/23/20 12:30	06/24/20 12:57	606-20-2	
Di-n-octylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	117-84-0	
1,2-Diphenylhydrazine	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	122-66-7	
bis(2-Ethylhexyl)phthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	117-81-7	
Fluoranthene	**426**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	206-44-0	
Fluorene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-73-7	
Hexachloro-1,3-butadiene	**<100**	ug/kg	344	100	1	06/23/20 12:30	06/24/20 12:57	87-68-3	
Hexachlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	118-74-1	
Hexachlorocyclopentadiene	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57	77-47-4	
Hexachloroethane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	67-72-1	
Indeno(1,2,3-cd)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	193-39-5	
Isophorone	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	78-59-1	
2-Methylnaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-57-6	
2-Methylphenol(o-Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57		
Naphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-20-3	
2-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	99-09-2	
4-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	100-01-6	
Nitrobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	98-95-3	
2-Nitrophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-75-5	
4-Nitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	100-02-7	
N-Nitrosodimethylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	62-75-9	
N-Nitroso-di-n-propylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	621-64-7	
N-Nitrosodiphenylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-30-6	
Pentachlorophenol	**<1530**	ug/kg	1670	1530	1	06/23/20 12:30	06/24/20 12:57	87-86-5	
Phenanthrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	85-01-8	
Phenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	108-95-2	
Pyrene	**436**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	129-00-0	
1,2,4-Trichlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-82-1	
2,4,5-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	95-95-4	
2,4,6-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%.	26-96		1	06/23/20 12:30	06/24/20 12:57	4165-60-0	
Phenol-d5 (S)	77	%.	32-93		1	06/23/20 12:30	06/24/20 12:57	4165-62-2	
2-Fluorophenol (S)	78	%.	24-95		1	06/23/20 12:30	06/24/20 12:57	367-12-4	
2,4,6-Tribromophenol (S)	77	%.	20-109		1	06/23/20 12:30	06/24/20 12:57	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/23/20 12:30	06/24/20 12:57	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 12:57	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<950**	ug/kg	950	950	1		06/24/20 05:50	67-64-1	
Acrylonitrile	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	107-13-1	
tert-Amylmethyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	994-05-8	N2
Benzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	71-43-2	
Bromobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-86-1	
Bromochloromethane	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	74-97-5	
Bromodichloromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-27-4	
Bromoform	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-25-2	
Bromomethane	**<190**	ug/kg	190	190	1		06/24/20 05:50	74-83-9	
2-Butanone (MEK)	**<712**	ug/kg	712	712	1		06/24/20 05:50	78-93-3	
tert-Butyl Alcohol	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	75-65-0	
n-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	104-51-8	
sec-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	135-98-8	
tert-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	98-06-6	
Carbon disulfide	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-15-0	
Carbon tetrachloride	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	56-23-5	
Chlorobenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	108-90-7	
Chloroethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-00-3	
Chloroform	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	74-87-3	
Cyclohexane	**<475**	ug/kg	475	475	1		06/24/20 05:50	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	96-12-8	
Dibromochloromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	124-48-1	
1,2-Dibromoethane (EDB)	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	106-93-4	
Dibromomethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	74-95-3	
1,2-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	95-50-1	
1,3-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	541-73-1	
1,4-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	106-46-7	
trans-1,4-Dichloro-2-butene	**<95.0**	ug/kg	950	95.0	1		06/24/20 05:50	110-57-6	
Dichlorodifluoromethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-71-8	
1,1-Dichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	75-34-3	
1,2-Dichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	107-06-2	
1,1-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	75-35-4	
cis-1,2-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	156-59-2	
trans-1,2-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	156-60-5	
1,2-Dichloropropane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	78-87-5	
cis-1,3-Dichloropropene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	10061-01-5	
trans-1,3-Dichloropropene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	10061-02-6	
Diethyl ether (Ethyl ether)	**<190**	ug/kg	190	190	1		06/24/20 05:50	60-29-7	
Diisopropyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	108-20-3	N2
Ethylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	100-41-4	
Ethyl-tert-butyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	637-92-3	N2
Hexachloroethane	**<285**	ug/kg	285	285	1		06/24/20 05:50	67-72-1	N2
2-Hexanone	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	591-78-6	
Iodomethane	**<95.0**	ug/kg	950	95.0	1		06/24/20 05:50	74-88-4	
Isopropylbenzene (Cumene)	**<237**	ug/kg	237	237	1		06/24/20 05:50	98-82-8	
p-Isopropyltoluene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	99-87-6	
Methylene Chloride	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-09-2	
2-Methylnaphthalene	**<313**	ug/kg	313	313	1		06/24/20 05:50	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	108-10-1	
Methyl-tert-butyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	1634-04-4	
Naphthalene	**<313**	ug/kg	313	313	1		06/24/20 05:50	91-20-3	
n-Propylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	103-65-1	
Styrene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	100-42-5	
1,1,1,2-Tetrachloroethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	630-20-6	
1,1,2,2-Tetrachloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-34-5	
Tetrachloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	127-18-4	
Tetrahydrofuran	**<950**	ug/kg	950	950	1		06/24/20 05:50	109-99-9	N2
Toluene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-88-3	
1,2,3-Trichlorobenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	87-61-6	
1,2,4-Trichlorobenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	120-82-1	
1,1,1-Trichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	71-55-6	
1,1,2-Trichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Trichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-01-6	
Trichlorofluoromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-69-4	
1,2,3-Trichloropropane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	96-18-4	
1,2,3-Trimethylbenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	526-73-8	N2
1,2,4-Trimethylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	95-63-6	
1,3,5-Trimethylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-67-8	
Vinyl chloride	**<38.0**	ug/kg	38.0	38.0	1		06/24/20 05:50	75-01-4	
m&p-Xylene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	179601-23-1	
o-Xylene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 05:50	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 05:50	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 05:50	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**4.6**	%	0.10	0.10	1		06/23/20 13:45		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	07/06/20 10:50	07/07/20 16:14	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**24.7**	mg/kg	1.0		1		07/10/20 14:23	16065-83-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4710**	ug/kg	4710	4710	1		06/22/20 16:43	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:43	64-17-5	
Methanol	**<4710**	ug/kg	4710	4710	1		06/22/20 16:43	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-36-0	
Arsenic	**<2040**	ug/kg	2040	2040	1	06/26/20 14:44	06/29/20 12:16	7440-38-2	
Barium	**8970**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-39-3	
Beryllium	**<511**	ug/kg	511	511	1	06/26/20 14:44	06/29/20 12:16	7440-41-7	
Boron	**<8180**	ug/kg	8180	8180	1	06/26/20 14:44	06/29/20 12:16	7440-42-8	
Calcium	**1790000**	ug/kg	51100	6780	1	06/26/20 14:44	06/29/20 12:16	7440-70-2	
Chromium	**5810**	ug/kg	2040	2040	1	06/26/20 14:44	06/29/20 12:16	7440-47-3	
Copper	**3020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-50-8	
Iron	**4180000**	ug/kg	25600	7770	1	06/26/20 14:44	06/29/20 12:16	7439-89-6	
Lead	**<10200**	ug/kg	10200	10200	1	06/26/20 14:44	06/29/20 12:16	7439-92-1	
Magnesium	**988000**	ug/kg	25600	4090	1	06/26/20 14:44	06/29/20 12:16	7439-95-4	
Manganese	**79400**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7439-96-5	
Molybdenum	**<1020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7439-98-7	
Nickel	**3960**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-02-0	
Potassium	**175000**	ug/kg	51100	5000	1	06/26/20 14:44	06/29/20 12:16	7440-09-7	
Sodium	**23900J**	ug/kg	25600	13900	1	06/26/20 14:44	06/29/20 12:16	7440-23-5	
Strontium	**<5110**	ug/kg	5110	5110	1	06/26/20 14:44	06/29/20 12:16	7440-24-6	
Vanadium	**8380**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-62-2	
Zinc	**11600**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2850000**	ug/kg	52800	52800	50	06/24/20 09:22	06/30/20 00:59	7429-90-5	
Cadmium	**<211**	ug/kg	211	211	1	06/24/20 09:22	06/25/20 15:03	7440-43-9	
Cobalt	**1710**	ug/kg	528	528	1	06/24/20 09:22	06/25/20 15:03	7440-48-4	
Selenium	**<1060**	ug/kg	1060	1060	5	06/24/20 09:22	06/30/20 02:40	7782-49-2	D3
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 15:03	7440-22-4	
Thallium	**<528**	ug/kg	528	528	1	06/24/20 09:22	06/25/20 15:03	7440-28-0	
Titanium	**159000**	ug/kg	5280	1400	50	06/24/20 09:22	06/30/20 00:59	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<87.7**	ug/kg	111	87.7	1	06/26/20 02:49	06/26/20 07:28	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	83-32-9	
Acenaphthylene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-12-7	
Benzo(a)anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	56-55-3	
Benzo(a)pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	50-32-8	
Benzo(b)fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	205-99-2	
Benzo(g,h,i)perylene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	191-24-2	
Benzo(k)fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	207-08-9	
4-Bromophenylphenyl ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	101-55-3	
Butylbenzylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	85-68-7	
Carbazole	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-74-8	
4-Chloro-3-methylphenol	**<282**	ug/kg	333	282	1	06/23/20 12:30	06/24/20 13:14	59-50-7	
bis(2-Chloroethoxy)methane	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	111-91-1	
bis(2-Chloroethyl) ether	**<161**	ug/kg	333	161	1	06/23/20 12:30	06/24/20 13:14	111-44-4	
bis(2-Chloroisopropyl) ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	108-60-1	
2-Chloronaphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-58-7	
2-Chlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	95-57-8	
4-Chlorophenylphenyl ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	7005-72-3	
Chrysene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	218-01-9	
Dibenz(a,h)anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	53-70-3	
Dibenzofuran	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	132-64-9	
2,4-Dichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-83-2	
Diethylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	84-66-2	
2,4-Dimethylphenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	105-67-9	
Dimethylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	131-11-3	
Di-n-butylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	84-74-2	
4,6-Dinitro-2-methylphenol	**<837**	ug/kg	837	837	1	06/23/20 12:30	06/24/20 13:14	534-52-1	
2,4-Dinitrophenol	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	51-28-5	
2,4-Dinitrotoluene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	121-14-2	
2,6-Dinitrotoluene	**<89.3**	ug/kg	333	89.3	1	06/23/20 12:30	06/24/20 13:14	606-20-2	
Di-n-octylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	117-84-0	
1,2-Diphenylhydrazine	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	122-66-7	
bis(2-Ethylhexyl)phthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	117-81-7	
Fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	206-44-0	
Fluorene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-73-7	
Hexachloro-1,3-butadiene	**<96.9**	ug/kg	333	96.9	1	06/23/20 12:30	06/24/20 13:14	87-68-3	
Hexachlorobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	118-74-1	
Hexachlorocyclopentadiene	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14	77-47-4	
Hexachloroethane	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	67-72-1	
Indeno(1,2,3-cd)pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	193-39-5	
Isophorone	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	78-59-1	
2-Methylnaphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-57-6	
2-Methylphenol(o-Cresol)	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14		
Naphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-20-3	
2-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	99-09-2	
4-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	100-01-6	
Nitrobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	98-95-3	
2-Nitrophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-75-5	
4-Nitrophenol	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	100-02-7	
N-Nitrosodimethylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	62-75-9	
N-Nitroso-di-n-propylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	621-64-7	
N-Nitrosodiphenylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-30-6	
Pentachlorophenol	**<1480**	ug/kg	1610	1480	1	06/23/20 12:30	06/24/20 13:14	87-86-5	
Phenanthrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	85-01-8	
Phenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	108-95-2	
Pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	129-00-0	
1,2,4-Trichlorobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-82-1	
2,4,5-Trichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	95-95-4	
2,4,6-Trichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	53	%.	26-96		1	06/23/20 12:30	06/24/20 13:14	4165-60-0	
Phenol-d5 (S)	81	%.	32-93		1	06/23/20 12:30	06/24/20 13:14	4165-62-2	
2-Fluorophenol (S)	82	%.	24-95		1	06/23/20 12:30	06/24/20 13:14	367-12-4	
2,4,6-Tribromophenol (S)	75	%.	20-109		1	06/23/20 12:30	06/24/20 13:14	118-79-6	
2-Fluorobiphenyl (S)	68	%.	36-91		1	06/23/20 12:30	06/24/20 13:14	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/23/20 12:30	06/24/20 13:14	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<995**	ug/kg	995	995	1		06/24/20 06:23	67-64-1	
Acrylonitrile	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	107-13-1	
tert-Amylmethyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	994-05-8	N2
Benzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	71-43-2	
Bromobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-86-1	
Bromochloromethane	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	74-97-5	
Bromodichloromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-27-4	
Bromoform	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-25-2	
Bromomethane	**<199**	ug/kg	199	199	1		06/24/20 06:23	74-83-9	
2-Butanone (MEK)	**<746**	ug/kg	746	746	1		06/24/20 06:23	78-93-3	
tert-Butyl Alcohol	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	75-65-0	
n-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	104-51-8	
sec-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	135-98-8	
tert-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	98-06-6	
Carbon disulfide	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-15-0	
Carbon tetrachloride	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	56-23-5	
Chlorobenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	108-90-7	
Chloroethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-00-3	
Chloroform	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	74-87-3	
Cyclohexane	**<497**	ug/kg	497	497	1		06/24/20 06:23	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	96-12-8	
Dibromochloromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	124-48-1	
1,2-Dibromoethane (EDB)	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	106-93-4	
Dibromomethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	74-95-3	
1,2-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	95-50-1	
1,3-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	541-73-1	
1,4-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	106-46-7	
trans-1,4-Dichloro-2-butene	**<99.5**	ug/kg	995	99.5	1		06/24/20 06:23	110-57-6	
Dichlorodifluoromethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-71-8	
1,1-Dichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	75-34-3	
1,2-Dichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	107-06-2	
1,1-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	75-35-4	
cis-1,2-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	156-59-2	
trans-1,2-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	156-60-5	
1,2-Dichloropropane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	78-87-5	
cis-1,3-Dichloropropene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	10061-01-5	
trans-1,3-Dichloropropene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	10061-02-6	
Diethyl ether (Ethyl ether)	**<199**	ug/kg	199	199	1		06/24/20 06:23	60-29-7	
Diisopropyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	108-20-3	N2
Ethylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	100-41-4	
Ethyl-tert-butyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	637-92-3	N2
Hexachloroethane	**<298**	ug/kg	298	298	1		06/24/20 06:23	67-72-1	N2
2-Hexanone	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	591-78-6	
Iodomethane	**<99.5**	ug/kg	995	99.5	1		06/24/20 06:23	74-88-4	
Isopropylbenzene (Cumene)	**<249**	ug/kg	249	249	1		06/24/20 06:23	98-82-8	
p-Isopropyltoluene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	99-87-6	
Methylene Chloride	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-09-2	
2-Methylnaphthalene	**<328**	ug/kg	328	328	1		06/24/20 06:23	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	108-10-1	
Methyl-tert-butyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	1634-04-4	
Naphthalene	**<328**	ug/kg	328	328	1		06/24/20 06:23	91-20-3	
n-Propylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	103-65-1	
Styrene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	100-42-5	
1,1,1,2-Tetrachloroethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-34-5	
Tetrachloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	127-18-4	
Tetrahydrofuran	**<995**	ug/kg	995	995	1		06/24/20 06:23	109-99-9	N2
Toluene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-88-3	
1,2,3-Trichlorobenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	87-61-6	
1,2,4-Trichlorobenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	120-82-1	
1,1,1-Trichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	71-55-6	
1,1,2-Trichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-01-6	
Trichlorofluoromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-69-4	
1,2,3-Trichloropropane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	96-18-4	
1,2,3-Trimethylbenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	526-73-8	N2
1,2,4-Trimethylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	95-63-6	
1,3,5-Trimethylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-67-8	
Vinyl chloride	**<39.8**	ug/kg	39.8	39.8	1		06/24/20 06:23	75-01-4	
m&p-Xylene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	179601-23-1	
o-Xylene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 06:23	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 06:23	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 06:23	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.5**	%	0.10	0.10	1		06/23/20 13:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4990**	ug/kg	4990	4990	1		06/22/20 16:52	71-36-3	
Ethanol	**<2830**	ug/kg	2830	2830	1		06/22/20 16:52	64-17-5	
Methanol	**<4990**	ug/kg	4990	4990	1		06/22/20 16:52	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1040**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-36-0	
Arsenic	**<2080**	ug/kg	2080	2080	1	06/26/20 14:44	06/29/20 12:18	7440-38-2	
Barium	**7000**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-39-3	
Beryllium	**<519**	ug/kg	519	519	1	06/26/20 14:44	06/29/20 12:18	7440-41-7	
Boron	**<8310**	ug/kg	8310	8310	1	06/26/20 14:44	06/29/20 12:18	7440-42-8	
Calcium	**842000**	ug/kg	51900	6880	1	06/26/20 14:44	06/29/20 12:18	7440-70-2	
Chromium	**4330**	ug/kg	2080	2080	1	06/26/20 14:44	06/29/20 12:18	7440-47-3	
Copper	**2060**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-50-8	
Iron	**2510000**	ug/kg	26000	7890	1	06/26/20 14:44	06/29/20 12:18	7439-89-6	
Lead	**<10400**	ug/kg	10400	10400	1	06/26/20 14:44	06/29/20 12:18	7439-92-1	
Magnesium	**785000**	ug/kg	26000	4150	1	06/26/20 14:44	06/29/20 12:18	7439-95-4	
Manganese	**29500**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7439-96-5	
Molybdenum	**<1040**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7439-98-7	
Nickel	**3670**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-02-0	
Potassium	**184000**	ug/kg	51900	5080	1	06/26/20 14:44	06/29/20 12:18	7440-09-7	
Sodium	**28900**	ug/kg	26000	14100	1	06/26/20 14:44	06/29/20 12:18	7440-23-5	
Strontium	**<5190**	ug/kg	5190	5190	1	06/26/20 14:44	06/29/20 12:18	7440-24-6	
Vanadium	**5740**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-62-2	
Zinc	**7580**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2480000**	ug/kg	56100	56100	50	06/24/20 09:22	06/30/20 01:13	7429-90-5	
Cadmium	**<224**	ug/kg	224	224	1	06/24/20 09:22	06/25/20 15:12	7440-43-9	
Cobalt	**1190**	ug/kg	561	561	1	06/24/20 09:22	06/25/20 15:12	7440-48-4	
Selenium	**<224**	ug/kg	224	224	1	06/24/20 09:22	06/25/20 15:12	7782-49-2	
Silver	**<112**	ug/kg	112	112	1	06/24/20 09:22	06/25/20 15:12	7440-22-4	
Thallium	**<561**	ug/kg	561	561	1	06/24/20 09:22	06/25/20 15:12	7440-28-0	
Titanium	**204000**	ug/kg	5610	1490	50	06/24/20 09:22	06/30/20 01:13	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<85.9**	ug/kg	109	85.9	1	06/26/20 02:49	06/26/20 07:30	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	83-32-9	
Acenaphthylene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-12-7	
Benzo(a)anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	56-55-3	
Benzo(a)pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	50-32-8	
Benzo(b)fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	205-99-2	
Benzo(g,h,i)perylene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	191-24-2	
Benzo(k)fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	207-08-9	
4-Bromophenylphenyl ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	101-55-3	
Butylbenzylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	85-68-7	
Carbazole	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-74-8	
4-Chloro-3-methylphenol	**<310**	ug/kg	366	310	1	06/23/20 12:30	06/24/20 13:32	59-50-7	
bis(2-Chloroethoxy)methane	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	111-91-1	
bis(2-Chloroethyl) ether	**<177**	ug/kg	366	177	1	06/23/20 12:30	06/24/20 13:32	111-44-4	
bis(2-Chloroisopropyl) ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	108-60-1	
2-Chloronaphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-58-7	
2-Chlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	95-57-8	
4-Chlorophenylphenyl ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	7005-72-3	
Chrysene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	218-01-9	
Dibenz(a,h)anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	53-70-3	
Dibenzofuran	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	132-64-9	
2,4-Dichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-83-2	
Diethylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	84-66-2	
2,4-Dimethylphenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	105-67-9	
Dimethylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	131-11-3	
Di-n-butylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	84-74-2	
4,6-Dinitro-2-methylphenol	**<920**	ug/kg	920	920	1	06/23/20 12:30	06/24/20 13:32	534-52-1	
2,4-Dinitrophenol	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	51-28-5	
2,4-Dinitrotoluene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	121-14-2	
2,6-Dinitrotoluene	**<98.1**	ug/kg	366	98.1	1	06/23/20 12:30	06/24/20 13:32	606-20-2	
Di-n-octylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	117-84-0	
1,2-Diphenylhydrazine	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	122-66-7	
bis(2-Ethylhexyl)phthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	117-81-7	
Fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	206-44-0	
Fluorene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-73-7	
Hexachloro-1,3-butadiene	**<106**	ug/kg	366	106	1	06/23/20 12:30	06/24/20 13:32	87-68-3	
Hexachlorobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	118-74-1	
Hexachlorocyclopentadiene	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32	77-47-4	
Hexachloroethane	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	67-72-1	
Indeno(1,2,3-cd)pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	193-39-5	
Isophorone	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	78-59-1	
2-Methylnaphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-57-6	
2-Methylphenol(o-Cresol)	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32		
Naphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-20-3	
2-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	99-09-2	
4-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	100-01-6	
Nitrobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	98-95-3	
2-Nitrophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-75-5	
4-Nitrophenol	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	100-02-7	
N-Nitrosodimethylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	62-75-9	
N-Nitroso-di-n-propylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	621-64-7	
N-Nitrosodiphenylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-30-6	
Pentachlorophenol	**<1630**	ug/kg	1770	1630	1	06/23/20 12:30	06/24/20 13:32	87-86-5	
Phenanthrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	85-01-8	
Phenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	108-95-2	
Pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	129-00-0	
1,2,4-Trichlorobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-82-1	
2,4,5-Trichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	95-95-4	
2,4,6-Trichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%.	26-96		1	06/23/20 12:30	06/24/20 13:32	4165-60-0	
Phenol-d5 (S)	82	%.	32-93		1	06/23/20 12:30	06/24/20 13:32	4165-62-2	
2-Fluorophenol (S)	87	%.	24-95		1	06/23/20 12:30	06/24/20 13:32	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 13:32	118-79-6	
2-Fluorobiphenyl (S)	79	%.	36-91		1	06/23/20 12:30	06/24/20 13:32	321-60-8	
p-Terphenyl-d14 (S)	91	%.	27-117		1	06/23/20 12:30	06/24/20 13:32	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1220**	ug/kg	1220	1220	1		06/24/20 06:56	67-64-1	
Acrylonitrile	**<122**	ug/kg	122	122	1		06/24/20 06:56	107-13-1	
tert-Amylmethyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	994-05-8	N2
Benzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	71-43-2	
Bromobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-86-1	
Bromochloromethane	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	74-97-5	
Bromodichloromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-27-4	
Bromoform	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-25-2	
Bromomethane	**<245**	ug/kg	245	245	1		06/24/20 06:56	74-83-9	
2-Butanone (MEK)	**<918**	ug/kg	918	918	1		06/24/20 06:56	78-93-3	
tert-Butyl Alcohol	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	75-65-0	
n-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	104-51-8	
sec-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	135-98-8	
tert-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	98-06-6	
Carbon disulfide	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-15-0	
Carbon tetrachloride	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	56-23-5	
Chlorobenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	108-90-7	
Chloroethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-00-3	
Chloroform	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	74-87-3	
Cyclohexane	**<612**	ug/kg	612	612	1		06/24/20 06:56	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	96-12-8	
Dibromochloromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	124-48-1	
1,2-Dibromoethane (EDB)	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	106-93-4	
Dibromomethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	74-95-3	
1,2-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	95-50-1	
1,3-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	541-73-1	
1,4-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	106-46-7	
trans-1,4-Dichloro-2-butene	**<122**	ug/kg	1220	122	1		06/24/20 06:56	110-57-6	
Dichlorodifluoromethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-71-8	
1,1-Dichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	75-34-3	
1,2-Dichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	107-06-2	
1,1-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	75-35-4	
cis-1,2-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	156-59-2	
trans-1,2-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	156-60-5	
1,2-Dichloropropane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	78-87-5	
cis-1,3-Dichloropropene	**<122**	ug/kg	122	122	1		06/24/20 06:56	10061-01-5	
trans-1,3-Dichloropropene	**<122**	ug/kg	122	122	1		06/24/20 06:56	10061-02-6	
Diethyl ether (Ethyl ether)	**<245**	ug/kg	245	245	1		06/24/20 06:56	60-29-7	
Diisopropyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	108-20-3	N2
Ethylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	100-41-4	
Ethyl-tert-butyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	637-92-3	N2
Hexachloroethane	**<367**	ug/kg	367	367	1		06/24/20 06:56	67-72-1	N2
2-Hexanone	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	591-78-6	
Iodomethane	**<122**	ug/kg	1220	122	1		06/24/20 06:56	74-88-4	
Isopropylbenzene (Cumene)	**<306**	ug/kg	306	306	1		06/24/20 06:56	98-82-8	
p-Isopropyltoluene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	99-87-6	
Methylene Chloride	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-09-2	
2-Methylnaphthalene	**<404**	ug/kg	404	404	1		06/24/20 06:56	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	108-10-1	
Methyl-tert-butyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	1634-04-4	
Naphthalene	**<404**	ug/kg	404	404	1		06/24/20 06:56	91-20-3	
n-Propylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	103-65-1	
Styrene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	100-42-5	
1,1,1,2-Tetrachloroethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	630-20-6	
1,1,2,2-Tetrachloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-34-5	
Tetrachloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	127-18-4	
Tetrahydrofuran	**<1220**	ug/kg	1220	1220	1		06/24/20 06:56	109-99-9	N2
Toluene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-88-3	
1,2,3-Trichlorobenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	87-61-6	
1,2,4-Trichlorobenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	120-82-1	
1,1,1-Trichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	71-55-6	
1,1,2-Trichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-01-6	
Trichlorofluoromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-69-4	
1,2,3-Trichloropropane	**<122**	ug/kg	122	122	1		06/24/20 06:56	96-18-4	
1,2,3-Trimethylbenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	526-73-8	N2
1,2,4-Trimethylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	95-63-6	
1,3,5-Trimethylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-67-8	
Vinyl chloride	**<49.0**	ug/kg	49.0	49.0	1		06/24/20 06:56	75-01-4	
m&p-Xylene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	179601-23-1	
o-Xylene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	95-47-6	
Surrogates									
Dibromofluoromethane (S)	115	%.	62-137		1		06/24/20 06:56	1868-53-7	
Toluene-d8 (S)	114	%.	64-139		1		06/24/20 06:56	2037-26-5	
4-Bromofluorobenzene (S)	117	%.	60-142		1		06/24/20 06:56	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**11.8**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4770**	ug/kg	4770	4770	1		06/22/20 17:02	71-36-3	
Ethanol	**<2710**	ug/kg	2710	2710	1		06/22/20 17:02	64-17-5	
Methanol	**<4770**	ug/kg	4770	4770	1		06/22/20 17:02	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	12674-11-2	
PCB-1221 (Aroclor 1221)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11096-82-5	
PCB-1262 (Aroclor 1262)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	53	%.	25-123		1	06/24/20 21:50	06/25/20 21:37	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-36-0	
Arsenic	**<2120**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:21	7440-38-2	
Barium	**4410**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-39-3	
Beryllium	**<529**	ug/kg	529	529	1	06/26/20 14:44	06/29/20 12:21	7440-41-7	
Boron	**<8470**	ug/kg	8470	8470	1	06/26/20 14:44	06/29/20 12:21	7440-42-8	
Calcium	**28100000**	ug/kg	265000	35100	5	06/26/20 14:44	06/29/20 12:47	7440-70-2	
Chromium	**3580**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:21	7440-47-3	
Copper	**2810**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-50-8	
Iron	**2440000**	ug/kg	26500	8040	1	06/26/20 14:44	06/29/20 12:21	7439-89-6	
Lead	**<10600**	ug/kg	10600	10600	1	06/26/20 14:44	06/29/20 12:21	7439-92-1	
Magnesium	**4010000**	ug/kg	26500	4230	1	06/26/20 14:44	06/29/20 12:21	7439-95-4	
Manganese	**61300**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7439-96-5	
Molybdenum	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7439-98-7	
Nickel	**4460**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-02-0	
Potassium	**195000**	ug/kg	52900	5170	1	06/26/20 14:44	06/29/20 12:21	7440-09-7	
Sodium	**56800**	ug/kg	26500	14400	1	06/26/20 14:44	06/29/20 12:21	7440-23-5	
Strontium	**24900**	ug/kg	5290	5290	1	06/26/20 14:44	06/29/20 12:21	7440-24-6	
Vanadium	**10200**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-62-2	
Zinc	**6750**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**1630000**	ug/kg	53000	53000	50	06/24/20 09:22	06/30/20 01:18	7429-90-5	
Cadmium	**<212**	ug/kg	212	212	1	06/24/20 09:22	06/25/20 15:26	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1150**	ug/kg	530	530	1	06/24/20 09:22	06/25/20 15:26	7440-48-4	
Selenium	**<212**	ug/kg	212	212	1	06/24/20 09:22	06/25/20 15:26	7782-49-2	
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 15:26	7440-22-4	
Thallium	**<530**	ug/kg	530	530	1	06/24/20 09:22	06/25/20 15:26	7440-28-0	
Titanium	**175000**	ug/kg	5300	1410	50	06/24/20 09:22	06/30/20 01:18	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<84.5**	ug/kg	107	84.5	1	06/26/20 02:49	06/26/20 07:33	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	83-32-9	
Acenaphthylene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	208-96-8	
Anthracene	**9250**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-12-7	
Benzo(a)anthracene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	56-55-3	
Benzo(a)pyrene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	50-32-8	
Benzo(b)fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	205-99-2	
Benzo(g,h,i)perylene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	191-24-2	
Benzo(k)fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	207-08-9	
4-Bromophenylphenyl ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	101-55-3	
Butylbenzylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	85-68-7	
Carbazole	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-74-8	
4-Chloro-3-methylphenol	**<7540**	ug/kg	8880	7540	5	06/23/20 12:30	06/24/20 13:49	59-50-7	
bis(2-Chloroethoxy)methane	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	111-91-1	
bis(2-Chloroethyl) ether	**<4310**	ug/kg	8880	4310	5	06/23/20 12:30	06/24/20 13:49	111-44-4	
bis(2-Chloroisopropyl) ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	108-60-1	
2-Chloronaphthalene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-58-7	
2-Chlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	95-57-8	
4-Chlorophenylphenyl ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	7005-72-3	
Chrysene	**11600**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	218-01-9	
Dibenz(a,h)anthracene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	53-70-3	
Dibenzofuran	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	132-64-9	
2,4-Dichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-83-2	
Diethylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	84-66-2	
2,4-Dimethylphenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	105-67-9	
Dimethylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	131-11-3	
Di-n-butylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	84-74-2	
4,6-Dinitro-2-methylphenol	**<22300**	ug/kg	22300	22300	5	06/23/20 12:30	06/24/20 13:49	534-52-1	
2,4-Dinitrophenol	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	51-28-5	
2,4-Dinitrotoluene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	121-14-2	
2,6-Dinitrotoluene	**<2380**	ug/kg	8880	2380	5	06/23/20 12:30	06/24/20 13:49	606-20-2	
Di-n-octylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	117-84-0	
1,2-Diphenylhydrazine	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	117-81-7	
Fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	206-44-0	
Fluorene	**16500**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-73-7	
Hexachloro-1,3-butadiene	**<2580**	ug/kg	8880	2580	5	06/23/20 12:30	06/24/20 13:49	87-68-3	
Hexachlorobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	118-74-1	
Hexachlorocyclopentadiene	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49	77-47-4	
Hexachloroethane	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	67-72-1	
Indeno(1,2,3-cd)pyrene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	193-39-5	
Isophorone	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	78-59-1	
2-Methylnaphthalene	**61800**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-57-6	
2-Methylphenol(o-Cresol)	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49		
Naphthalene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-20-3	
2-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-74-4	
3-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	99-09-2	
4-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	100-01-6	
Nitrobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	98-95-3	
2-Nitrophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-75-5	
4-Nitrophenol	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	100-02-7	
N-Nitrosodimethylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	62-75-9	
N-Nitroso-di-n-propylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	621-64-7	
N-Nitrosodiphenylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-30-6	
Pentachlorophenol	**<39600**	ug/kg	43100	39600	5	06/23/20 12:30	06/24/20 13:49	87-86-5	
Phenanthrene	**68700**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	85-01-8	
Phenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	108-95-2	ED
Pyrene	**23800**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	129-00-0	
1,2,4-Trichlorobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-82-1	
2,4,5-Trichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	95-95-4	
2,4,6-Trichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	0	%.	26-96		5	06/23/20 12:30	06/24/20 13:49	4165-60-0	S4
Phenol-d5 (S)	0	%.	32-93		5	06/23/20 12:30	06/24/20 13:49	4165-62-2	S4
2-Fluorophenol (S)	0	%.	24-95		5	06/23/20 12:30	06/24/20 13:49	367-12-4	S4
2,4,6-Tribromophenol (S)	54	%.	20-109		5	06/23/20 12:30	06/24/20 13:49	118-79-6	
2-Fluorobiphenyl (S)	86	%.	36-91		5	06/23/20 12:30	06/24/20 13:49	321-60-8	
p-Terphenyl-d14 (S)	74	%.	27-117		5	06/23/20 12:30	06/24/20 13:49	1718-51-0	
Tentatively Identified Compounds									
Naphthalene, 1-ethyl-	**51900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1127-76-0	N
Naphthalene, 2,6-dimethy	**147000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-42-0	N
Naphthalene, 1,3-dimethy	**172000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	575-41-7	N
Naphthalene, 1,7-dimethy	**96100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	575-37-1	N
Naphthalene, 2,3-dimethy	**74500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-40-8	N
Naphthalene, 2,3-dimethy	**31100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-40-8	N
Naphthalene, 2-(1-methyl	**95800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2027-17-0	N

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546								
	Pace Analytical Services - Indianapolis								
Tentatively Identified Compounds									
Naphthalene, 2,3,6-trime	**64600J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	829-26-5	N
Naphthalene, 2,3,6-trime	**52700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	829-26-5	N
Naphthalene, 1,4,6-trime	**43900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2131-42-2	N
Naphthalene, 1,6,7-trime	**68400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2245-38-7	N
Benzene, [1-(2,4-cyclope	**97700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2320-32-3	N
Naphthalene, 2-methyl-1-	**35600J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	54774-89-9	N
Dibenzofuran, 4-methyl-	**34000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	7320-53-8	N
Unknown	**48400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
4,4'-Dimethylbiphenyl	**55800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	613-33-2	N
Unknown	**36500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
9H-Fluorene, 2,3-dimethy	**32800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	4612-63-9	N
Anthracene, 1-methyl-	**64700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	610-48-0	N
1H-Indene, 1-phenyl-	**80400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1961-96-2	N
Phenanthrene, 4-methyl-	**52100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	832-64-4	N
2,8-Dimethyldibenzo(B,D)	**32900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1207-15-4	N
Phenanthrene, 4,5-dimeth	**38200J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-69-9	N
Phenanthrene, 3,6-dimeth	**48800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1576-67-6	N
Phenanthrene, 2,5-dimeth	**86700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-66-6	N
Unknown	**45700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
Phenanthrene, 2,3,5-trim	**16700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-73-5	N
Pyrene, 1-methyl-	**17100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2381-21-7	N
Pyrene, 1,3-dimethyl-	**15500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	64401-21-4	N
Unknown	**15200J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Acetone	**<1070**	ug/kg	1070	1070	1		06/24/20 07:30	67-64-1	
Acrylonitrile	**<107**	ug/kg	107	107	1		06/24/20 07:30	107-13-1	
tert-Amylmethyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	994-05-8	N2
Benzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	71-43-2	
Bromobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-86-1	
Bromochloromethane	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	74-97-5	
Bromodichloromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-27-4	
Bromoform	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-25-2	
Bromomethane	**<214**	ug/kg	214	214	1		06/24/20 07:30	74-83-9	
2-Butanone (MEK)	**<802**	ug/kg	802	802	1		06/24/20 07:30	78-93-3	
tert-Butyl Alcohol	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	75-65-0	
n-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	104-51-8	
sec-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	135-98-8	
tert-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	98-06-6	
Carbon disulfide	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-15-0	
Carbon tetrachloride	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	56-23-5	
Chlorobenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-00-3	
Chloroform	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	67-66-3	
Chloromethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	74-87-3	
Cyclohexane	**<535**	ug/kg	535	535	1		06/24/20 07:30	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	96-12-8	
Dibromochloromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	124-48-1	
1,2-Dibromoethane (EDB)	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	106-93-4	
Dibromomethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	74-95-3	
1,2-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	95-50-1	
1,3-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	541-73-1	
1,4-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	106-46-7	
trans-1,4-Dichloro-2-butene	**<107**	ug/kg	1070	107	1		06/24/20 07:30	110-57-6	
Dichlorodifluoromethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-71-8	
1,1-Dichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	75-34-3	
1,2-Dichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	107-06-2	
1,1-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	75-35-4	
cis-1,2-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	156-59-2	
trans-1,2-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	156-60-5	
1,2-Dichloropropane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	78-87-5	
cis-1,3-Dichloropropene	**<107**	ug/kg	107	107	1		06/24/20 07:30	10061-01-5	
trans-1,3-Dichloropropene	**<107**	ug/kg	107	107	1		06/24/20 07:30	10061-02-6	
Diethyl ether (Ethyl ether)	**<214**	ug/kg	214	214	1		06/24/20 07:30	60-29-7	
Diisopropyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	108-20-3	N2
Ethylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	100-41-4	
Ethyl-tert-butyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	637-92-3	N2
Hexachloroethane	**<321**	ug/kg	321	321	1		06/24/20 07:30	67-72-1	N2
2-Hexanone	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	591-78-6	
Iodomethane	**<107**	ug/kg	1070	107	1		06/24/20 07:30	74-88-4	
Isopropylbenzene (Cumene)	**<267**	ug/kg	267	267	1		06/24/20 07:30	98-82-8	
p-Isopropyltoluene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	99-87-6	
Methylene Chloride	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-09-2	
2-Methylnaphthalene	**<353**	ug/kg	353	353	1		06/24/20 07:30	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	108-10-1	
Methyl-tert-butyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	1634-04-4	
Naphthalene	**<353**	ug/kg	353	353	1		06/24/20 07:30	91-20-3	
n-Propylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	103-65-1	
Styrene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	630-20-6	
1,1,2,2-Tetrachloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-34-5	
Tetrachloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	127-18-4	
Tetrahydrofuran	**<1070**	ug/kg	1070	1070	1		06/24/20 07:30	109-99-9	N2
Toluene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-88-3	
1,2,3-Trichlorobenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	87-61-6	
1,2,4-Trichlorobenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	120-82-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,1,1-Trichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	71-55-6	
1,1,2-Trichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-00-5	
Trichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-01-6	
Trichlorofluoromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-69-4	
1,2,3-Trichloropropane	**<107**	ug/kg	107	107	1		06/24/20 07:30	96-18-4	
1,2,3-Trimethylbenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	526-73-8	N2
1,2,4-Trimethylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	95-63-6	
1,3,5-Trimethylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-67-8	
Vinyl chloride	**<42.8**	ug/kg	42.8	42.8	1		06/24/20 07:30	75-01-4	
m&p-Xylene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	179601-23-1	
o-Xylene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 07:30	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 07:30	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	60-142		1		06/24/20 07:30	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**7.7**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5150**	ug/kg	5150	5150	1		06/22/20 17:11	71-36-3	
Ethanol	**<2920**	ug/kg	2920	2920	1		06/22/20 17:11	64-17-5	
Methanol	**<5150**	ug/kg	5150	5150	1		06/22/20 17:11	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	12672-29-6	
PCB-1254 (Aroclor 1254)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11096-82-5	
PCB-1262 (Aroclor 1262)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	57	%.	25-123		1	06/24/20 21:50	06/25/20 21:52	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1080**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-36-0	
Arsenic	**2770**	ug/kg	2160	2160	1	06/26/20 14:44	06/29/20 12:23	7440-38-2	
Barium	**21400**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-39-3	
Beryllium	**<539**	ug/kg	539	539	1	06/26/20 14:44	06/29/20 12:23	7440-41-7	
Boron	**<8620**	ug/kg	8620	8620	1	06/26/20 14:44	06/29/20 12:23	7440-42-8	
Calcium	**62400000**	ug/kg	539000	71500	10	06/26/20 14:44	06/29/20 12:55	7440-70-2	
Chromium	**7200**	ug/kg	2160	2160	1	06/26/20 14:44	06/29/20 12:23	7440-47-3	
Copper	**8240**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-50-8	
Iron	**5040000**	ug/kg	26900	8190	1	06/26/20 14:44	06/29/20 12:23	7439-89-6	
Lead	**<10800**	ug/kg	10800	10800	1	06/26/20 14:44	06/29/20 12:23	7439-92-1	
Magnesium	**5520000**	ug/kg	26900	4310	1	06/26/20 14:44	06/29/20 12:23	7439-95-4	
Manganese	**110000**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7439-96-5	
Molybdenum	**1870**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7439-98-7	
Nickel	**5840**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-02-0	
Potassium	**390000**	ug/kg	53900	5270	1	06/26/20 14:44	06/29/20 12:23	7440-09-7	
Sodium	**90100**	ug/kg	26900	14700	1	06/26/20 14:44	06/29/20 12:23	7440-23-5	
Strontium	**45900**	ug/kg	5390	5390	1	06/26/20 14:44	06/29/20 12:23	7440-24-6	
Vanadium	**12000**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-62-2	
Zinc	**17800**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4160000**	ug/kg	110000	110000	100	06/24/20 09:22	06/30/20 01:22	7429-90-5	
Cadmium	**<220**	ug/kg	220	220	1	06/24/20 09:22	06/25/20 15:35	7440-43-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1520**	ug/kg	550	550	1	06/24/20 09:22	06/25/20 15:35	7440-48-4	
Selenium	**223**	ug/kg	220	220	1	06/24/20 09:22	06/25/20 15:35	7782-49-2	
Silver	**<110**	ug/kg	110	110	1	06/24/20 09:22	06/25/20 15:35	7440-22-4	
Thallium	**<550**	ug/kg	550	550	1	06/24/20 09:22	06/25/20 15:35	7440-28-0	
Titanium	**275000**	ug/kg	11000	2920	100	06/24/20 09:22	06/30/20 01:22	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<95.6**	ug/kg	121	95.6	1	06/26/20 02:49	06/26/20 07:35	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	83-32-9	
Acenaphthylene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	208-96-8	
Anthracene	**841**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-12-7	
Benzo(a)anthracene	**1510**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	56-55-3	
Benzo(a)pyrene	**765**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	50-32-8	
Benzo(b)fluoranthene	**1110**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	205-99-2	
Benzo(g,h,i)perylene	**545**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	191-24-2	
Benzo(k)fluoranthene	**496**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	207-08-9	
4-Bromophenylphenyl ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	101-55-3	
Butylbenzylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	85-68-7	
Carbazole	**620**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-74-8	
4-Chloro-3-methylphenol	**<363**	ug/kg	427	363	1	06/26/20 14:45	06/29/20 23:27	59-50-7	
bis(2-Chloroethoxy)methane	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	111-91-1	
bis(2-Chloroethyl) ether	**<207**	ug/kg	427	207	1	06/26/20 14:45	06/29/20 23:27	111-44-4	
bis(2-Chloroisopropyl) ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	108-60-1	
2-Chloronaphthalene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-58-7	
2-Chlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	95-57-8	
4-Chlorophenylphenyl ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	7005-72-3	
Chrysene	**1280**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	218-01-9	
Dibenz(a,h)anthracene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	53-70-3	
Dibenzofuran	**988**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	132-64-9	
2,4-Dichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-83-2	
Diethylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	84-66-2	
2,4-Dimethylphenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	105-67-9	
Dimethylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	131-11-3	
Di-n-butylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	84-74-2	
4,6-Dinitro-2-methylphenol	**<1070**	ug/kg	1070	1070	1	06/26/20 14:45	06/29/20 23:27	534-52-1	
2,4-Dinitrophenol	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	51-28-5	
2,4-Dinitrotoluene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	121-14-2	
2,6-Dinitrotoluene	**<115**	ug/kg	427	115	1	06/26/20 14:45	06/29/20 23:27	606-20-2	
Di-n-octylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	117-84-0	
1,2-Diphenylhydrazine	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	122-66-7	

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Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

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Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	117-81-7	
Fluoranthene	**5490**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	206-44-0	
Fluorene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-73-7	
Hexachloro-1,3-butadiene	**<124**	ug/kg	427	124	1	06/26/20 14:45	06/29/20 23:27	87-68-3	
Hexachlorobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	118-74-1	
Hexachlorocyclopentadiene	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27	77-47-4	
Hexachloroethane	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	67-72-1	
Indeno(1,2,3-cd)pyrene	**454**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	193-39-5	
Isophorone	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	78-59-1	
2-Methylnaphthalene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-57-6	
2-Methylphenol(o-Cresol)	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27		
Naphthalene	**591**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-20-3	
2-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-74-4	
3-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	99-09-2	
4-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	100-01-6	
Nitrobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	98-95-3	
2-Nitrophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-75-5	
4-Nitrophenol	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	100-02-7	
N-Nitrosodimethylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	62-75-9	
N-Nitroso-di-n-propylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	621-64-7	
N-Nitrosodiphenylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-30-6	
Pentachlorophenol	**<1900**	ug/kg	2070	1900	1	06/26/20 14:45	06/29/20 23:27	87-86-5	
Phenanthrene	**6780**	ug/kg	2140	2140	5	06/26/20 14:45	06/30/20 13:16	85-01-8	
Phenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	108-95-2	
Pyrene	**4370**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	129-00-0	
1,2,4-Trichlorobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-82-1	
2,4,5-Trichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	95-95-4	
2,4,6-Trichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	26-96		1	06/26/20 14:45	06/29/20 23:27	4165-60-0	
Phenol-d5 (S)	60	%.	32-93		1	06/26/20 14:45	06/29/20 23:27	4165-62-2	
2-Fluorophenol (S)	25	%.	24-95		1	06/26/20 14:45	06/29/20 23:27	367-12-4	
2,4,6-Tribromophenol (S)	10	%.	20-109		1	06/26/20 14:45	06/29/20 23:27	118-79-6	S0
2-Fluorobiphenyl (S)	64	%.	36-91		1	06/26/20 14:45	06/29/20 23:27	321-60-8	
p-Terphenyl-d14 (S)	83	%.	27-117		1	06/26/20 14:45	06/29/20 23:27	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1310**	ug/kg	1310	1310	1		06/24/20 08:03	67-64-1	
Acrylonitrile	**<131**	ug/kg	131	131	1		06/24/20 08:03	107-13-1	
tert-Amylmethyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	994-05-8	N2
Benzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	71-43-2	
Bromobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-86-1	

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ANALYTICAL RESULTS

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Pace Project No.: 50260268

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Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	74-97-5	
Bromodichloromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-27-4	
Bromoform	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-25-2	
Bromomethane	**<262**	ug/kg	262	262	1		06/24/20 08:03	74-83-9	
2-Butanone (MEK)	**<982**	ug/kg	982	982	1		06/24/20 08:03	78-93-3	
tert-Butyl Alcohol	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	75-65-0	
n-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	104-51-8	
sec-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	135-98-8	
tert-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	98-06-6	
Carbon disulfide	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-15-0	
Carbon tetrachloride	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	56-23-5	
Chlorobenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	108-90-7	
Chloroethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-00-3	
Chloroform	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	67-66-3	
Chloromethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	74-87-3	
Cyclohexane	**<655**	ug/kg	655	655	1		06/24/20 08:03	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	96-12-8	
Dibromochloromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	124-48-1	
1,2-Dibromoethane (EDB)	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	106-93-4	
Dibromomethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	74-95-3	
1,2-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	95-50-1	
1,3-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	541-73-1	
1,4-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	106-46-7	
trans-1,4-Dichloro-2-butene	**<131**	ug/kg	1310	131	1		06/24/20 08:03	110-57-6	
Dichlorodifluoromethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-71-8	
1,1-Dichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	75-34-3	
1,2-Dichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	107-06-2	
1,1-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	75-35-4	
cis-1,2-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	156-59-2	
trans-1,2-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	156-60-5	
1,2-Dichloropropane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	78-87-5	
cis-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		06/24/20 08:03	10061-01-5	
trans-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		06/24/20 08:03	10061-02-6	
Diethyl ether (Ethyl ether)	**<262**	ug/kg	262	262	1		06/24/20 08:03	60-29-7	
Diisopropyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	108-20-3	N2
Ethylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	100-41-4	
Ethyl-tert-butyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	637-92-3	N2
Hexachloroethane	**<393**	ug/kg	393	393	1		06/24/20 08:03	67-72-1	N2
2-Hexanone	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	591-78-6	
Iodomethane	**<131**	ug/kg	1310	131	1		06/24/20 08:03	74-88-4	
Isopropylbenzene (Cumene)	**<327**	ug/kg	327	327	1		06/24/20 08:03	98-82-8	
p-Isopropyltoluene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	99-87-6	
Methylene Chloride	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-09-2	
2-Methylnaphthalene	**<432**	ug/kg	432	432	1		06/24/20 08:03	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	108-10-1	
Methyl-tert-butyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	1634-04-4	
Naphthalene	**<432**	ug/kg	432	432	1		06/24/20 08:03	91-20-3	
n-Propylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	103-65-1	
Styrene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	100-42-5	
1,1,1,2-Tetrachloroethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	630-20-6	
1,1,2,2-Tetrachloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-34-5	
Tetrachloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	127-18-4	
Tetrahydrofuran	**<1310**	ug/kg	1310	1310	1		06/24/20 08:03	109-99-9	N2
Toluene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-88-3	
1,2,3-Trichlorobenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	87-61-6	
1,2,4-Trichlorobenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	120-82-1	
1,1,1-Trichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	71-55-6	
1,1,2-Trichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-00-5	
Trichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-01-6	
Trichlorofluoromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-69-4	
1,2,3-Trichloropropane	**<131**	ug/kg	131	131	1		06/24/20 08:03	96-18-4	
1,2,3-Trimethylbenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	526-73-8	N2
1,2,4-Trimethylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	95-63-6	
1,3,5-Trimethylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-67-8	
Vinyl chloride	**<52.4**	ug/kg	52.4	52.4	1		06/24/20 08:03	75-01-4	
m&p-Xylene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	179601-23-1	
o-Xylene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	95-47-6	
Surrogates									
Dibromofluoromethane (S)	120	%.	62-137		1		06/24/20 08:03	1868-53-7	
Toluene-d8 (S)	114	%.	64-139		1		06/24/20 08:03	2037-26-5	
4-Bromofluorobenzene (S)	119	%.	60-142		1		06/24/20 08:03	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**14.5**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4890**	ug/kg	4890	4890	1		06/22/20 17:44	71-36-3	
Ethanol	**<2780**	ug/kg	2780	2780	1		06/22/20 17:44	64-17-5	
Methanol	**<4890**	ug/kg	4890	4890	1		06/22/20 17:44	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<961**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-36-0	
Arsenic	**<1920**	ug/kg	1920	1920	1	06/26/20 14:44	06/29/20 12:25	7440-38-2	
Barium	**7670**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-39-3	
Beryllium	**<480**	ug/kg	480	480	1	06/26/20 14:44	06/29/20 12:25	7440-41-7	
Boron	**<7690**	ug/kg	7690	7690	1	06/26/20 14:44	06/29/20 12:25	7440-42-8	
Calcium	**663000**	ug/kg	48000	6370	1	06/26/20 14:44	06/29/20 12:25	7440-70-2	
Chromium	**6740**	ug/kg	1920	1920	1	06/26/20 14:44	06/29/20 12:25	7440-47-3	
Copper	**2900**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-50-8	
Iron	**3950000**	ug/kg	24000	7300	1	06/26/20 14:44	06/29/20 12:25	7439-89-6	
Lead	**<9610**	ug/kg	9610	9610	1	06/26/20 14:44	06/29/20 12:25	7439-92-1	
Magnesium	**1110000**	ug/kg	24000	3840	1	06/26/20 14:44	06/29/20 12:25	7439-95-4	
Manganese	**148000**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7439-96-5	
Molybdenum	**<961**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7439-98-7	
Nickel	**5440**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-02-0	
Potassium	**232000**	ug/kg	48000	4700	1	06/26/20 14:44	06/29/20 12:25	7440-09-7	
Sodium	**26100**	ug/kg	24000	13100	1	06/26/20 14:44	06/29/20 12:25	7440-23-5	
Strontium	**<4800**	ug/kg	4800	4800	1	06/26/20 14:44	06/29/20 12:25	7440-24-6	
Vanadium	**6710**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-62-2	
Zinc	**9870**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2900000**	ug/kg	54000	54000	50	06/24/20 09:22	06/30/20 01:27	7429-90-5	
Cadmium	**<216**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 15:44	7440-43-9	
Cobalt	**1640**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 15:44	7440-48-4	
Selenium	**<1080**	ug/kg	1080	1080	5	06/24/20 09:22	06/30/20 02:45	7782-49-2	D3
Silver	**<108**	ug/kg	108	108	1	06/24/20 09:22	06/25/20 15:44	7440-22-4	
Thallium	**<540**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 15:44	7440-28-0	
Titanium	**179000**	ug/kg	5400	1440	50	06/24/20 09:22	06/30/20 01:27	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<93.4**	ug/kg	118	93.4	1	06/26/20 02:49	06/26/20 07:38	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	83-32-9	
Acenaphthylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-12-7	
Benzo(a)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	56-55-3	
Benzo(a)pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	50-32-8	
Benzo(b)fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	205-99-2	
Benzo(g,h,i)perylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	191-24-2	
Benzo(k)fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	207-08-9	
4-Bromophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	101-55-3	
Butylbenzylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	85-68-7	
Carbazole	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-74-8	
4-Chloro-3-methylphenol	**<295**	ug/kg	347	295	1	06/23/20 12:30	06/24/20 14:24	59-50-7	
bis(2-Chloroethoxy)methane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	111-91-1	
bis(2-Chloroethyl) ether	**<168**	ug/kg	347	168	1	06/23/20 12:30	06/24/20 14:24	111-44-4	
bis(2-Chloroisopropyl) ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	108-60-1	
2-Chloronaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-58-7	
2-Chlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	95-57-8	
4-Chlorophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	7005-72-3	
Chrysene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	218-01-9	
Dibenz(a,h)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	53-70-3	
Dibenzofuran	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	132-64-9	
2,4-Dichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-83-2	
Diethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	84-66-2	
2,4-Dimethylphenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	105-67-9	
Dimethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	131-11-3	
Di-n-butylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	84-74-2	
4,6-Dinitro-2-methylphenol	**<873**	ug/kg	873	873	1	06/23/20 12:30	06/24/20 14:24	534-52-1	
2,4-Dinitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	51-28-5	
2,4-Dinitrotoluene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	121-14-2	
2,6-Dinitrotoluene	**<93.1**	ug/kg	347	93.1	1	06/23/20 12:30	06/24/20 14:24	606-20-2	
Di-n-octylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	117-84-0	
1,2-Diphenylhydrazine	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	122-66-7	
bis(2-Ethylhexyl)phthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	117-81-7	
Fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	206-44-0	
Fluorene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	347	101	1	06/23/20 12:30	06/24/20 14:24	87-68-3	
Hexachlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24	77-47-4	
Hexachloroethane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	67-72-1	
Indeno(1,2,3-cd)pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	193-39-5	
Isophorone	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	78-59-1	
2-Methylnaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24		
Naphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-20-3	
2-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	99-09-2	
4-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	100-01-6	
Nitrobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	98-95-3	
2-Nitrophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-75-5	
4-Nitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	100-02-7	
N-Nitrosodimethylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	62-75-9	
N-Nitroso-di-n-propylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	621-64-7	
N-Nitrosodiphenylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-30-6	
Pentachlorophenol	**<1550**	ug/kg	1680	1550	1	06/23/20 12:30	06/24/20 14:24	87-86-5	
Phenanthrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	85-01-8	
Phenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	108-95-2	
Pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	129-00-0	
1,2,4-Trichlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-82-1	
2,4,5-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	95-95-4	
2,4,6-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	43	%.	26-96		1	06/23/20 12:30	06/24/20 14:24	4165-60-0	
Phenol-d5 (S)	79	%.	32-93		1	06/23/20 12:30	06/24/20 14:24	4165-62-2	
2-Fluorophenol (S)	81	%.	24-95		1	06/23/20 12:30	06/24/20 14:24	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	20-109		1	06/23/20 12:30	06/24/20 14:24	118-79-6	
2-Fluorobiphenyl (S)	121	%.	36-91		1	06/23/20 12:30	06/24/20 14:24	321-60-8	S3
p-Terphenyl-d14 (S)	92	%.	27-117		1	06/23/20 12:30	06/24/20 14:24	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1270**	ug/kg	1270	1270	1		06/24/20 08:36	67-64-1	
Acrylonitrile	**<127**	ug/kg	127	127	1		06/24/20 08:36	107-13-1	
tert-Amylmethyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	994-05-8	N2
Benzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	71-43-2	
Bromobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-86-1	
Bromochloromethane	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	74-97-5	
Bromodichloromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-27-4	
Bromoform	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-25-2	
Bromomethane	**<254**	ug/kg	254	254	1		06/24/20 08:36	74-83-9	
2-Butanone (MEK)	**<952**	ug/kg	952	952	1		06/24/20 08:36	78-93-3	
tert-Butyl Alcohol	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	75-65-0	
n-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	104-51-8	
sec-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	135-98-8	
tert-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	98-06-6	
Carbon disulfide	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-15-0	
Carbon tetrachloride	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	56-23-5	
Chlorobenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	108-90-7	
Chloroethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-00-3	
Chloroform	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	74-87-3	
Cyclohexane	**<635**	ug/kg	635	635	1		06/24/20 08:36	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	96-12-8	
Dibromochloromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	124-48-1	
1,2-Dibromoethane (EDB)	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	106-93-4	
Dibromomethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	74-95-3	
1,2-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	95-50-1	
1,3-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	541-73-1	
1,4-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	106-46-7	
trans-1,4-Dichloro-2-butene	**<127**	ug/kg	1270	127	1		06/24/20 08:36	110-57-6	
Dichlorodifluoromethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-71-8	
1,1-Dichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	75-34-3	
1,2-Dichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	107-06-2	
1,1-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	75-35-4	
cis-1,2-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	156-59-2	
trans-1,2-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	156-60-5	
1,2-Dichloropropane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	78-87-5	
cis-1,3-Dichloropropene	**<127**	ug/kg	127	127	1		06/24/20 08:36	10061-01-5	
trans-1,3-Dichloropropene	**<127**	ug/kg	127	127	1		06/24/20 08:36	10061-02-6	
Diethyl ether (Ethyl ether)	**<254**	ug/kg	254	254	1		06/24/20 08:36	60-29-7	
Diisopropyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	108-20-3	N2
Ethylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	100-41-4	
Ethyl-tert-butyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	637-92-3	N2
Hexachloroethane	**<381**	ug/kg	381	381	1		06/24/20 08:36	67-72-1	N2
2-Hexanone	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	591-78-6	
Iodomethane	**<127**	ug/kg	1270	127	1		06/24/20 08:36	74-88-4	
Isopropylbenzene (Cumene)	**<317**	ug/kg	317	317	1		06/24/20 08:36	98-82-8	
p-Isopropyltoluene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	99-87-6	
Methylene Chloride	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-09-2	
2-Methylnaphthalene	**<419**	ug/kg	419	419	1		06/24/20 08:36	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	108-10-1	
Methyl-tert-butyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	1634-04-4	
Naphthalene	**<419**	ug/kg	419	419	1		06/24/20 08:36	91-20-3	
n-Propylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	103-65-1	
Styrene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	630-20-6	
1,1,2,2-Tetrachloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-34-5	
Tetrachloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	127-18-4	
Tetrahydrofuran	**<1270**	ug/kg	1270	1270	1		06/24/20 08:36	109-99-9	N2
Toluene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-88-3	
1,2,3-Trichlorobenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	87-61-6	
1,2,4-Trichlorobenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	120-82-1	
1,1,1-Trichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	71-55-6	
1,1,2-Trichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-01-6	
Trichlorofluoromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-69-4	
1,2,3-Trichloropropane	**<127**	ug/kg	127	127	1		06/24/20 08:36	96-18-4	
1,2,3-Trimethylbenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	526-73-8	N2
1,2,4-Trimethylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	95-63-6	
1,3,5-Trimethylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-67-8	
Vinyl chloride	**<50.8**	ug/kg	50.8	50.8	1		06/24/20 08:36	75-01-4	
m&p-Xylene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	179601-23-1	
o-Xylene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	95-47-6	
Surrogates									
Dibromofluoromethane (S)	113	%.	62-137		1		06/24/20 08:36	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		06/24/20 08:36	2037-26-5	
4-Bromofluorobenzene (S)	113	%.	60-142		1		06/24/20 08:36	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**10.0**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4620**	ug/kg	4620	4620	1		06/22/20 17:54	71-36-3	
Ethanol	**<2620**	ug/kg	2620	2620	1		06/22/20 17:54	64-17-5	
Methanol	**<4620**	ug/kg	4620	4620	1		06/22/20 17:54	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<926**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-36-0	
Arsenic	**2450**	ug/kg	1850	1850	1	06/26/20 14:44	06/29/20 12:27	7440-38-2	
Barium	**23100**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-39-3	
Beryllium	**<463**	ug/kg	463	463	1	06/26/20 14:44	06/29/20 12:27	7440-41-7	
Boron	**<7410**	ug/kg	7410	7410	1	06/26/20 14:44	06/29/20 12:27	7440-42-8	
Calcium	**24200000**	ug/kg	231000	30700	5	06/26/20 14:44	06/29/20 12:52	7440-70-2	
Chromium	**8290**	ug/kg	1850	1850	1	06/26/20 14:44	06/29/20 12:27	7440-47-3	
Copper	**20800**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-50-8	
Iron	**6060000**	ug/kg	23100	7040	1	06/26/20 14:44	06/29/20 12:27	7439-89-6	
Lead	**47200**	ug/kg	9260	9260	1	06/26/20 14:44	06/29/20 12:27	7439-92-1	
Magnesium	**3800000**	ug/kg	23100	3700	1	06/26/20 14:44	06/29/20 12:27	7439-95-4	
Manganese	**92200**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7439-96-5	
Molybdenum	**<926**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7439-98-7	
Nickel	**5930**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-02-0	
Potassium	**336000**	ug/kg	46300	4530	1	06/26/20 14:44	06/29/20 12:27	7440-09-7	
Sodium	**72400**	ug/kg	23100	12600	1	06/26/20 14:44	06/29/20 12:27	7440-23-5	
Strontium	**30000**	ug/kg	4630	4630	1	06/26/20 14:44	06/29/20 12:27	7440-24-6	
Vanadium	**10200**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-62-2	
Zinc	**43600**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4190000**	ug/kg	99900	99900	100	06/24/20 09:22	06/30/20 01:31	7429-90-5	
Cadmium	**316**	ug/kg	200	200	1	06/24/20 09:22	06/25/20 15:58	7440-43-9	
Cobalt	**1610**	ug/kg	500	500	1	06/24/20 09:22	06/25/20 15:58	7440-48-4	
Selenium	**<999**	ug/kg	999	999	5	06/24/20 09:22	06/30/20 02:50	7782-49-2	D3
Silver	**<99.9**	ug/kg	99.9	99.9	1	06/24/20 09:22	06/25/20 15:58	7440-22-4	
Thallium	**<500**	ug/kg	500	500	1	06/24/20 09:22	06/25/20 15:58	7440-28-0	
Titanium	**247000**	ug/kg	9990	2660	100	06/24/20 09:22	06/30/20 01:31	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**666**	ug/kg	106	83.5	1	06/26/20 02:49	06/26/20 07:40	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	83-32-9	
Acenaphthylene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-12-7	
Benzo(a)anthracene	**1650**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	56-55-3	
Benzo(a)pyrene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	50-32-8	
Benzo(b)fluoranthene	**2220**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	205-99-2	
Benzo(g,h,i)perylene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	191-24-2	
Benzo(k)fluoranthene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	207-08-9	
4-Bromophenylphenyl ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	101-55-3	
Butylbenzylphthalate	**90700**	ug/kg	8150	8150	25	06/23/20 12:30	06/25/20 17:36	85-68-7	
Carbazole	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-74-8	
4-Chloro-3-methylphenol	**<1380**	ug/kg	1630	1380	5	06/23/20 12:30	06/24/20 14:42	59-50-7	
bis(2-Chloroethoxy)methane	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	111-91-1	
bis(2-Chloroethyl) ether	**<790**	ug/kg	1630	790	5	06/23/20 12:30	06/24/20 14:42	111-44-4	
bis(2-Chloroisopropyl) ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	108-60-1	
2-Chloronaphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-58-7	
2-Chlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	95-57-8	
4-Chlorophenylphenyl ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	7005-72-3	
Chrysene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	218-01-9	
Dibenz(a,h)anthracene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	53-70-3	
Dibenzofuran	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	132-64-9	
2,4-Dichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-83-2	
Diethylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	84-66-2	
2,4-Dimethylphenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	105-67-9	
Dimethylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	131-11-3	
Di-n-butylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	84-74-2	
4,6-Dinitro-2-methylphenol	**<4100**	ug/kg	4100	4100	5	06/23/20 12:30	06/24/20 14:42	534-52-1	
2,4-Dinitrophenol	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	51-28-5	
2,4-Dinitrotoluene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	121-14-2	
2,6-Dinitrotoluene	**<437**	ug/kg	1630	437	5	06/23/20 12:30	06/24/20 14:42	606-20-2	
Di-n-octylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	117-84-0	
1,2-Diphenylhydrazine	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	122-66-7	
bis(2-Ethylhexyl)phthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	117-81-7	
Fluoranthene	**2960**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	206-44-0	
Fluorene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-73-7	
Hexachloro-1,3-butadiene	**<474**	ug/kg	1630	474	5	06/23/20 12:30	06/24/20 14:42	87-68-3	
Hexachlorobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	118-74-1	
Hexachlorocyclopentadiene	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42	77-47-4	
Hexachloroethane	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	67-72-1	
Indeno(1,2,3-cd)pyrene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	193-39-5	
Isophorone	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	78-59-1	
2-Methylnaphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-57-6	
2-Methylphenol(o-Cresol)	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42		
Naphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-20-3	
2-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	99-09-2	
4-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	100-01-6	
Nitrobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	98-95-3	
2-Nitrophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-75-5	
4-Nitrophenol	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	100-02-7	
N-Nitrosodimethylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	62-75-9	
N-Nitroso-di-n-propylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	621-64-7	
N-Nitrosodiphenylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-30-6	
Pentachlorophenol	**<7260**	ug/kg	7900	7260	5	06/23/20 12:30	06/24/20 14:42	87-86-5	
Phenanthrene	**1870**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	85-01-8	
Phenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	108-95-2	ED
Pyrene	**2620**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	129-00-0	
1,2,4-Trichlorobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-82-1	
2,4,5-Trichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	95-95-4	
2,4,6-Trichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	26-96		5	06/23/20 12:30	06/24/20 14:42	4165-60-0	
Phenol-d5 (S)	73	%.	32-93		5	06/23/20 12:30	06/24/20 14:42	4165-62-2	
2-Fluorophenol (S)	83	%.	24-95		5	06/23/20 12:30	06/24/20 14:42	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	20-109		5	06/23/20 12:30	06/24/20 14:42	118-79-6	
2-Fluorobiphenyl (S)	92	%.	36-91		5	06/23/20 12:30	06/24/20 14:42	321-60-8	S0
p-Terphenyl-d14 (S)	97	%.	27-117		5	06/23/20 12:30	06/24/20 14:42	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1020**	ug/kg	1020	1020	1		06/24/20 09:09	67-64-1	
Acrylonitrile	**<102**	ug/kg	102	102	1		06/24/20 09:09	107-13-1	
tert-Amylmethyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	994-05-8	N2
Benzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	71-43-2	
Bromobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-86-1	
Bromochloromethane	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	74-97-5	
Bromodichloromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-27-4	
Bromoform	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-25-2	
Bromomethane	**<204**	ug/kg	204	204	1		06/24/20 09:09	74-83-9	
2-Butanone (MEK)	**<766**	ug/kg	766	766	1		06/24/20 09:09	78-93-3	
tert-Butyl Alcohol	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	75-65-0	
n-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	104-51-8	
sec-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	135-98-8	
tert-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	98-06-6	
Carbon disulfide	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-15-0	
Carbon tetrachloride	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	56-23-5	
Chlorobenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	108-90-7	
Chloroethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-00-3	
Chloroform	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	74-87-3	
Cyclohexane	**<510**	ug/kg	510	510	1		06/24/20 09:09	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	96-12-8	
Dibromochloromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	124-48-1	
1,2-Dibromoethane (EDB)	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	106-93-4	
Dibromomethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	74-95-3	
1,2-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	95-50-1	
1,3-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	541-73-1	
1,4-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	106-46-7	
trans-1,4-Dichloro-2-butene	**<102**	ug/kg	1020	102	1		06/24/20 09:09	110-57-6	
Dichlorodifluoromethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-71-8	
1,1-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	75-34-3	
1,2-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	107-06-2	
1,1-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	75-35-4	
cis-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	156-59-2	
trans-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	156-60-5	
1,2-Dichloropropane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	78-87-5	
cis-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		06/24/20 09:09	10061-01-5	
trans-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		06/24/20 09:09	10061-02-6	
Diethyl ether (Ethyl ether)	**<204**	ug/kg	204	204	1		06/24/20 09:09	60-29-7	
Diisopropyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	108-20-3	N2
Ethylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	100-41-4	
Ethyl-tert-butyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	637-92-3	N2
Hexachloroethane	**<306**	ug/kg	306	306	1		06/24/20 09:09	67-72-1	N2
2-Hexanone	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	591-78-6	
Iodomethane	**<102**	ug/kg	1020	102	1		06/24/20 09:09	74-88-4	
Isopropylbenzene (Cumene)	**<255**	ug/kg	255	255	1		06/24/20 09:09	98-82-8	
p-Isopropyltoluene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	99-87-6	
Methylene Chloride	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-09-2	
2-Methylnaphthalene	**<337**	ug/kg	337	337	1		06/24/20 09:09	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	108-10-1	
Methyl-tert-butyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	1634-04-4	
Naphthalene	**<337**	ug/kg	337	337	1		06/24/20 09:09	91-20-3	
n-Propylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	103-65-1	
Styrene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	100-42-5	
1,1,1,2-Tetrachloroethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	630-20-6	
1,1,2,2-Tetrachloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-34-5	
Tetrachloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	127-18-4	
Tetrahydrofuran	**<1020**	ug/kg	1020	1020	1		06/24/20 09:09	109-99-9	N2
Toluene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-88-3	
1,2,3-Trichlorobenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	87-61-6	
1,2,4-Trichlorobenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	120-82-1	
1,1,1-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	71-55-6	
1,1,2-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-01-6	
Trichlorofluoromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-69-4	
1,2,3-Trichloropropane	**<102**	ug/kg	102	102	1		06/24/20 09:09	96-18-4	
1,2,3-Trimethylbenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	526-73-8	N2
1,2,4-Trimethylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	95-63-6	
1,3,5-Trimethylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-67-8	
Vinyl chloride	**<40.8**	ug/kg	40.8	40.8	1		06/24/20 09:09	75-01-4	
m&p-Xylene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	179601-23-1	
o-Xylene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 09:09	1868-53-7	
Toluene-d8 (S)	100	%.	64-139		1		06/24/20 09:09	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 09:09	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**4.7**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4650**	ug/kg	4650	4650	1		06/22/20 18:03	71-36-3	
Ethanol	**<2640**	ug/kg	2640	2640	1		06/22/20 18:03	64-17-5	
Methanol	**<4650**	ug/kg	4650	4650	1		06/22/20 18:03	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11096-82-5	
PCB-1262 (Aroclor 1262)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	75	%.	25-123		1	06/24/20 21:50	06/25/20 18:22	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<985**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-36-0	
Arsenic	**<1970**	ug/kg	1970	1970	1	06/26/20 14:44	06/29/20 12:30	7440-38-2	
Barium	**9000**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-39-3	
Beryllium	**<492**	ug/kg	492	492	1	06/26/20 14:44	06/29/20 12:30	7440-41-7	
Boron	**<7880**	ug/kg	7880	7880	1	06/26/20 14:44	06/29/20 12:30	7440-42-8	
Calcium	**927000**	ug/kg	49200	6530	1	06/26/20 14:44	06/29/20 12:30	7440-70-2	
Chromium	**5510**	ug/kg	1970	1970	1	06/26/20 14:44	06/29/20 12:30	7440-47-3	
Copper	**1440**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-50-8	
Iron	**3160000**	ug/kg	24600	7480	1	06/26/20 14:44	06/29/20 12:30	7439-89-6	
Lead	**<9850**	ug/kg	9850	9850	1	06/26/20 14:44	06/29/20 12:30	7439-92-1	
Magnesium	**730000**	ug/kg	24600	3940	1	06/26/20 14:44	06/29/20 12:30	7439-95-4	
Manganese	**25900**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7439-96-5	
Molybdenum	**<985**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7439-98-7	
Nickel	**4170**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-02-0	
Potassium	**143000**	ug/kg	49200	4810	1	06/26/20 14:44	06/29/20 12:30	7440-09-7	
Sodium	**21700J**	ug/kg	24600	13400	1	06/26/20 14:44	06/29/20 12:30	7440-23-5	
Strontium	**<4920**	ug/kg	4920	4920	1	06/26/20 14:44	06/29/20 12:30	7440-24-6	
Vanadium	**7980**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-62-2	
Zinc	**9160**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4020000**	ug/kg	105000	105000	100	06/24/20 09:22	06/30/20 01:36	7429-90-5	
Cadmium	**<210**	ug/kg	210	210	1	06/24/20 09:22	06/25/20 16:07	7440-43-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1260**	ug/kg	526	526	1	06/24/20 09:22	06/25/20 16:07	7440-48-4	
Selenium	**<210**	ug/kg	210	210	1	06/24/20 09:22	06/25/20 16:07	7782-49-2	
Silver	**<105**	ug/kg	105	105	1	06/24/20 09:22	06/25/20 16:07	7440-22-4	
Thallium	**<526**	ug/kg	526	526	1	06/24/20 09:22	06/25/20 16:07	7440-28-0	
Titanium	**229000**	ug/kg	10500	2800	100	06/24/20 09:22	06/30/20 01:36	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<83.0**	ug/kg	105	83.0	1	06/26/20 02:49	06/26/20 07:42	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	83-32-9	
Acenaphthylene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	208-96-8	
Anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-12-7	
Benzo(a)anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	56-55-3	
Benzo(a)pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	50-32-8	
Benzo(b)fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	205-99-2	
Benzo(g,h,i)perylene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	191-24-2	
Benzo(k)fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	207-08-9	
4-Bromophenylphenyl ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	101-55-3	
Butylbenzylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	85-68-7	
Carbazole	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-74-8	
4-Chloro-3-methylphenol	**<295**	ug/kg	348	295	1	06/24/20 23:00	06/25/20 19:21	59-50-7	
bis(2-Chloroethoxy)methane	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	111-91-1	
bis(2-Chloroethyl) ether	**<169**	ug/kg	348	169	1	06/24/20 23:00	06/25/20 19:21	111-44-4	
bis(2-Chloroisopropyl) ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	108-60-1	
2-Chloronaphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-58-7	
2-Chlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	95-57-8	
4-Chlorophenylphenyl ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	7005-72-3	
Chrysene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	218-01-9	
Dibenz(a,h)anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	53-70-3	
Dibenzofuran	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	132-64-9	
2,4-Dichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-83-2	
Diethylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	84-66-2	
2,4-Dimethylphenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	105-67-9	
Dimethylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	131-11-3	
Di-n-butylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	84-74-2	
4,6-Dinitro-2-methylphenol	**<875**	ug/kg	875	875	1	06/24/20 23:00	06/25/20 19:21	534-52-1	
2,4-Dinitrophenol	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	51-28-5	
2,4-Dinitrotoluene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	121-14-2	
2,6-Dinitrotoluene	**<93.3**	ug/kg	348	93.3	1	06/24/20 23:00	06/25/20 19:21	606-20-2	
Di-n-octylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	117-84-0	
1,2-Diphenylhydrazine	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	117-81-7	
Fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	206-44-0	L1
Fluorene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	348	101	1	06/24/20 23:00	06/25/20 19:21	87-68-3	
Hexachlorobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21	77-47-4	
Hexachloroethane	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	67-72-1	
Indeno(1,2,3-cd)pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	193-39-5	
Isophorone	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	78-59-1	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21		
Naphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-20-3	
2-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-74-4	
3-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	99-09-2	
4-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	100-01-6	
Nitrobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	98-95-3	
2-Nitrophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-75-5	
4-Nitrophenol	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	100-02-7	
N-Nitrosodimethylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	62-75-9	
N-Nitroso-di-n-propylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	621-64-7	
N-Nitrosodiphenylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-30-6	
Pentachlorophenol	**<1550**	ug/kg	1690	1550	1	06/24/20 23:00	06/25/20 19:21	87-86-5	
Phenanthrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	85-01-8	
Phenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	108-95-2	
Pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	129-00-0	
1,2,4-Trichlorobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-82-1	
2,4,5-Trichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	95-95-4	
2,4,6-Trichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%.	26-96		1	06/24/20 23:00	06/25/20 19:21	4165-60-0	
Phenol-d5 (S)	77	%.	32-93		1	06/24/20 23:00	06/25/20 19:21	4165-62-2	
2-Fluorophenol (S)	90	%.	24-95		1	06/24/20 23:00	06/25/20 19:21	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/24/20 23:00	06/25/20 19:21	118-79-6	
2-Fluorobiphenyl (S)	78	%.	36-91		1	06/24/20 23:00	06/25/20 19:21	321-60-8	
p-Terphenyl-d14 (S)	79	%.	27-117		1	06/24/20 23:00	06/25/20 19:21	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<991**	ug/kg	991	991	1		06/24/20 09:43	67-64-1	
Acrylonitrile	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	107-13-1	
tert-Amylmethyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	994-05-8	N2
Benzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	71-43-2	
Bromobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	74-97-5	
Bromodichloromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-27-4	
Bromoform	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-25-2	
Bromomethane	**<198**	ug/kg	198	198	1		06/24/20 09:43	74-83-9	
2-Butanone (MEK)	**<743**	ug/kg	743	743	1		06/24/20 09:43	78-93-3	
tert-Butyl Alcohol	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	75-65-0	
n-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	104-51-8	
sec-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	135-98-8	
tert-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	98-06-6	
Carbon disulfide	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-15-0	
Carbon tetrachloride	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	56-23-5	
Chlorobenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	108-90-7	
Chloroethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-00-3	
Chloroform	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	67-66-3	
Chloromethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	74-87-3	
Cyclohexane	**<496**	ug/kg	496	496	1		06/24/20 09:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	96-12-8	
Dibromochloromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	124-48-1	
1,2-Dibromoethane (EDB)	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	106-93-4	
Dibromomethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	74-95-3	
1,2-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	95-50-1	
1,3-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	541-73-1	
1,4-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<99.1**	ug/kg	991	99.1	1		06/24/20 09:43	110-57-6	
Dichlorodifluoromethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-71-8	
1,1-Dichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	75-34-3	
1,2-Dichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	107-06-2	
1,1-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	75-35-4	
cis-1,2-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	156-59-2	
trans-1,2-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	156-60-5	
1,2-Dichloropropane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	78-87-5	
cis-1,3-Dichloropropene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	10061-01-5	
trans-1,3-Dichloropropene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<198**	ug/kg	198	198	1		06/24/20 09:43	60-29-7	
Diisopropyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	108-20-3	N2
Ethylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	100-41-4	
Ethyl-tert-butyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	637-92-3	N2
Hexachloroethane	**<297**	ug/kg	297	297	1		06/24/20 09:43	67-72-1	N2
2-Hexanone	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	591-78-6	
Iodomethane	**<99.1**	ug/kg	991	99.1	1		06/24/20 09:43	74-88-4	
Isopropylbenzene (Cumene)	**<248**	ug/kg	248	248	1		06/24/20 09:43	98-82-8	
p-Isopropyltoluene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	99-87-6	
Methylene Chloride	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-09-2	
2-Methylnaphthalene	**<327**	ug/kg	327	327	1		06/24/20 09:43	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	108-10-1	
Methyl-tert-butyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	1634-04-4	
Naphthalene	**<327**	ug/kg	327	327	1		06/24/20 09:43	91-20-3	
n-Propylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	103-65-1	
Styrene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-34-5	
Tetrachloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	127-18-4	
Tetrahydrofuran	**<991**	ug/kg	991	991	1		06/24/20 09:43	109-99-9	N2
Toluene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-88-3	
1,2,3-Trichlorobenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	87-61-6	
1,2,4-Trichlorobenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	120-82-1	
1,1,1-Trichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	71-55-6	
1,1,2-Trichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-00-5	
Trichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-01-6	
Trichlorofluoromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-69-4	
1,2,3-Trichloropropane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	96-18-4	
1,2,3-Trimethylbenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	95-63-6	
1,3,5-Trimethylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-67-8	
Vinyl chloride	**<39.6**	ug/kg	39.6	39.6	1		06/24/20 09:43	75-01-4	
m&p-Xylene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	179601-23-1	
o-Xylene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 09:43	1868-53-7	
Toluene-d8 (S)	102	%.	64-139		1		06/24/20 09:43	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 09:43	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.4**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5650**	ug/kg	5650	5650	1		06/22/20 18:12	71-36-3	
Ethanol	**<3210**	ug/kg	3210	3210	1		06/22/20 18:12	64-17-5	
Methanol	**<5650**	ug/kg	5650	5650	1		06/22/20 18:12	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1140**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-36-0	
Arsenic	**<2290**	ug/kg	2290	2290	1	06/26/20 14:44	06/29/20 12:32	7440-38-2	
Barium	**14300**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-39-3	
Beryllium	**<572**	ug/kg	572	572	1	06/26/20 14:44	06/29/20 12:32	7440-41-7	
Boron	**<9160**	ug/kg	9160	9160	1	06/26/20 14:44	06/29/20 12:32	7440-42-8	
Calcium	**2600000**	ug/kg	57200	7590	1	06/26/20 14:44	06/29/20 12:32	7440-70-2	
Chromium	**7550**	ug/kg	2290	2290	1	06/26/20 14:44	06/29/20 12:32	7440-47-3	
Copper	**6650**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-50-8	
Iron	**5240000**	ug/kg	28600	8700	1	06/26/20 14:44	06/29/20 12:32	7439-89-6	
Lead	**16800**	ug/kg	11400	11400	1	06/26/20 14:44	06/29/20 12:32	7439-92-1	
Magnesium	**1130000**	ug/kg	28600	4580	1	06/26/20 14:44	06/29/20 12:32	7439-95-4	
Manganese	**66400**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7439-96-5	
Molybdenum	**<1140**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7439-98-7	
Nickel	**4460**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-02-0	
Potassium	**191000**	ug/kg	57200	5600	1	06/26/20 14:44	06/29/20 12:32	7440-09-7	
Sodium	**27700J**	ug/kg	28600	15600	1	06/26/20 14:44	06/29/20 12:32	7440-23-5	
Strontium	**<5720**	ug/kg	5720	5720	1	06/26/20 14:44	06/29/20 12:32	7440-24-6	
Vanadium	**10800**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-62-2	
Zinc	**33700**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**5290000**	ug/kg	125000	125000	100	06/24/20 09:22	06/30/20 01:40	7429-90-5	
Cadmium	**<250**	ug/kg	250	250	1	06/24/20 09:22	06/25/20 16:17	7440-43-9	
Cobalt	**2120**	ug/kg	624	624	1	06/24/20 09:22	06/25/20 16:17	7440-48-4	
Selenium	**319**	ug/kg	250	250	1	06/24/20 09:22	06/25/20 16:17	7782-49-2	
Silver	**203**	ug/kg	125	125	1	06/24/20 09:22	06/25/20 16:17	7440-22-4	
Thallium	**<624**	ug/kg	624	624	1	06/24/20 09:22	06/25/20 16:17	7440-28-0	
Titanium	**218000**	ug/kg	12500	3320	100	06/24/20 09:22	06/30/20 01:40	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<101**	ug/kg	128	101	1	06/26/20 02:49	06/26/20 07:45	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	83-32-9	
Acenaphthylene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-12-7	
Benzo(a)anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	56-55-3	
Benzo(a)pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	50-32-8	
Benzo(b)fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	205-99-2	
Benzo(g,h,i)perylene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	191-24-2	
Benzo(k)fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	207-08-9	
4-Bromophenylphenyl ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	101-55-3	
Butylbenzylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	85-68-7	
Carbazole	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-74-8	
4-Chloro-3-methylphenol	**<358**	ug/kg	422	358	1	06/26/20 14:45	06/29/20 23:44	59-50-7	
bis(2-Chloroethoxy)methane	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	111-91-1	
bis(2-Chloroethyl) ether	**<205**	ug/kg	422	205	1	06/26/20 14:45	06/29/20 23:44	111-44-4	
bis(2-Chloroisopropyl) ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	108-60-1	
2-Chloronaphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-58-7	
2-Chlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	95-57-8	
4-Chlorophenylphenyl ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	7005-72-3	
Chrysene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	218-01-9	
Dibenz(a,h)anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	53-70-3	
Dibenzofuran	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	132-64-9	
2,4-Dichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-83-2	
Diethylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	84-66-2	
2,4-Dimethylphenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	105-67-9	
Dimethylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	131-11-3	
Di-n-butylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	84-74-2	
4,6-Dinitro-2-methylphenol	**<1060**	ug/kg	1060	1060	1	06/26/20 14:45	06/29/20 23:44	534-52-1	
2,4-Dinitrophenol	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	51-28-5	
2,4-Dinitrotoluene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	121-14-2	
2,6-Dinitrotoluene	**<113**	ug/kg	422	113	1	06/26/20 14:45	06/29/20 23:44	606-20-2	
Di-n-octylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	117-84-0	
1,2-Diphenylhydrazine	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	122-66-7	
bis(2-Ethylhexyl)phthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	117-81-7	
Fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	206-44-0	
Fluorene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-73-7	
Hexachloro-1,3-butadiene	**<123**	ug/kg	422	123	1	06/26/20 14:45	06/29/20 23:44	87-68-3	
Hexachlorobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	118-74-1	
Hexachlorocyclopentadiene	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44	77-47-4	
Hexachloroethane	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	67-72-1	
Indeno(1,2,3-cd)pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	193-39-5	
Isophorone	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	78-59-1	
2-Methylnaphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-57-6	
2-Methylphenol(o-Cresol)	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44		
Naphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-20-3	
2-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	99-09-2	
4-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	100-01-6	
Nitrobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	98-95-3	
2-Nitrophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-75-5	
4-Nitrophenol	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	100-02-7	
N-Nitrosodimethylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	62-75-9	
N-Nitroso-di-n-propylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	621-64-7	
N-Nitrosodiphenylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-30-6	
Pentachlorophenol	**<1880**	ug/kg	2050	1880	1	06/26/20 14:45	06/29/20 23:44	87-86-5	
Phenanthrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	85-01-8	
Phenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	108-95-2	
Pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	129-00-0	
1,2,4-Trichlorobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-82-1	
2,4,5-Trichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	95-95-4	
2,4,6-Trichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%.	26-96		1	06/26/20 14:45	06/29/20 23:44	4165-60-0	
Phenol-d5 (S)	75	%.	32-93		1	06/26/20 14:45	06/29/20 23:44	4165-62-2	
2-Fluorophenol (S)	76	%.	24-95		1	06/26/20 14:45	06/29/20 23:44	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	20-109		1	06/26/20 14:45	06/29/20 23:44	118-79-6	
2-Fluorobiphenyl (S)	64	%.	36-91		1	06/26/20 14:45	06/29/20 23:44	321-60-8	
p-Terphenyl-d14 (S)	78	%.	27-117		1	06/26/20 14:45	06/29/20 23:44	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1480**	ug/kg	1480	1480	1		06/24/20 10:16	67-64-1	
Acrylonitrile	**<148**	ug/kg	148	148	1		06/24/20 10:16	107-13-1	
tert-Amylmethyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	994-05-8	N2
Benzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	71-43-2	
Bromobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-86-1	
Bromochloromethane	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	74-97-5	
Bromodichloromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-27-4	
Bromoform	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-25-2	
Bromomethane	**<297**	ug/kg	297	297	1		06/24/20 10:16	74-83-9	
2-Butanone (MEK)	**<1110**	ug/kg	1110	1110	1		06/24/20 10:16	78-93-3	
tert-Butyl Alcohol	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	75-65-0	
n-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	104-51-8	
sec-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	135-98-8	
tert-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	98-06-6	
Carbon disulfide	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-15-0	
Carbon tetrachloride	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	56-23-5	
Chlorobenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	108-90-7	
Chloroethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-00-3	
Chloroform	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	74-87-3	
Cyclohexane	**<742**	ug/kg	742	742	1		06/24/20 10:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	96-12-8	
Dibromochloromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	124-48-1	
1,2-Dibromoethane (EDB)	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	106-93-4	
Dibromomethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	74-95-3	
1,2-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	95-50-1	
1,3-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	541-73-1	
1,4-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<148**	ug/kg	1480	148	1		06/24/20 10:16	110-57-6	
Dichlorodifluoromethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-71-8	
1,1-Dichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	75-34-3	
1,2-Dichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	107-06-2	
1,1-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	75-35-4	
cis-1,2-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	156-59-2	
trans-1,2-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	156-60-5	
1,2-Dichloropropane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	78-87-5	
cis-1,3-Dichloropropene	**<148**	ug/kg	148	148	1		06/24/20 10:16	10061-01-5	
trans-1,3-Dichloropropene	**<148**	ug/kg	148	148	1		06/24/20 10:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<297**	ug/kg	297	297	1		06/24/20 10:16	60-29-7	
Diisopropyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	108-20-3	N2
Ethylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	100-41-4	
Ethyl-tert-butyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	637-92-3	N2
Hexachloroethane	**<445**	ug/kg	445	445	1		06/24/20 10:16	67-72-1	N2
2-Hexanone	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	591-78-6	
Iodomethane	**<148**	ug/kg	1480	148	1		06/24/20 10:16	74-88-4	
Isopropylbenzene (Cumene)	**<371**	ug/kg	371	371	1		06/24/20 10:16	98-82-8	
p-Isopropyltoluene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	99-87-6	
Methylene Chloride	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-09-2	
2-Methylnaphthalene	**<490**	ug/kg	490	490	1		06/24/20 10:16	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	108-10-1	
Methyl-tert-butyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	1634-04-4	
Naphthalene	**<490**	ug/kg	490	490	1		06/24/20 10:16	91-20-3	
n-Propylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	103-65-1	
Styrene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-34-5	
Tetrachloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	127-18-4	
Tetrahydrofuran	**<1480**	ug/kg	1480	1480	1		06/24/20 10:16	109-99-9	N2
Toluene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-88-3	
1,2,3-Trichlorobenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	87-61-6	
1,2,4-Trichlorobenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	120-82-1	
1,1,1-Trichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	71-55-6	
1,1,2-Trichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-01-6	
Trichlorofluoromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-69-4	
1,2,3-Trichloropropane	**<148**	ug/kg	148	148	1		06/24/20 10:16	96-18-4	
1,2,3-Trimethylbenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	95-63-6	
1,3,5-Trimethylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-67-8	
Vinyl chloride	**<59.4**	ug/kg	59.4	59.4	1		06/24/20 10:16	75-01-4	
m&p-Xylene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	179601-23-1	
o-Xylene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	126	%.	62-137		1		06/24/20 10:16	1868-53-7	
Toluene-d8 (S)	122	%.	64-139		1		06/24/20 10:16	2037-26-5	
4-Bromofluorobenzene (S)	126	%.	60-142		1		06/24/20 10:16	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**22.1**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4770**	ug/kg	4770	4770	1		06/22/20 18:21	71-36-3	
Ethanol	**<2710**	ug/kg	2710	2710	1		06/22/20 18:21	64-17-5	
Methanol	**<4770**	ug/kg	4770	4770	1		06/22/20 18:21	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1050**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-36-0	
Arsenic	**<2100**	ug/kg	2100	2100	1	06/26/20 14:44	06/29/20 12:34	7440-38-2	
Barium	**9360**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-39-3	
Beryllium	**<525**	ug/kg	525	525	1	06/26/20 14:44	06/29/20 12:34	7440-41-7	
Boron	**<8400**	ug/kg	8400	8400	1	06/26/20 14:44	06/29/20 12:34	7440-42-8	
Calcium	**8810000**	ug/kg	52500	6970	1	06/26/20 14:44	06/29/20 12:34	7440-70-2	
Chromium	**5570**	ug/kg	2100	2100	1	06/26/20 14:44	06/29/20 12:34	7440-47-3	
Copper	**3040**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-50-8	
Iron	**4110000**	ug/kg	26300	7980	1	06/26/20 14:44	06/29/20 12:34	7439-89-6	
Lead	**<10500**	ug/kg	10500	10500	1	06/26/20 14:44	06/29/20 12:34	7439-92-1	
Magnesium	**1640000**	ug/kg	26300	4200	1	06/26/20 14:44	06/29/20 12:34	7439-95-4	
Manganese	**75400**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7439-96-5	
Molybdenum	**<1050**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7439-98-7	
Nickel	**4020**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-02-0	
Potassium	**172000**	ug/kg	52500	5140	1	06/26/20 14:44	06/29/20 12:34	7440-09-7	
Sodium	**27800**	ug/kg	26300	14300	1	06/26/20 14:44	06/29/20 12:34	7440-23-5	
Strontium	**9550**	ug/kg	5250	5250	1	06/26/20 14:44	06/29/20 12:34	7440-24-6	
Vanadium	**7890**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-62-2	
Zinc	**10300**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**3230000**	ug/kg	106000	106000	100	06/24/20 09:22	06/30/20 01:45	7429-90-5	
Cadmium	**<213**	ug/kg	213	213	1	06/24/20 09:22	06/25/20 16:30	7440-43-9	
Cobalt	**1550**	ug/kg	532	532	1	06/24/20 09:22	06/25/20 16:30	7440-48-4	
Selenium	**<213**	ug/kg	213	213	1	06/24/20 09:22	06/25/20 16:30	7782-49-2	
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 16:30	7440-22-4	
Thallium	**<532**	ug/kg	532	532	1	06/24/20 09:22	06/25/20 16:30	7440-28-0	
Titanium	**211000**	ug/kg	10600	2830	100	06/24/20 09:22	06/30/20 01:45	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<89.4**	ug/kg	113	89.4	1	06/26/20 02:49	06/26/20 07:47	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	83-32-9	
Acenaphthylene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-12-7	
Benzo(a)anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	56-55-3	
Benzo(a)pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	50-32-8	
Benzo(b)fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	205-99-2	
Benzo(g,h,i)perylene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	191-24-2	
Benzo(k)fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	207-08-9	
4-Bromophenylphenyl ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	101-55-3	
Butylbenzylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	85-68-7	
Carbazole	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-74-8	
4-Chloro-3-methylphenol	**<301**	ug/kg	355	301	1	06/24/20 23:00	06/26/20 07:01	59-50-7	
bis(2-Chloroethoxy)methane	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	111-91-1	
bis(2-Chloroethyl) ether	**<172**	ug/kg	355	172	1	06/24/20 23:00	06/26/20 07:01	111-44-4	
bis(2-Chloroisopropyl) ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	108-60-1	
2-Chloronaphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-58-7	
2-Chlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	95-57-8	
4-Chlorophenylphenyl ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	7005-72-3	
Chrysene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	218-01-9	
Dibenz(a,h)anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	53-70-3	
Dibenzofuran	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	132-64-9	
2,4-Dichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-83-2	
Diethylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	84-66-2	
2,4-Dimethylphenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	105-67-9	
Dimethylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	131-11-3	
Di-n-butylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	84-74-2	
4,6-Dinitro-2-methylphenol	**<893**	ug/kg	893	893	1	06/24/20 23:00	06/26/20 07:01	534-52-1	
2,4-Dinitrophenol	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	51-28-5	
2,4-Dinitrotoluene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	121-14-2	
2,6-Dinitrotoluene	**<95.2**	ug/kg	355	95.2	1	06/24/20 23:00	06/26/20 07:01	606-20-2	
Di-n-octylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	117-84-0	
1,2-Diphenylhydrazine	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	122-66-7	
bis(2-Ethylhexyl)phthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	117-81-7	
Fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	206-44-0	L1
Fluorene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-73-7	
Hexachloro-1,3-butadiene	**<103**	ug/kg	355	103	1	06/24/20 23:00	06/26/20 07:01	87-68-3	
Hexachlorobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	118-74-1	
Hexachlorocyclopentadiene	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01	77-47-4	
Hexachloroethane	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	67-72-1	
Indeno(1,2,3-cd)pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	193-39-5	
Isophorone	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	78-59-1	
2-Methylnaphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-57-6	
2-Methylphenol(o-Cresol)	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01		
Naphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-20-3	
2-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	99-09-2	
4-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	100-01-6	
Nitrobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	98-95-3	
2-Nitrophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-75-5	
4-Nitrophenol	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	100-02-7	
N-Nitrosodimethylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	62-75-9	
N-Nitroso-di-n-propylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	621-64-7	
N-Nitrosodiphenylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-30-6	
Pentachlorophenol	**<1580**	ug/kg	1720	1580	1	06/24/20 23:00	06/26/20 07:01	87-86-5	
Phenanthrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	85-01-8	
Phenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	108-95-2	
Pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	129-00-0	
1,2,4-Trichlorobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-82-1	
2,4,5-Trichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	95-95-4	
2,4,6-Trichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	43	%.	26-96		1	06/24/20 23:00	06/26/20 07:01	4165-60-0	
Phenol-d5 (S)	68	%.	32-93		1	06/24/20 23:00	06/26/20 07:01	4165-62-2	
2-Fluorophenol (S)	72	%.	24-95		1	06/24/20 23:00	06/26/20 07:01	367-12-4	
2,4,6-Tribromophenol (S)	76	%.	20-109		1	06/24/20 23:00	06/26/20 07:01	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/24/20 23:00	06/26/20 07:01	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/24/20 23:00	06/26/20 07:01	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1400**	ug/kg	1400	1400	1		06/24/20 10:49	67-64-1	
Acrylonitrile	**<140**	ug/kg	140	140	1		06/24/20 10:49	107-13-1	
tert-Amylmethyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	994-05-8	N2
Benzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	71-43-2	
Bromobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-86-1	
Bromochloromethane	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	74-97-5	
Bromodichloromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-27-4	
Bromoform	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-25-2	
Bromomethane	**<279**	ug/kg	279	279	1		06/24/20 10:49	74-83-9	
2-Butanone (MEK)	**<1050**	ug/kg	1050	1050	1		06/24/20 10:49	78-93-3	
tert-Butyl Alcohol	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	75-65-0	
n-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	104-51-8	
sec-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	135-98-8	
tert-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	98-06-6	
Carbon disulfide	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-15-0	
Carbon tetrachloride	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	56-23-5	
Chlorobenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	108-90-7	
Chloroethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-00-3	
Chloroform	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	74-87-3	
Cyclohexane	**<698**	ug/kg	698	698	1		06/24/20 10:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	96-12-8	
Dibromochloromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	124-48-1	
1,2-Dibromoethane (EDB)	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	106-93-4	
Dibromomethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	74-95-3	
1,2-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	95-50-1	
1,3-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	541-73-1	
1,4-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<140**	ug/kg	1400	140	1		06/24/20 10:49	110-57-6	
Dichlorodifluoromethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-71-8	
1,1-Dichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	75-34-3	
1,2-Dichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	107-06-2	
1,1-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	75-35-4	
cis-1,2-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	156-59-2	
trans-1,2-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	156-60-5	
1,2-Dichloropropane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	78-87-5	
cis-1,3-Dichloropropene	**<140**	ug/kg	140	140	1		06/24/20 10:49	10061-01-5	
trans-1,3-Dichloropropene	**<140**	ug/kg	140	140	1		06/24/20 10:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<279**	ug/kg	279	279	1		06/24/20 10:49	60-29-7	
Diisopropyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	108-20-3	N2
Ethylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	100-41-4	
Ethyl-tert-butyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	637-92-3	N2
Hexachloroethane	**<419**	ug/kg	419	419	1		06/24/20 10:49	67-72-1	N2
2-Hexanone	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	591-78-6	
Iodomethane	**<140**	ug/kg	1400	140	1		06/24/20 10:49	74-88-4	
Isopropylbenzene (Cumene)	**<349**	ug/kg	349	349	1		06/24/20 10:49	98-82-8	
p-Isopropyltoluene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	99-87-6	
Methylene Chloride	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-09-2	
2-Methylnaphthalene	**<460**	ug/kg	460	460	1		06/24/20 10:49	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	108-10-1	
Methyl-tert-butyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	1634-04-4	
Naphthalene	**<460**	ug/kg	460	460	1		06/24/20 10:49	91-20-3	
n-Propylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	103-65-1	
Styrene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-34-5	
Tetrachloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	127-18-4	
Tetrahydrofuran	**<1400**	ug/kg	1400	1400	1		06/24/20 10:49	109-99-9	N2
Toluene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-88-3	
1,2,3-Trichlorobenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	87-61-6	
1,2,4-Trichlorobenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	120-82-1	
1,1,1-Trichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	71-55-6	
1,1,2-Trichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-01-6	
Trichlorofluoromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-69-4	
1,2,3-Trichloropropane	**<140**	ug/kg	140	140	1		06/24/20 10:49	96-18-4	
1,2,3-Trimethylbenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	95-63-6	
1,3,5-Trimethylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-67-8	
Vinyl chloride	**<55.8**	ug/kg	55.8	55.8	1		06/24/20 10:49	75-01-4	
m&p-Xylene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	179601-23-1	
o-Xylene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 10:49	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 10:49	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 10:49	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**7.7**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4940**	ug/kg	4940	4940	1		06/22/20 18:31	71-36-3	
Ethanol	**<2810**	ug/kg	2810	2810	1		06/22/20 18:31	64-17-5	
Methanol	**<4940**	ug/kg	4940	4940	1		06/22/20 18:31	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-36-0	
Arsenic	**<2120**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:36	7440-38-2	
Barium	**14900**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-39-3	
Beryllium	**<529**	ug/kg	529	529	1	06/26/20 14:44	06/29/20 12:36	7440-41-7	
Boron	**<8470**	ug/kg	8470	8470	1	06/26/20 14:44	06/29/20 12:36	7440-42-8	
Calcium	**10200000**	ug/kg	52900	7020	1	06/26/20 14:44	06/29/20 12:36	7440-70-2	
Chromium	**6530**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:36	7440-47-3	
Copper	**5830**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-50-8	
Iron	**4680000**	ug/kg	26500	8050	1	06/26/20 14:44	06/29/20 12:36	7439-89-6	
Lead	**18400**	ug/kg	10600	10600	1	06/26/20 14:44	06/29/20 12:36	7439-92-1	
Magnesium	**2120000**	ug/kg	26500	4230	1	06/26/20 14:44	06/29/20 12:36	7439-95-4	
Manganese	**64900**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7439-96-5	
Molybdenum	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7439-98-7	
Nickel	**4420**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-02-0	
Potassium	**285000**	ug/kg	52900	5180	1	06/26/20 14:44	06/29/20 12:36	7440-09-7	
Sodium	**46000**	ug/kg	26500	14400	1	06/26/20 14:44	06/29/20 12:36	7440-23-5	
Strontium	**15800**	ug/kg	5290	5290	1	06/26/20 14:44	06/29/20 12:36	7440-24-6	
Vanadium	**10300**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-62-2	
Zinc	**21400**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4930000**	ug/kg	108000	108000	100	06/24/20 09:22	06/30/20 01:50	7429-90-5	
Cadmium	**<216**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 16:39	7440-43-9	
Cobalt	**1960**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 16:39	7440-48-4	
Selenium	**239**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 16:39	7782-49-2	
Silver	**<108**	ug/kg	108	108	1	06/24/20 09:22	06/25/20 16:39	7440-22-4	
Thallium	**<540**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 16:39	7440-28-0	
Titanium	**212000**	ug/kg	10800	2870	100	06/24/20 09:22	06/30/20 01:50	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<93.3**	ug/kg	118	93.3	1	06/26/20 02:49	06/26/20 07:57	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	83-32-9	
Acenaphthylene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**407**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-12-7	
Benzo(a)anthracene	**1700**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	56-55-3	
Benzo(a)pyrene	**1600**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	50-32-8	
Benzo(b)fluoranthene	**2210**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	205-99-2	
Benzo(g,h,i)perylene	**894**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	191-24-2	
Benzo(k)fluoranthene	**1020**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	207-08-9	
4-Bromophenylphenyl ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	101-55-3	
Butylbenzylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	85-68-7	
Carbazole	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-74-8	
4-Chloro-3-methylphenol	**<314**	ug/kg	370	314	1	06/24/20 23:00	06/26/20 07:18	59-50-7	
bis(2-Chloroethoxy)methane	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	111-91-1	
bis(2-Chloroethyl) ether	**<180**	ug/kg	370	180	1	06/24/20 23:00	06/26/20 07:18	111-44-4	
bis(2-Chloroisopropyl) ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	108-60-1	
2-Chloronaphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-58-7	
2-Chlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	95-57-8	
4-Chlorophenylphenyl ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	7005-72-3	
Chrysene	**1750**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	218-01-9	
Dibenz(a,h)anthracene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	53-70-3	
Dibenzofuran	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	132-64-9	
2,4-Dichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-83-2	
Diethylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	84-66-2	
2,4-Dimethylphenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	105-67-9	
Dimethylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	131-11-3	
Di-n-butylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	84-74-2	
4,6-Dinitro-2-methylphenol	**<931**	ug/kg	931	931	1	06/24/20 23:00	06/26/20 07:18	534-52-1	
2,4-Dinitrophenol	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	51-28-5	
2,4-Dinitrotoluene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	121-14-2	
2,6-Dinitrotoluene	**<99.3**	ug/kg	370	99.3	1	06/24/20 23:00	06/26/20 07:18	606-20-2	
Di-n-octylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	117-84-0	
1,2-Diphenylhydrazine	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	122-66-7	
bis(2-Ethylhexyl)phthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	117-81-7	
Fluoranthene	**3640**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	206-44-0	L1
Fluorene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-73-7	
Hexachloro-1,3-butadiene	**<108**	ug/kg	370	108	1	06/24/20 23:00	06/26/20 07:18	87-68-3	
Hexachlorobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	118-74-1	
Hexachlorocyclopentadiene	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18	77-47-4	
Hexachloroethane	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	67-72-1	
Indeno(1,2,3-cd)pyrene	**808**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	193-39-5	
Isophorone	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	78-59-1	
2-Methylnaphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-57-6	
2-Methylphenol(o-Cresol)	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18		
Naphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-20-3	
2-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	99-09-2	
4-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	100-01-6	
Nitrobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	98-95-3	
2-Nitrophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-75-5	
4-Nitrophenol	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	100-02-7	
N-Nitrosodimethylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	62-75-9	
N-Nitroso-di-n-propylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	621-64-7	
N-Nitrosodiphenylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-30-6	
Pentachlorophenol	**<1650**	ug/kg	1800	1650	1	06/24/20 23:00	06/26/20 07:18	87-86-5	
Phenanthrene	**1890**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	85-01-8	
Phenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	108-95-2	
Pyrene	**2880**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	129-00-0	
1,2,4-Trichlorobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-82-1	
2,4,5-Trichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	95-95-4	
2,4,6-Trichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	41	%.	26-96		1	06/24/20 23:00	06/26/20 07:18	4165-60-0	
Phenol-d5 (S)	78	%.	32-93		1	06/24/20 23:00	06/26/20 07:18	4165-62-2	
2-Fluorophenol (S)	80	%.	24-95		1	06/24/20 23:00	06/26/20 07:18	367-12-4	
2,4,6-Tribromophenol (S)	62	%.	20-109		1	06/24/20 23:00	06/26/20 07:18	118-79-6	
2-Fluorobiphenyl (S)	72	%.	36-91		1	06/24/20 23:00	06/26/20 07:18	321-60-8	
p-Terphenyl-d14 (S)	85	%.	27-117		1	06/24/20 23:00	06/26/20 07:18	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1180**	ug/kg	1180	1180	1		06/24/20 11:22	67-64-1	
Acrylonitrile	**<118**	ug/kg	118	118	1		06/24/20 11:22	107-13-1	
tert-Amylmethyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	994-05-8	N2
Benzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	71-43-2	
Bromobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-86-1	
Bromochloromethane	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	74-97-5	
Bromodichloromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-27-4	
Bromoform	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-25-2	
Bromomethane	**<236**	ug/kg	236	236	1		06/24/20 11:22	74-83-9	
2-Butanone (MEK)	**<884**	ug/kg	884	884	1		06/24/20 11:22	78-93-3	
tert-Butyl Alcohol	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	75-65-0	
n-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	104-51-8	
sec-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	135-98-8	
tert-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	98-06-6	
Carbon disulfide	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-15-0	
Carbon tetrachloride	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	56-23-5	
Chlorobenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	108-90-7	
Chloroethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-00-3	
Chloroform	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	74-87-3	
Cyclohexane	**<590**	ug/kg	590	590	1		06/24/20 11:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	96-12-8	
Dibromochloromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	124-48-1	
1,2-Dibromoethane (EDB)	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	106-93-4	
Dibromomethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	74-95-3	
1,2-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	95-50-1	
1,3-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	541-73-1	
1,4-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<118**	ug/kg	1180	118	1		06/24/20 11:22	110-57-6	
Dichlorodifluoromethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-71-8	
1,1-Dichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	75-34-3	
1,2-Dichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	107-06-2	
1,1-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	75-35-4	
cis-1,2-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	156-59-2	
trans-1,2-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	156-60-5	
1,2-Dichloropropane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	78-87-5	
cis-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		06/24/20 11:22	10061-01-5	
trans-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		06/24/20 11:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<236**	ug/kg	236	236	1		06/24/20 11:22	60-29-7	
Diisopropyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	108-20-3	N2
Ethylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	100-41-4	
Ethyl-tert-butyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	637-92-3	N2
Hexachloroethane	**<354**	ug/kg	354	354	1		06/24/20 11:22	67-72-1	N2
2-Hexanone	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	591-78-6	
Iodomethane	**<118**	ug/kg	1180	118	1		06/24/20 11:22	74-88-4	
Isopropylbenzene (Cumene)	**<295**	ug/kg	295	295	1		06/24/20 11:22	98-82-8	
p-Isopropyltoluene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	99-87-6	
Methylene Chloride	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-09-2	
2-Methylnaphthalene	**<389**	ug/kg	389	389	1		06/24/20 11:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	108-10-1	
Methyl-tert-butyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	1634-04-4	
Naphthalene	**<389**	ug/kg	389	389	1		06/24/20 11:22	91-20-3	
n-Propylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	103-65-1	
Styrene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-34-5	
Tetrachloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	127-18-4	
Tetrahydrofuran	**<1180**	ug/kg	1180	1180	1		06/24/20 11:22	109-99-9	N2
Toluene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-88-3	
1,2,3-Trichlorobenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	87-61-6	
1,2,4-Trichlorobenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	120-82-1	
1,1,1-Trichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	71-55-6	
1,1,2-Trichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-01-6	
Trichlorofluoromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-69-4	
1,2,3-Trichloropropane	**<118**	ug/kg	118	118	1		06/24/20 11:22	96-18-4	
1,2,3-Trimethylbenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	95-63-6	
1,3,5-Trimethylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-67-8	
Vinyl chloride	**<47.2**	ug/kg	47.2	47.2	1		06/24/20 11:22	75-01-4	
m&p-Xylene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	179601-23-1	
o-Xylene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	95-47-6	
Surrogates									
Dibromofluoromethane (S)	114	%.	62-137		1		06/24/20 11:22	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		06/24/20 11:22	2037-26-5	
4-Bromofluorobenzene (S)	115	%.	60-142		1		06/24/20 11:22	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**10.9**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268016** Collected: 06/15/20 14:29 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/24/20 11:55	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/24/20 11:55	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/24/20 11:55	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/24/20 11:55	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/24/20 11:55	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/24/20 11:55	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 11:55	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 11:55	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/24/20 11:55	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/24/20 11:55	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268016** Collected: 06/15/20 14:29 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/24/20 11:55	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/24/20 11:55	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/24/20 11:55	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/24/20 11:55	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/24/20 11:55	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/24/20 11:55	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/24/20 11:55	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 11:55	1868-53-7	
Toluene-d8 (S)	98	%.	64-139		1		06/24/20 11:55	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	60-142		1		06/24/20 11:55	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268017** Collected: 06/15/20 14:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/24/20 12:29	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/24/20 12:29	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/24/20 12:29	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/24/20 12:29	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/24/20 12:29	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/24/20 12:29	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 12:29	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 12:29	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/24/20 12:29	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/24/20 12:29	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268017** Collected: 06/15/20 14:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/24/20 12:29	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/24/20 12:29	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/24/20 12:29	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/24/20 12:29	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/24/20 12:29	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/24/20 12:29	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/24/20 12:29	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%.	62-137		1		06/24/20 12:29	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 12:29	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 12:29	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Field Blank **Lab ID: 50260268018** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/23/20 16:34	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/23/20 16:34	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/23/20 16:34	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/23/20 16:34	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/23/20 16:34	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/23/20 16:34	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/23/20 16:34	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/23/20 16:34	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/23/20 16:34	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/23/20 16:34	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Field Blank **Lab ID: 50260268018** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/23/20 16:34	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/23/20 16:34	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/23/20 16:34	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/23/20 16:34	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/23/20 16:34	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/23/20 16:34	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/23/20 16:34	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		06/23/20 16:34	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/23/20 16:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	60-142		1		06/23/20 16:34	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568440
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2622641 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/kg	<2500	2500	2500	06/22/20 12:25	
Methanol	ug/kg	<4400	4400	4400	06/22/20 12:25	
n-Butanol	ug/kg	<4400	4400	4400	06/22/20 12:25	

LABORATORY CONTROL SAMPLE: 2622642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/kg	50000	60600	121	79-113	L5
Methanol	ug/kg	50000	49900	100	75-111	
n-Butanol	ug/kg	50000	50400	101	80-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2622873 2622874

Parameter	Units	50260268001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/kg	<2750	54900	54900	57600	55400	105	101	46-120	4	20	
Methanol	ug/kg	<4830	54900	54900	48000	45700	87	83	42-119	5	20	
n-Butanol	ug/kg	<4830	54900	54900	47600	46100	87	84	10-142	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569181
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2625731
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<75.5	95.5	75.5	06/26/20 06:56	

LABORATORY CONTROL SAMPLE: 2625732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	493	530	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625733 2625734

Parameter	Units	50260268002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	<85.3	553	531	564	528	102	99	75-125	7	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568327
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2622338 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/kg	<1000	1000	1000	06/29/20 11:44	
Arsenic	ug/kg	<2000	2000	2000	06/29/20 11:44	
Barium	ug/kg	<1000	1000	1000	06/29/20 11:44	
Beryllium	ug/kg	<500	500	500	06/29/20 11:44	
Boron	ug/kg	<8000	8000	8000	06/29/20 11:44	
Calcium	ug/kg	<6630	50000	6630	06/29/20 11:44	
Chromium	ug/kg	<2000	2000	2000	06/29/20 11:44	
Copper	ug/kg	<1000	1000	1000	06/29/20 11:44	
Iron	ug/kg	<7600	25000	7600	06/29/20 11:44	
Lead	ug/kg	<10000	10000	10000	06/29/20 11:44	
Magnesium	ug/kg	<4000	25000	4000	06/29/20 11:44	
Manganese	ug/kg	<1000	1000	1000	06/29/20 11:44	
Molybdenum	ug/kg	<1000	1000	1000	06/29/20 11:44	
Nickel	ug/kg	<1000	1000	1000	06/29/20 11:44	
Potassium	ug/kg	<4890	50000	4890	06/29/20 11:44	
Sodium	ug/kg	<13600	25000	13600	06/29/20 11:44	
Strontium	ug/kg	<5000	5000	5000	06/29/20 11:44	
Vanadium	ug/kg	<1000	1000	1000	06/29/20 11:44	
Zinc	ug/kg	<1000	1000	1000	06/29/20 11:44	

LABORATORY CONTROL SAMPLE: 2622339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/kg	50000	49700	99	80-120	
Arsenic	ug/kg	50000	50300	101	80-120	
Barium	ug/kg	50000	48800	98	80-120	
Beryllium	ug/kg	50000	51000	102	80-120	
Boron	ug/kg	50000	49600	99	80-120	
Calcium	ug/kg	500000	499000	100	80-120	
Chromium	ug/kg	50000	49800	100	80-120	
Copper	ug/kg	50000	47500	95	80-120	
Iron	ug/kg	500000	492000	98	80-120	
Lead	ug/kg	50000	49500	99	80-120	
Magnesium	ug/kg	500000	492000	98	80-120	
Manganese	ug/kg	50000	50000	100	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2622339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum	ug/kg	50000	52100	104	80-120	
Nickel	ug/kg	50000	50100	100	80-120	
Potassium	ug/kg	500000	489000	98	80-120	
Sodium	ug/kg	500000	495000	99	80-120	
Strontium	ug/kg	50000	49700	99	80-120	
Vanadium	ug/kg	50000	49300	99	80-120	
Zinc	ug/kg	50000	50600	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2622340 2622341

Parameter	Units	50260268003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/kg	<957	45300	46300	25100	26600	56	58	75-125	6	20	M3
Arsenic	ug/kg	<1910	45300	46300	43400	44700	94	94	75-125	3	20	
Barium	ug/kg	8540	45300	46300	50100	51600	92	93	75-125	3	20	
Beryllium	ug/kg	<478	45300	46300	42700	44200	94	95	75-125	3	20	
Boron	ug/kg	<7650	45300	46300	43500	45300	94	95	75-125	4	20	
Calcium	ug/kg	628000	453000	463000	1260000	1270000	141	139	75-125	1	20	M3
Chromium	ug/kg	5880	45300	46300	47300	48700	92	92	75-125	3	20	
Copper	ug/kg	1580	45300	46300	41100	42600	87	88	75-125	4	20	
Iron	ug/kg	3940000	453000	463000	4610000	4510000	147	124	75-125	2	20	P6
Lead	ug/kg	<9570	45300	46300	42700	44100	90	91	75-125	3	20	
Magnesium	ug/kg	739000	453000	463000	1290000	1260000	121	112	75-125	2	20	
Manganese	ug/kg	27300	45300	46300	74600	74200	105	101	75-125	1	20	
Molybdenum	ug/kg	<957	45300	46300	42400	44100	93	95	75-125	4	20	
Nickel	ug/kg	3880	45300	46300	45100	46500	91	92	75-125	3	20	
Potassium	ug/kg	148000	453000	463000	649000	658000	111	110	75-125	1	20	
Sodium	ug/kg	23200J	453000	463000	453000	464000	95	95	75-125	2	20	
Strontium	ug/kg	<4780	45300	46300	46500	48000	96	97	75-125	3	20	
Vanadium	ug/kg	8010	45300	46300	50800	52400	95	96	75-125	3	20	
Zinc	ug/kg	8190	45300	46300	50500	51800	94	94	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568592
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2623199 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/kg	<970	970	970	06/25/20 13:18	
Cadmium	ug/kg	<194	194	194	06/25/20 13:18	
Cobalt	ug/kg	<485	485	485	06/25/20 13:18	
Selenium	ug/kg	<194	194	194	06/25/20 13:18	
Silver	ug/kg	<97.0	97.0	97.0	06/25/20 13:18	
Thallium	ug/kg	<485	485	485	06/25/20 13:18	
Titanium	ug/kg	<25.8	97.0	25.8	06/25/20 13:18	N2

LABORATORY CONTROL SAMPLE: 2623200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/kg	38000	38700	102	80-120	
Cadmium	ug/kg	3800	3510	92	80-120	
Cobalt	ug/kg	3800	3870	102	80-120	
Selenium	ug/kg	3800	3430	90	80-120	
Silver	ug/kg	3800	3760	99	80-120	
Thallium	ug/kg	3800	3860	102	80-120	
Titanium	ug/kg	3800	3910	103	80-120	N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623201 2623205

Parameter	Units	50260268001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/kg	4330000	43000	41000	4780000	5450000	1060	2740	75-125	13	20	P6
Cadmium	ug/kg	<218	4300	4100	4200	4010	94	94	75-125	5	20	
Cobalt	ug/kg	1400	4300	4100	5290	5080	91	90	75-125	4	20	
Selenium	ug/kg	262	4300	4100	3390	3280	73	74	75-125	3	20	M3
Silver	ug/kg	157	4300	4100	4190	3910	94	91	75-125	7	20	
Thallium	ug/kg	<544	4300	4100	4420	4210	102	102	75-125	5	20	
Titanium	ug/kg	237000	4300	4100	256000	280000	438	1060	75-125	9	20	N2,P6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568677
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50260268018

METHOD BLANK: 2623525 Matrix: Solid
Associated Lab Samples: 50260268018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	06/23/20 15:27	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	06/23/20 15:27	
1,2,3-Trichloropropane	ug/kg	<100	100	100	06/23/20 15:27	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	06/23/20 15:27	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	06/23/20 15:27	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,3-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,4-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
2-Butanone (MEK)	ug/kg	<750	750	750	06/23/20 15:27	
2-Hexanone	ug/kg	<2500	2500	2500	06/23/20 15:27	
2-Methylnaphthalene	ug/kg	<330	330	330	06/23/20 15:27	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	06/23/20 15:27	
Acetone	ug/kg	<1000	1000	1000	06/23/20 15:27	
Acrylonitrile	ug/kg	<100	100	100	06/23/20 15:27	
Benzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Bromobenzene	ug/kg	<100	100	100	06/23/20 15:27	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
Bromodichloromethane	ug/kg	<100	100	100	06/23/20 15:27	
Bromoform	ug/kg	<100	100	100	06/23/20 15:27	
Bromomethane	ug/kg	<200	200	200	06/23/20 15:27	
Carbon disulfide	ug/kg	<250	250	250	06/23/20 15:27	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chloroethane	ug/kg	<250	250	250	06/23/20 15:27	
Chloroform	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chloromethane	ug/kg	<250	250	250	06/23/20 15:27	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	06/23/20 15:27	
Cyclohexane	ug/kg	<500	500	500	06/23/20 15:27	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623525 Matrix: Solid
Associated Lab Samples: 50260268018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	06/23/20 15:27	
Dibromomethane	ug/kg	<250	250	250	06/23/20 15:27	
Dichlorodifluoromethane	ug/kg	<250	250	250	06/23/20 15:27	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	06/23/20 15:27	
Diisopropyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Hexachloroethane	ug/kg	<300	300	300	06/23/20 15:27	N2
Iodomethane	ug/kg	<100	1000	100	06/23/20 15:27	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	06/23/20 15:27	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
Methyl-tert-butyl ether	ug/kg	<250	250	250	06/23/20 15:27	
Methylene Chloride	ug/kg	<100	100	100	06/23/20 15:27	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
n-Propylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
Naphthalene	ug/kg	<330	330	330	06/23/20 15:27	
o-Xylene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Styrene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
tert-Amylmethyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	06/23/20 15:27	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Tetrahydrofuran	ug/kg	<1000	1000	1000	06/23/20 15:27	N2
Toluene	ug/kg	<100	100	100	06/23/20 15:27	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	06/23/20 15:27	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	06/23/20 15:27	
Trichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Trichlorofluoromethane	ug/kg	<100	100	100	06/23/20 15:27	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	06/23/20 15:27	
4-Bromofluorobenzene (S)	%.	99	60-142		06/23/20 15:27	
Dibromofluoromethane (S)	%.	104	62-137		06/23/20 15:27	
Toluene-d8 (S)	%.	96	64-139		06/23/20 15:27	

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	87	82-119	
1,1,1-Trichloroethane	ug/kg	100	98.9	99	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	84.8	85	54-137	
1,1,2-Trichloroethane	ug/kg	100	84.1	84	77-122	
1,1-Dichloroethane	ug/kg	100	101	101	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	96.3	96	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	88	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	76	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	91	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	82	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	85.6	86	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	83.0	83	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	80	79-117	
1,2-Dichloroethane	ug/kg	100	90.2	90	74-116	
1,2-Dichloropropane	ug/kg	100	90.0	90	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	83	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	84	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	80	76-115	
2-Butanone (MEK)	ug/kg	500	<750	89	65-126	
2-Hexanone	ug/kg	500	<2500	97	54-141	
2-Methylnaphthalene	ug/kg	100	<330	71	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	85	60-133	
Acetone	ug/kg	500	<1000	108	49-139	
Acrylonitrile	ug/kg	400	349	87	66-133	
Benzene	ug/kg	100	90.2	90	71-126	
Bromobenzene	ug/kg	100	<100	82	77-119	
Bromochloromethane	ug/kg	100	79.0	79	60-117	
Bromodichloromethane	ug/kg	100	<100	83	79-122	
Bromoform	ug/kg	100	<100	76	64-121	
Bromomethane	ug/kg	100	<200	103	10-200	
Carbon disulfide	ug/kg	100	<250	97	54-129	
Carbon tetrachloride	ug/kg	100	105	105	78-120	
Chlorobenzene	ug/kg	100	87.5	87	81-117	
Chloroethane	ug/kg	100	<250	102	54-134	
Chloroform	ug/kg	100	83.3	83	80-119	
Chloromethane	ug/kg	100	<250	93	31-118	
cis-1,2-Dichloroethene	ug/kg	100	87.4	87	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	93	74-133	
Cyclohexane	ug/kg	100	<500	103	49-128	N2
Dibromochloromethane	ug/kg	100	<100	87	78-124	
Dibromomethane	ug/kg	100	<250	86	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	119	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	90	50-150	
Ethylbenzene	ug/kg	100	90.8	91	74-127	
Iodomethane	ug/kg	200	132J	66	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	94	85-121	
m&p-Xylene	ug/kg	200	179	90	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	88	78-135	
Methylene Chloride	ug/kg	100	<100	91	73-119	
n-Butylbenzene	ug/kg	100	90.4	90	69-126	
n-Propylbenzene	ug/kg	100	<100	85	73-124	
Naphthalene	ug/kg	100	<330	92	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	89.0	89	74-128	
p-Isopropyltoluene	ug/kg	100	89.8	90	74-124	
sec-Butylbenzene	ug/kg	100	87.4	87	72-124	
Styrene	ug/kg	100	88.8	89	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	103	50-150	
tert-Butylbenzene	ug/kg	100	65.8	66	54-104	
Tetrachloroethene	ug/kg	100	95.5	95	74-120	
Tetrahydrofuran	ug/kg	100	<1000	93	53-135	N2
Toluene	ug/kg	100	<100	90	71-124	
trans-1,2-Dichloroethene	ug/kg	100	93.9	94	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	83	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	311J	78	22-132	
Trichloroethene	ug/kg	100	92.2	92	75-121	
Trichlorofluoromethane	ug/kg	100	125	125	64-135	
Vinyl chloride	ug/kg	100	109	109	51-137	
4-Bromofluorobenzene (S)	%.			100	60-142	
Dibromofluoromethane (S)	%.			95	62-137	
Toluene-d8 (S)	%.			98	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568681
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

METHOD BLANK: 2623538
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	06/24/20 03:04	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	06/24/20 03:04	
1,2,3-Trichloropropane	ug/kg	<100	100	100	06/24/20 03:04	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	06/24/20 03:04	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	06/24/20 03:04	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,3-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,4-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
2-Butanone (MEK)	ug/kg	<750	750	750	06/24/20 03:04	
2-Hexanone	ug/kg	<2500	2500	2500	06/24/20 03:04	
2-Methylnaphthalene	ug/kg	<330	330	330	06/24/20 03:04	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	06/24/20 03:04	
Acetone	ug/kg	<1000	1000	1000	06/24/20 03:04	
Acrylonitrile	ug/kg	<100	100	100	06/24/20 03:04	
Benzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Bromobenzene	ug/kg	<100	100	100	06/24/20 03:04	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
Bromodichloromethane	ug/kg	<100	100	100	06/24/20 03:04	
Bromoform	ug/kg	<100	100	100	06/24/20 03:04	
Bromomethane	ug/kg	<200	200	200	06/24/20 03:04	
Carbon disulfide	ug/kg	<250	250	250	06/24/20 03:04	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chloroethane	ug/kg	<250	250	250	06/24/20 03:04	
Chloroform	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chloromethane	ug/kg	<250	250	250	06/24/20 03:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623538 Matrix: Solid

Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	06/24/20 03:04	
Cyclohexane	ug/kg	<500	500	500	06/24/20 03:04	N2
Dibromochloromethane	ug/kg	<100	100	100	06/24/20 03:04	
Dibromomethane	ug/kg	<250	250	250	06/24/20 03:04	
Dichlorodifluoromethane	ug/kg	<250	250	250	06/24/20 03:04	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	06/24/20 03:04	
Diisopropyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Hexachloroethane	ug/kg	<300	300	300	06/24/20 03:04	N2
Iodomethane	ug/kg	<100	1000	100	06/24/20 03:04	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	06/24/20 03:04	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
Methyl-tert-butyl ether	ug/kg	<250	250	250	06/24/20 03:04	
Methylene Chloride	ug/kg	<100	100	100	06/24/20 03:04	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
n-Propylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
Naphthalene	ug/kg	<330	330	330	06/24/20 03:04	
o-Xylene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Styrene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
tert-Amylmethyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	06/24/20 03:04	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Tetrahydrofuran	ug/kg	<1000	1000	1000	06/24/20 03:04	N2
Toluene	ug/kg	<100	100	100	06/24/20 03:04	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	06/24/20 03:04	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	06/24/20 03:04	
Trichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Trichlorofluoromethane	ug/kg	<100	100	100	06/24/20 03:04	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	06/24/20 03:04	
4-Bromofluorobenzene (S)	%.	103	60-142		06/24/20 03:04	
Dibromofluoromethane (S)	%.	106	62-137		06/24/20 03:04	
Toluene-d8 (S)	%.	98	64-139		06/24/20 03:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	96	82-119	
1,1,1-Trichloroethane	ug/kg	100	103	103	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.9	94	54-137	
1,1,2-Trichloroethane	ug/kg	100	94.6	95	77-122	
1,1-Dichloroethane	ug/kg	100	103	103	68-126	
1,1-Dichloroethene	ug/kg	100	101	101	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	97	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	85	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	98	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	86	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	91.3	91	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	92.3	92	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	86	79-117	
1,2-Dichloroethane	ug/kg	100	93.3	93	74-116	
1,2-Dichloropropane	ug/kg	100	95.2	95	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	88	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	87	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	83	76-115	
2-Butanone (MEK)	ug/kg	500	<750	96	65-126	
2-Hexanone	ug/kg	500	<2500	112	54-141	
2-Methylnaphthalene	ug/kg	100	<330	79	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	98	60-133	
Acetone	ug/kg	500	<1000	113	49-139	
Acrylonitrile	ug/kg	400	384	96	66-133	
Benzene	ug/kg	100	95.7	96	71-126	
Bromobenzene	ug/kg	100	<100	89	77-119	
Bromochloromethane	ug/kg	100	85.2	85	60-117	
Bromodichloromethane	ug/kg	100	<100	88	79-122	
Bromoform	ug/kg	100	<100	84	64-121	
Bromomethane	ug/kg	100	<200	80	10-200	
Carbon disulfide	ug/kg	100	<250	98	54-129	
Carbon tetrachloride	ug/kg	100	105	105	78-120	
Chlorobenzene	ug/kg	100	93.6	94	81-117	
Chloroethane	ug/kg	100	<250	101	54-134	
Chloroform	ug/kg	100	87.3	87	80-119	
Chloromethane	ug/kg	100	<250	95	31-118	
cis-1,2-Dichloroethene	ug/kg	100	92.5	93	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	97	74-133	
Cyclohexane	ug/kg	100	<500	107	49-128	N2
Dibromochloromethane	ug/kg	100	<100	97	78-124	
Dibromomethane	ug/kg	100	<250	90	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	124	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	95	50-150	
Ethylbenzene	ug/kg	100	96.6	97	74-127	
Iodomethane	ug/kg	200	110J	55	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	101	85-121	
m&p-Xylene	ug/kg	200	195	97	72-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl-tert-butyl ether	ug/kg	100	<250	97	78-135	
Methylene Chloride	ug/kg	100	<100	99	73-119	
n-Butylbenzene	ug/kg	100	90.0	90	69-126	
n-Propylbenzene	ug/kg	100	<100	90	73-124	
Naphthalene	ug/kg	100	<330	101	71-128	
o-Xylene	ug/kg	100	93.9	94	74-128	
p-Isopropyltoluene	ug/kg	100	92.0	92	74-124	
sec-Butylbenzene	ug/kg	100	91.0	91	72-124	
Styrene	ug/kg	100	94.1	94	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	131	50-150	
tert-Butylbenzene	ug/kg	100	68.8	69	54-104	
Tetrachloroethene	ug/kg	100	98.8	99	74-120	
Tetrahydrofuran	ug/kg	100	<1000	108	53-135	N2
Toluene	ug/kg	100	<100	99	71-124	
trans-1,2-Dichloroethene	ug/kg	100	98.3	98	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	89	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	313J	78	22-132	
Trichloroethene	ug/kg	100	94.1	94	75-121	
Trichlorofluoromethane	ug/kg	100	128	128	64-135	
Vinyl chloride	ug/kg	100	113	113	51-137	
4-Bromofluorobenzene (S)	%.			105	60-142	
Dibromofluoromethane (S)	%.			99	62-137	
Toluene-d8 (S)	%.			102	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569057
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268002, 50260268004, 50260268008, 50260268009, 50260268012

METHOD BLANK: 2625307 Matrix: Solid
Associated Lab Samples: 50260268002, 50260268004, 50260268008, 50260268009, 50260268012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1221 (Aroclor 1221)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1232 (Aroclor 1232)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1242 (Aroclor 1242)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1248 (Aroclor 1248)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1254 (Aroclor 1254)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1260 (Aroclor 1260)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1262 (Aroclor 1262)	ug/kg	<328	328	328	06/25/20 23:23	N2
PCB-1268 (Aroclor 1268)	ug/kg	<328	328	328	06/25/20 23:23	N2
Tetrachloro-m-xylene (S)	%.	69	25-123		06/25/20 23:23	

LABORATORY CONTROL SAMPLE: 2625308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	164	<326	84	54-128	
PCB-1260 (Aroclor 1260)	ug/kg	164	<326	76	36-118	
Tetrachloro-m-xylene (S)	%.			76	25-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625309 2625310

Parameter	Units	50260681001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	166	167	<32800	<33000	585	659	10-145		20	M0
PCB-1260 (Aroclor 1260)	ug/kg	16.1 mg/kg	166	167	<32800	<33000	-3130	-2820	11-124	4	20	M0
Tetrachloro-m-xylene (S)	%.						0	0	25-123			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568613
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

METHOD BLANK: 2623260
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<318	318	318	06/24/20 08:01	
1,2-Diphenylhydrazine	ug/kg	<1540	1540	1540	06/24/20 08:01	
2,4,5-Trichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4,6-Trichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dimethylphenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dinitrophenol	ug/kg	<1540	1540	1540	06/24/20 08:01	
2,4-Dinitrotoluene	ug/kg	<318	318	318	06/24/20 08:01	
2,6-Dinitrotoluene	ug/kg	<85.4	318	85.4	06/24/20 08:01	
2-Chloronaphthalene	ug/kg	<318	318	318	06/24/20 08:01	
2-Chlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2-Methylnaphthalene	ug/kg	<318	318	318	06/24/20 08:01	
2-Methylphenol(o-Cresol)	ug/kg	<965	965	965	06/24/20 08:01	
2-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
2-Nitrophenol	ug/kg	<318	318	318	06/24/20 08:01	
3&4-Methylphenol(m&p Cresol)	ug/kg	<965	965	965	06/24/20 08:01	
3-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
4,6-Dinitro-2-methylphenol	ug/kg	<801	801	801	06/24/20 08:01	
4-Bromophenylphenyl ether	ug/kg	<318	318	318	06/24/20 08:01	
4-Chloro-3-methylphenol	ug/kg	<270	318	270	06/24/20 08:01	
4-Chlorophenylphenyl ether	ug/kg	<318	318	318	06/24/20 08:01	
4-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
4-Nitrophenol	ug/kg	<1540	1540	1540	06/24/20 08:01	
Acenaphthene	ug/kg	<318	318	318	06/24/20 08:01	
Acenaphthylene	ug/kg	<318	318	318	06/24/20 08:01	
Anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(a)anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(a)pyrene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(b)fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(g,h,i)perylene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(k)fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Chloroethoxy)methane	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Chloroethyl) ether	ug/kg	<154	318	154	06/24/20 08:01	
bis(2-Chloroisopropyl) ether	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Ethylhexyl)phthalate	ug/kg	<318	318	318	06/24/20 08:01	
Butylbenzylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Carbazole	ug/kg	<318	318	318	06/24/20 08:01	
Chrysene	ug/kg	<318	318	318	06/24/20 08:01	
Di-n-butylphthalate	ug/kg	<318	318	318	06/24/20 08:01	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623260 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Di-n-octylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Dibenz(a,h)anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Dibenzofuran	ug/kg	<318	318	318	06/24/20 08:01	
Diethylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Dimethylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
Fluorene	ug/kg	<318	318	318	06/24/20 08:01	
Hexachloro-1,3-butadiene	ug/kg	<92.6	318	92.6	06/24/20 08:01	
Hexachlorobenzene	ug/kg	<318	318	318	06/24/20 08:01	
Hexachlorocyclopentadiene	ug/kg	<965	965	965	06/24/20 08:01	
Hexachloroethane	ug/kg	<318	318	318	06/24/20 08:01	
Indeno(1,2,3-cd)pyrene	ug/kg	<318	318	318	06/24/20 08:01	
Isophorone	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitroso-di-n-propylamine	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitrosodimethylamine	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitrosodiphenylamine	ug/kg	<318	318	318	06/24/20 08:01	
Naphthalene	ug/kg	<318	318	318	06/24/20 08:01	
Nitrobenzene	ug/kg	<318	318	318	06/24/20 08:01	
Pentachlorophenol	ug/kg	<1420	1540	1420	06/24/20 08:01	
Phenanthrene	ug/kg	<318	318	318	06/24/20 08:01	
Phenol	ug/kg	<318	318	318	06/24/20 08:01	
Pyrene	ug/kg	<318	318	318	06/24/20 08:01	
2,4,6-Tribromophenol (S)	%.	84	20-109		06/24/20 08:01	
2-Fluorobiphenyl (S)	%.	81	36-91		06/24/20 08:01	
2-Fluorophenol (S)	%.	96	24-95		06/24/20 08:01	S3
Nitrobenzene-d5 (S)	%.	59	26-96		06/24/20 08:01	
p-Terphenyl-d14 (S)	%.	107	27-117		06/24/20 08:01	
Phenol-d5 (S)	%.	82	32-93		06/24/20 08:01	

LABORATORY CONTROL SAMPLE: 2623261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1570	1290	82	52-89	
2,4-Dinitrotoluene	ug/kg	1570	1340	86	41-116	
2-Chlorophenol	ug/kg	1570	1450	92	48-97	
2-Methylnaphthalene	ug/kg	1570	1410	90	51-98	
4-Chloro-3-methylphenol	ug/kg	1570	1670	106	51-108	
4-Nitrophenol	ug/kg	1570	<1500	75	42-118	
Acenaphthene	ug/kg	1570	1270	81	58-94	
Acenaphthylene	ug/kg	1570	1240	79	56-94	
Anthracene	ug/kg	1570	1350	86	59-98	
Benzo(a)anthracene	ug/kg	1570	1390	89	60-103	
Benzo(a)pyrene	ug/kg	1570	1430	91	57-96	

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Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(b)fluoranthene	ug/kg	1570	1500	96	57-104	
Benzo(g,h,i)perylene	ug/kg	1570	1260	80	56-103	
Benzo(k)fluoranthene	ug/kg	1570	1440	92	55-104	
Chrysene	ug/kg	1570	1390	89	59-105	
Dibenz(a,h)anthracene	ug/kg	1570	1260	80	54-103	
Fluoranthene	ug/kg	1570	1440	92	57-107	
Fluorene	ug/kg	1570	1100	70	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1570	1250	80	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1570	1240	79	43-94	
Naphthalene	ug/kg	1570	1330	85	51-90	
Pentachlorophenol	ug/kg	1570	<1380	71	24-118	
Phenanthrene	ug/kg	1570	1380	88	60-96	
Phenol	ug/kg	1570	1330	85	44-101	
Pyrene	ug/kg	1570	1360	87	59-108	
2,4,6-Tribromophenol (S)	%.			86	20-109	
2-Fluorobiphenyl (S)	%.			92	36-91	S0
2-Fluorophenol (S)	%.			98	24-95	S0
Nitrobenzene-d5 (S)	%.			72	26-96	
p-Terphenyl-d14 (S)	%.			113	27-117	
Phenol-d5 (S)	%.			92	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623262 2623263

Parameter	Units	50259803017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1920	1950	1510	1780	79	91	30-96	16	20	
2,4-Dinitrotoluene	ug/kg	ND	1920	1950	1230	804	64	41	10-127	42	20	R1
2-Chlorophenol	ug/kg	ND	1920	1950	1620	1540	84	79	17-107	5	20	
2-Methylnaphthalene	ug/kg	ND	1920	1950	1980	1560	103	80	20-120	23	20	R1
4-Chloro-3-methylphenol	ug/kg	ND	1920	1950	2320	1760	121	90	22-117	28	20	M1,R1
4-Nitrophenol	ug/kg	ND	1920	1950	<1850	<1870	72	61	10-131		20	
Acenaphthene	ug/kg	ND	1920	1950	1500	1530	78	78	19-115	2	20	
Acenaphthylene	ug/kg	ND	1920	1950	1460	1530	76	78	11-122	5	20	
Anthracene	ug/kg	ND	1920	1950	1370	1460	71	75	10-133	6	20	
Benzo(a)anthracene	ug/kg	ND	1920	1950	1290	1440	67	74	10-137	11	20	
Benzo(a)pyrene	ug/kg	ND	1920	1950	1270	1410	66	72	10-132	11	20	
Benzo(b)fluoranthene	ug/kg	ND	1920	1950	1410	1470	73	75	10-134	4	20	
Benzo(g,h,i)perylene	ug/kg	ND	1920	1950	1130	1250	59	64	10-138	10	20	
Benzo(k)fluoranthene	ug/kg	ND	1920	1950	1330	1280	69	66	10-140	4	20	
Chrysene	ug/kg	ND	1920	1950	1420	1500	74	77	10-150	5	20	
Dibenz(a,h)anthracene	ug/kg	ND	1920	1950	1230	1320	64	67	10-126	7	20	
Fluoranthene	ug/kg	ND	1920	1950	1280	1480	66	76	10-128	15	20	
Fluorene	ug/kg	ND	1920	1950	1570	1520	81	78	12-127	3	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1920	1950	1130	1250	58	64	10-125	10	20	
N-Nitroso-di-n-propylamine	ug/kg	ND	1920	1950	1480	1990	77	102	23-101	29	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623262 2623263

Parameter	Units	50259803017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/kg	ND	1920	1950	1550	1410	81	72	12-120	9	20	
Pentachlorophenol	ug/kg	ND	1920	1950	<1700	<1720	82	78	10-112		20	
Phenanthrene	ug/kg	ND	1920	1950	1430	1530	74	79	10-125	7	20	
Phenol	ug/kg	ND	1920	1950	1500	1500	78	77	22-105	0	20	
Pyrene	ug/kg	ND	1920	1950	1390	1750	72	90	10-146	23	20	R1
2,4,6-Tribromophenol (S)	%.						79	76	20-109			
2-Fluorobiphenyl (S)	%.						99	79	36-91			S0
2-Fluorophenol (S)	%.						81	82	24-95			
Nitrobenzene-d5 (S)	%.						75	79	26-96			
p-Terphenyl-d14 (S)	%.						85	87	27-117			
Phenol-d5 (S)	%.						84	82	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569058
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268012, 50260268014, 50260268015

METHOD BLANK: 2625311 Matrix: Solid
Associated Lab Samples: 50260268012, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<330	330	330	06/25/20 14:54	
1,2-Diphenylhydrazine	ug/kg	<1600	1600	1600	06/25/20 14:54	
2,4,5-Trichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4,6-Trichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dimethylphenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dinitrophenol	ug/kg	<1600	1600	1600	06/25/20 14:54	
2,4-Dinitrotoluene	ug/kg	<330	330	330	06/25/20 14:54	
2,6-Dinitrotoluene	ug/kg	<88.5	330	88.5	06/25/20 14:54	
2-Chloronaphthalene	ug/kg	<330	330	330	06/25/20 14:54	
2-Chlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2-Methylnaphthalene	ug/kg	<330	330	330	06/25/20 14:54	
2-Methylphenol(o-Cresol)	ug/kg	<1000	1000	1000	06/25/20 14:54	
2-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
2-Nitrophenol	ug/kg	<330	330	330	06/25/20 14:54	
3&4-Methylphenol(m&p Cresol)	ug/kg	<1000	1000	1000	06/25/20 14:54	
3-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
4,6-Dinitro-2-methylphenol	ug/kg	<830	830	830	06/25/20 14:54	
4-Bromophenylphenyl ether	ug/kg	<330	330	330	06/25/20 14:54	
4-Chloro-3-methylphenol	ug/kg	<280	330	280	06/25/20 14:54	
4-Chlorophenylphenyl ether	ug/kg	<330	330	330	06/25/20 14:54	
4-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
4-Nitrophenol	ug/kg	<1600	1600	1600	06/25/20 14:54	
Acenaphthene	ug/kg	<330	330	330	06/25/20 14:54	
Acenaphthylene	ug/kg	<330	330	330	06/25/20 14:54	
Anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(a)anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(a)pyrene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(b)fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(g,h,i)perylene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(k)fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Chloroethoxy)methane	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Chloroethyl) ether	ug/kg	<160	330	160	06/25/20 14:54	
bis(2-Chloroisopropyl) ether	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Ethylhexyl)phthalate	ug/kg	<330	330	330	06/25/20 14:54	
Butylbenzylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Carbazole	ug/kg	<330	330	330	06/25/20 14:54	
Chrysene	ug/kg	<330	330	330	06/25/20 14:54	
Di-n-butylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Di-n-octylphthalate	ug/kg	<330	330	330	06/25/20 14:54	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2625311 Matrix: Solid
Associated Lab Samples: 50260268012, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Dibenzofuran	ug/kg	<330	330	330	06/25/20 14:54	
Diethylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Dimethylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
Fluorene	ug/kg	<330	330	330	06/25/20 14:54	
Hexachloro-1,3-butadiene	ug/kg	<96.0	330	96.0	06/25/20 14:54	
Hexachlorobenzene	ug/kg	<330	330	330	06/25/20 14:54	
Hexachlorocyclopentadiene	ug/kg	<1000	1000	1000	06/25/20 14:54	
Hexachloroethane	ug/kg	<330	330	330	06/25/20 14:54	
Indeno(1,2,3-cd)pyrene	ug/kg	<330	330	330	06/25/20 14:54	
Isophorone	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitroso-di-n-propylamine	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitrosodimethylamine	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitrosodiphenylamine	ug/kg	<330	330	330	06/25/20 14:54	
Naphthalene	ug/kg	<330	330	330	06/25/20 14:54	
Nitrobenzene	ug/kg	<330	330	330	06/25/20 14:54	
Pentachlorophenol	ug/kg	<1470	1600	1470	06/25/20 14:54	
Phenanthrene	ug/kg	<330	330	330	06/25/20 14:54	
Phenol	ug/kg	<330	330	330	06/25/20 14:54	
Pyrene	ug/kg	<330	330	330	06/25/20 14:54	
2,4,6-Tribromophenol (S)	%.	83	20-109		06/25/20 14:54	
2-Fluorobiphenyl (S)	%.	110	36-91		06/25/20 14:54	S3
2-Fluorophenol (S)	%.	95	24-95		06/25/20 14:54	
Nitrobenzene-d5 (S)	%.	53	26-96		06/25/20 14:54	
p-Terphenyl-d14 (S)	%.	111	27-117		06/25/20 14:54	
Phenol-d5 (S)	%.	93	32-93		06/25/20 14:54	

LABORATORY CONTROL SAMPLE: 2625312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1280	77	52-89	
2,4-Dinitrotoluene	ug/kg	1670	1360	81	41-116	
2-Chlorophenol	ug/kg	1670	1370	82	48-97	
2-Methylnaphthalene	ug/kg	1670	1250	75	51-98	
4-Chloro-3-methylphenol	ug/kg	1670	1470	88	51-108	
4-Nitrophenol	ug/kg	1670	<1600	69	42-118	
Acenaphthene	ug/kg	1670	1330	80	58-94	
Acenaphthylene	ug/kg	1670	1310	79	56-94	
Anthracene	ug/kg	1670	1320	79	59-98	
Benzo(a)anthracene	ug/kg	1670	1400	84	60-103	
Benzo(a)pyrene	ug/kg	1670	1370	82	57-96	
Benzo(b)fluoranthene	ug/kg	1670	1490	89	57-104	
Benzo(g,h,i)perylene	ug/kg	1670	1220	73	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2625312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1670	1320	79	55-104	
Chrysene	ug/kg	1670	1320	79	59-105	
Dibenz(a,h)anthracene	ug/kg	1670	1240	75	54-103	
Fluoranthene	ug/kg	1670	1890	113	57-107	L1
Fluorene	ug/kg	1670	1330	80	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1230	74	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1670	1300	78	43-94	
Naphthalene	ug/kg	1670	1250	75	51-90	
Pentachlorophenol	ug/kg	1670	<1470	73	24-118	
Phenanthrene	ug/kg	1670	1350	81	60-96	
Phenol	ug/kg	1670	1320	79	44-101	
Pyrene	ug/kg	1670	1590	95	59-108	
2,4,6-Tribromophenol (S)	%.			83	20-109	
2-Fluorobiphenyl (S)	%.			94	36-91	S0
2-Fluorophenol (S)	%.			90	24-95	
Nitrobenzene-d5 (S)	%.			74	26-96	
p-Terphenyl-d14 (S)	%.			150	27-117	S0
Phenol-d5 (S)	%.			84	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625313 2625314

Parameter	Units	50259803013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1830	1860	1500	1510	81	81	30-96	1	20	
2,4-Dinitrotoluene	ug/kg	ND	1830	1860	1530	1510	83	82	10-127	1	20	
2-Chlorophenol	ug/kg	ND	1830	1860	1420	1510	77	81	17-107	6	20	
2-Methylnaphthalene	ug/kg	ND	1830	1860	1260	1290	69	70	20-120	2	20	
4-Chloro-3-methylphenol	ug/kg	ND	1830	1860	1550	1640	84	88	22-117	5	20	
4-Nitrophenol	ug/kg	ND	1830	1860	<1770	<1780	75	75	10-131		20	
Acenaphthene	ug/kg	ND	1830	1860	1530	1490	83	80	19-115	3	20	
Acenaphthylene	ug/kg	ND	1830	1860	1450	1490	79	80	11-122	2	20	
Anthracene	ug/kg	ND	1830	1860	1500	1460	82	78	10-133	3	20	
Benzo(a)anthracene	ug/kg	ND	1830	1860	1530	1540	83	83	10-137	1	20	
Benzo(a)pyrene	ug/kg	ND	1830	1860	1610	1520	88	82	10-132	6	20	
Benzo(b)fluoranthene	ug/kg	ND	1830	1860	2480	1690	135	91	10-134	38	20	M1,R1
Benzo(g,h,i)perylene	ug/kg	ND	1830	1860	1340	1380	73	75	10-138	3	20	
Benzo(k)fluoranthene	ug/kg	ND	1830	1860	2230	1520	121	82	10-140	38	20	R1
Chrysene	ug/kg	ND	1830	1860	1500	1500	82	81	10-150	0	20	
Dibenz(a,h)anthracene	ug/kg	ND	1830	1860	1380	1380	75	74	10-126	0	20	
Fluoranthene	ug/kg	ND	1830	1860	2390	1510	130	81	10-128	45	20	M0,R1
Fluorene	ug/kg	ND	1830	1860	1470	1550	80	84	12-127	5	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1830	1860	1360	1370	74	74	10-125	1	20	
N-Nitroso-di-n-propylamine	ug/kg	ND	1830	1860	1740	1860	94	100	23-101	7	20	
Naphthalene	ug/kg	ND	1830	1860	1400	1420	76	77	12-120	2	20	
Pentachlorophenol	ug/kg	ND	1830	1860	<1620	<1640	76	71	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625313 2625314

Parameter	Units	50259803013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	ND	1830	1860	1510	1480	82	80	10-125	2	20	
Phenol	ug/kg	ND	1830	1860	1320	1350	72	73	22-105	2	20	
Pyrene	ug/kg	ND	1830	1860	1640	2360	89	127	10-146	36	20	R1
2,4,6-Tribromophenol (S)	%.						78	64	20-109			
2-Fluorobiphenyl (S)	%.						96	79	36-91			S0
2-Fluorophenol (S)	%.						75	77	24-95			
Nitrobenzene-d5 (S)	%.						78	85	26-96			
p-Terphenyl-d14 (S)	%.						161	95	27-117			S0
Phenol-d5 (S)	%.						75	78	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569491
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268009, 50260268013

METHOD BLANK: 2627633 Matrix: Solid
Associated Lab Samples: 50260268009, 50260268013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<326	326	326	06/29/20 22:54	
1,2-Diphenylhydrazine	ug/kg	<1580	1580	1580	06/29/20 22:54	
2,4,5-Trichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4,6-Trichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dimethylphenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dinitrophenol	ug/kg	<1580	1580	1580	06/29/20 22:54	
2,4-Dinitrotoluene	ug/kg	<326	326	326	06/29/20 22:54	
2,6-Dinitrotoluene	ug/kg	<87.3	326	87.3	06/29/20 22:54	
2-Chloronaphthalene	ug/kg	<326	326	326	06/29/20 22:54	
2-Chlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2-Methylnaphthalene	ug/kg	<326	326	326	06/29/20 22:54	
2-Methylphenol(o-Cresol)	ug/kg	<987	987	987	06/29/20 22:54	
2-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
2-Nitrophenol	ug/kg	<326	326	326	06/29/20 22:54	
3&4-Methylphenol(m&p Cresol)	ug/kg	<987	987	987	06/29/20 22:54	
3-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
4,6-Dinitro-2-methylphenol	ug/kg	<819	819	819	06/29/20 22:54	
4-Bromophenylphenyl ether	ug/kg	<326	326	326	06/29/20 22:54	
4-Chloro-3-methylphenol	ug/kg	<276	326	276	06/29/20 22:54	
4-Chlorophenylphenyl ether	ug/kg	<326	326	326	06/29/20 22:54	
4-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
4-Nitrophenol	ug/kg	<1580	1580	1580	06/29/20 22:54	
Acenaphthene	ug/kg	<326	326	326	06/29/20 22:54	
Acenaphthylene	ug/kg	<326	326	326	06/29/20 22:54	
Anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(a)anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(a)pyrene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(b)fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(g,h,i)perylene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(k)fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Chloroethoxy)methane	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Chloroethyl) ether	ug/kg	<158	326	158	06/29/20 22:54	
bis(2-Chloroisopropyl) ether	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Ethylhexyl)phthalate	ug/kg	<326	326	326	06/29/20 22:54	
Butylbenzylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Carbazole	ug/kg	<326	326	326	06/29/20 22:54	
Chrysene	ug/kg	<326	326	326	06/29/20 22:54	
Di-n-butylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Di-n-octylphthalate	ug/kg	<326	326	326	06/29/20 22:54	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2627633 Matrix: Solid
Associated Lab Samples: 50260268009, 50260268013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Dibenzofuran	ug/kg	<326	326	326	06/29/20 22:54	
Diethylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Dimethylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
Fluorene	ug/kg	<326	326	326	06/29/20 22:54	
Hexachloro-1,3-butadiene	ug/kg	<94.7	326	94.7	06/29/20 22:54	
Hexachlorobenzene	ug/kg	<326	326	326	06/29/20 22:54	
Hexachlorocyclopentadiene	ug/kg	<987	987	987	06/29/20 22:54	
Hexachloroethane	ug/kg	<326	326	326	06/29/20 22:54	
Indeno(1,2,3-cd)pyrene	ug/kg	<326	326	326	06/29/20 22:54	
Isophorone	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitroso-di-n-propylamine	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitrosodimethylamine	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitrosodiphenylamine	ug/kg	<326	326	326	06/29/20 22:54	
Naphthalene	ug/kg	<326	326	326	06/29/20 22:54	
Nitrobenzene	ug/kg	<326	326	326	06/29/20 22:54	
Pentachlorophenol	ug/kg	<1450	1580	1450	06/29/20 22:54	
Phenanthrene	ug/kg	<326	326	326	06/29/20 22:54	
Phenol	ug/kg	<326	326	326	06/29/20 22:54	
Pyrene	ug/kg	<326	326	326	06/29/20 22:54	
2,4,6-Tribromophenol (S)	%.	82	20-109		06/29/20 22:54	
2-Fluorobiphenyl (S)	%.	79	36-91		06/29/20 22:54	
2-Fluorophenol (S)	%.	84	24-95		06/29/20 22:54	
Nitrobenzene-d5 (S)	%.	77	26-96		06/29/20 22:54	
p-Terphenyl-d14 (S)	%.	108	27-117		06/29/20 22:54	
Phenol-d5 (S)	%.	84	32-93		06/29/20 22:54	

LABORATORY CONTROL SAMPLE: 2627634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1590	1240	78	52-89	
2,4-Dinitrotoluene	ug/kg	1590	1250	79	41-116	
2-Chlorophenol	ug/kg	1590	1320	83	48-97	
2-Methylnaphthalene	ug/kg	1590	1260	79	51-98	
4-Chloro-3-methylphenol	ug/kg	1590	1450	92	51-108	
4-Nitrophenol	ug/kg	1590	<1520	85	42-118	
Acenaphthene	ug/kg	1590	1310	83	58-94	
Acenaphthylene	ug/kg	1590	1320	83	56-94	
Anthracene	ug/kg	1590	1340	85	59-98	
Benzo(a)anthracene	ug/kg	1590	1340	85	60-103	
Benzo(a)pyrene	ug/kg	1590	1360	86	57-96	
Benzo(b)fluoranthene	ug/kg	1590	1480	93	57-104	
Benzo(g,h,i)perylene	ug/kg	1590	1390	88	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2627634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1590	1250	79	55-104	
Chrysene	ug/kg	1590	1250	79	59-105	
Dibenz(a,h)anthracene	ug/kg	1590	1430	90	54-103	
Fluoranthene	ug/kg	1590	1450	91	57-107	
Fluorene	ug/kg	1590	1370	86	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1590	1380	87	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1590	1430	90	43-94	
Naphthalene	ug/kg	1590	1220	77	51-90	
Pentachlorophenol	ug/kg	1590	<1400	78	24-118	
Phenanthrene	ug/kg	1590	1370	86	60-96	
Phenol	ug/kg	1590	1330	84	44-101	
Pyrene	ug/kg	1590	1340	84	59-108	
2,4,6-Tribromophenol (S)	%.			93	20-109	
2-Fluorobiphenyl (S)	%.			77	36-91	
2-Fluorophenol (S)	%.			83	24-95	
Nitrobenzene-d5 (S)	%.			83	26-96	
p-Terphenyl-d14 (S)	%.			110	27-117	
Phenol-d5 (S)	%.			87	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627635 2627636

Parameter	Units	50260268013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	<422	2120	1990	1340	1230	63	62	30-96	9	20	
2,4-Dinitrotoluene	ug/kg	<422	2120	1990	1210	1140	57	58	10-127	6	20	
2-Chlorophenol	ug/kg	<422	2120	1990	1470	1360	70	68	17-107	8	20	
2-Methylnaphthalene	ug/kg	<422	2120	1990	1230	1150	58	58	20-120	7	20	
4-Chloro-3-methylphenol	ug/kg	<358	2120	1990	1450	1450	68	73	22-117	1	20	
4-Nitrophenol	ug/kg	<2050	2120	1990	<2030	<1910	67	68	10-131		20	
Acenaphthene	ug/kg	<422	2120	1990	1160	1120	55	57	19-115	3	20	
Acenaphthylene	ug/kg	<422	2120	1990	1210	1140	57	58	11-122	6	20	
Anthracene	ug/kg	<422	2120	1990	1110	1120	52	56	10-133	1	20	
Benzo(a)anthracene	ug/kg	<422	2120	1990	1200	1110	57	56	10-137	8	20	
Benzo(a)pyrene	ug/kg	<422	2120	1990	1110	998	53	50	10-132	11	20	
Benzo(b)fluoranthene	ug/kg	<422	2120	1990	1180	958	55	48	10-134	20	20	
Benzo(g,h,i)perylene	ug/kg	<422	2120	1990	1070	951	51	48	10-138	12	20	
Benzo(k)fluoranthene	ug/kg	<422	2120	1990	1050	1070	49	54	10-140	2	20	
Chrysene	ug/kg	<422	2120	1990	1230	1080	58	54	10-150	13	20	
Dibenz(a,h)anthracene	ug/kg	<422	2120	1990	1150	994	54	50	10-126	15	20	
Fluoranthene	ug/kg	<422	2120	1990	1520	1390	54	52	10-128	9	20	
Fluorene	ug/kg	<422	2120	1990	1180	1160	56	58	12-127	2	20	
Indeno(1,2,3-cd)pyrene	ug/kg	<422	2120	1990	1010	920	48	46	10-125	10	20	
N-Nitroso-di-n-propylamine	ug/kg	<422	2120	1990	1590	1480	75	74	23-101	8	20	
Naphthalene	ug/kg	<422	2120	1990	1340	1220	63	61	12-120	10	20	
Pentachlorophenol	ug/kg	<1880	2120	1990	<1870	<1750	55	60	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627635 2627636

Parameter	Units	50260268013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	<422	2120	1990	1340	1320	53	55	10-125	1	20	
Phenol	ug/kg	<422	2120	1990	1420	1380	67	70	22-105	2	20	
Pyrene	ug/kg	<422	2120	1990	1440	1330	54	52	10-146	8	20	
2,4,6-Tribromophenol (S)	%.						68	71	20-109			
2-Fluorobiphenyl (S)	%.						59	59	36-91			
2-Fluorophenol (S)	%.						69	73	24-95			
Nitrobenzene-d5 (S)	%.						68	67	26-96			
p-Terphenyl-d14 (S)	%.						67	69	27-117			
Phenol-d5 (S)	%.						70	73	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568683
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006

SAMPLE DUPLICATE: 2623545

Parameter	Units	50260268001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.0	8.6	5	5	

SAMPLE DUPLICATE: 2623546

Parameter	Units	50260171001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.7	13.4	5	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568712
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

SAMPLE DUPLICATE: 2623658

Parameter	Units	50260268007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.8	12.6	7	5	R1

SAMPLE DUPLICATE: 2623659

Parameter	Units	50260285007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	60.7	58.2	4	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 570566
QC Batch Method: EPA 3060A
Analysis Method: EPA 7196A
Analysis Description: 7196 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268005

METHOD BLANK: 2632291 Matrix: Solid
Associated Lab Samples: 50260268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	<2.0	2.0	2.0	07/07/20 16:14	

LABORATORY CONTROL SAMPLE: 2632292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	969	898	93	80-120	

MATRIX SPIKE SAMPLE: 2632294

Parameter	Units	50261280004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	1090	208	19	75-125	1d,M0

MATRIX SPIKE SAMPLE: 2632295

Parameter	Units	50261280004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	42.3	<10.6	-1	75-125	1d,M0

SAMPLE DUPLICATE: 2632293

Parameter	Units	50260268005 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	<2.1	<2.1		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	Redox (202 mV) and pH (7.85) values indicate a naturally reducing matrix. This accounts for the poor recovery values on the sample per method Eh/pH phase diagram.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L5	LCS recovery exceeded QC limits. Batch accepted based on matrix spike recovery within LCS limits.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
N	The reported TIC has an 85% or higher match on a mass spectral library search.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268001	**MW-122 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268002	**MW-123 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268003	**MW-124 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268004	**MW-125 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268005	**MW-126 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268006	**MW-126 (7.5-8.5')**	EPA 8015 Alcohol-Glycol	568440		
50260268007	**MW-127 (6-7')**	EPA 8015 Alcohol-Glycol	568440		
50260268008	**MW-127 (10-11')**	EPA 8015 Alcohol-Glycol	568440		
50260268009	**MW-128 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268010	**MW-128 (8-9')**	EPA 8015 Alcohol-Glycol	568440		
50260268011	**MW-129 (3-4')**	EPA 8015 Alcohol-Glycol	568440		
50260268012	**MW-130 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268013	**MW-131 (2-3')**	EPA 8015 Alcohol-Glycol	568440		
50260268014	**Dup. 1**	EPA 8015 Alcohol-Glycol	568440		
50260268015	**Dup. 2**	EPA 8015 Alcohol-Glycol	568440		
50260268002	**MW-123 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268004	**MW-125 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268008	**MW-127 (10-11')**	EPA 3546	569057	EPA 8082	569164
50260268009	**MW-128 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268012	**MW-130 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268001	**MW-122 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268002	**MW-123 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268003	**MW-124 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268004	**MW-125 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268005	**MW-126 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268006	**MW-126 (7.5-8.5')**	EPA 3050	568327	EPA 6010	569711
50260268007	**MW-127 (6-7')**	EPA 3050	568327	EPA 6010	569711
50260268008	**MW-127 (10-11')**	EPA 3050	568327	EPA 6010	569711
50260268009	**MW-128 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268010	**MW-128 (8-9')**	EPA 3050	568327	EPA 6010	569711
50260268011	**MW-129 (3-4')**	EPA 3050	568327	EPA 6010	569711
50260268012	**MW-130 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268013	**MW-131 (2-3')**	EPA 3050	568327	EPA 6010	569711
50260268014	**Dup. 1**	EPA 3050	568327	EPA 6010	569711
50260268015	**Dup. 2**	EPA 3050	568327	EPA 6010	569711
50260268001	**MW-122 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268002	**MW-123 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268003	**MW-124 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268004	**MW-125 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268005	**MW-126 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268006	**MW-126 (7.5-8.5')**	EPA 3050B	568592	EPA 6020	569073
50260268007	**MW-127 (6-7')**	EPA 3050B	568592	EPA 6020	569073
50260268008	**MW-127 (10-11')**	EPA 3050B	568592	EPA 6020	569073
50260268009	**MW-128 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268010	**MW-128 (8-9')**	EPA 3050B	568592	EPA 6020	569073
50260268011	**MW-129 (3-4')**	EPA 3050B	568592	EPA 6020	569073
50260268012	**MW-130 (4-5')**	EPA 3050B	568592	EPA 6020	569073

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268013	MW-131 (2-3')	EPA 3050B	568592	EPA 6020	569073
50260268014	Dup. 1	EPA 3050B	568592	EPA 6020	569073
50260268015	Dup. 2	EPA 3050B	568592	EPA 6020	569073
50260268001	MW-122 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268002	MW-123 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268003	MW-124 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268004	MW-125 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268005	MW-126 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268006	MW-126 (7.5-8.5')	EPA 7471	569181	EPA 7471	569347
50260268007	MW-127 (6-7')	EPA 7471	569181	EPA 7471	569347
50260268008	MW-127 (10-11')	EPA 7471	569181	EPA 7471	569347
50260268009	MW-128 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268010	MW-128 (8-9')	EPA 7471	569181	EPA 7471	569347
50260268011	MW-129 (3-4')	EPA 7471	569181	EPA 7471	569347
50260268012	MW-130 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268013	MW-131 (2-3')	EPA 7471	569181	EPA 7471	569347
50260268014	Dup. 1	EPA 7471	569181	EPA 7471	569347
50260268015	Dup. 2	EPA 7471	569181	EPA 7471	569347
50260268001	MW-122 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268002	MW-123 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268003	MW-124 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268004	MW-125 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268005	MW-126 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268006	MW-126 (7.5-8.5')	EPA 3546	568613	EPA 8270	568826
50260268007	MW-127 (6-7')	EPA 3546	568613	EPA 8270	568826
50260268008	MW-127 (10-11')	EPA 3546	568613	EPA 8270	568826
50260268009	MW-128 (4-5')	EPA 3546	569491	EPA 8270	569827
50260268010	MW-128 (8-9')	EPA 3546	568613	EPA 8270	568826
50260268011	MW-129 (3-4')	EPA 3546	568613	EPA 8270	568826
50260268012	MW-130 (4-5')	EPA 3546	569058	EPA 8270	569235
50260268013	MW-131 (2-3')	EPA 3546	569491	EPA 8270	569827
50260268014	Dup. 1	EPA 3546	569058	EPA 8270	569235
50260268015	Dup. 2	EPA 3546	569058	EPA 8270	569235
50260268001	MW-122 (4-5')	EPA 8260	568681		
50260268002	MW-123 (4-5')	EPA 8260	568681		
50260268003	MW-124 (4-5')	EPA 8260	568681		
50260268004	MW-125 (4-5')	EPA 8260	568681		
50260268005	MW-126 (4-5')	EPA 8260	568681		
50260268006	MW-126 (7.5-8.5')	EPA 8260	568681		
50260268007	MW-127 (6-7')	EPA 8260	568681		
50260268008	MW-127 (10-11')	EPA 8260	568681		
50260268009	MW-128 (4-5')	EPA 8260	568681		
50260268010	MW-128 (8-9')	EPA 8260	568681		
50260268011	MW-129 (3-4')	EPA 8260	568681		
50260268012	MW-130 (4-5')	EPA 8260	568681		

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268013	**MW-131 (2-3')**	EPA 8260	568681		
50260268014	**Dup. 1**	EPA 8260	568681		
50260268015	**Dup. 2**	EPA 8260	568681		
50260268016	**Trip Blank**	EPA 8260	568681		
50260268017	**Trip Blank**	EPA 8260	568681		
50260268018	**Field Blank**	EPA 8260	568677		
50260268001	**MW-122 (4-5')**	SM 2540G	568683		
50260268002	**MW-123 (4-5')**	SM 2540G	568683		
50260268003	**MW-124 (4-5')**	SM 2540G	568683		
50260268004	**MW-125 (4-5')**	SM 2540G	568683		
50260268005	**MW-126 (4-5')**	SM 2540G	568683		
50260268006	**MW-126 (7.5-8.5')**	SM 2540G	568683		
50260268007	**MW-127 (6-7')**	SM 2540G	568712		
50260268008	**MW-127 (10-11')**	SM 2540G	568712		
50260268009	**MW-128 (4-5')**	SM 2540G	568712		
50260268010	**MW-128 (8-9')**	SM 2540G	568712		
50260268011	**MW-129 (3-4')**	SM 2540G	568712		
50260268012	**MW-130 (4-5')**	SM 2540G	568712		
50260268013	**MW-131 (2-3')**	SM 2540G	568712		
50260268014	**Dup. 1**	SM 2540G	568712		
50260268015	**Dup. 2**	SM 2540G	568712		
50260268005	**MW-126 (4-5')**	EPA 3060A	570566	EPA 7196A	570880
50260268005	**MW-126 (4-5')**	Trivalent Chromium Calculation	571475		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO# : 50260268

50260268

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Detroit Axle	Report To:	Ryann.Scott@atcgs.com	Attention:	Ryann Scott
Address:	1600 W. 8 Mile Rd. Ferndale, MI 48220	Copy To:		Company Name:	ATC Group Services,
Email To:	Ryann.Scott@atcgs.com	Purchase Order No.		Address:	46555 Humboldt Drive, S
Phone:	248-669-5140 Fax 248-669-5147	Client Project ID:	NPDAX19001	Pace Quote Reference:	
Requested Due Date/TAT:	10 Day (Standard)	Container Order Number:		Pace Project Manager:	
				Pace Profile #:	

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM#	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs (+ MTBE & fuel oxygenates)	SVOCs	MI Part 201 Full Metals List	PCBs	Residual Chlorine (Y/N)
1	MW-122 (4-5')	SL	G			6/15/2020	1337		3	x						x			x	x	x		
2	MW-123 (4-5')	SL	G			6/15/2020	1315		3	x						x			x	x	x	x	
3	MW-124 (4-5')	SL	G			6/15/2020	1240		3	x						x			x	x	x		
4	MW-125 (4-5')	SL	G			6/16/2020	1100		3	x						x			x	x	x	x	
5	MW-126 (4-5')	SL	G			6/15/2020	1020		3	x						x			x	x	x		
6	MW-126 (7.5-8.5')	SL	G			6/15/2020	1030		3	x						x			-x	x	x		
7	MW-127 (6-7')	SL	G			6/15/2020	1130		3	x						x			x	x	x		
8	MW-127 (10-11')	SL	G			6/15/2020	1120		3	x						x			x	x	x	x	
9	MW-128 (4-5')	SL	G			6/15/2020	945		3	x						x			x	x	x	x	
10	MW-128 (8-9')	SL	G			6/15/2020	947		3	x						x			x	x	x		
11	MW-129 (3-4')	SL	G			6/15/2020	1156		3	x						x			x	x	x		
12	MW-130 (4-5')	SL	G			6/15/2020	1422		3	x						x			x	x	x	x	
13	MW-131 (2-3')	SL	G			6/15/2020	1355		3	x						x			x	x	x		
14	Dup.1	SL	G			6/15/2020	1200		3	x						x			x	x	x		
15	Dup.2	SL	G			6/16/2020	1200		3	x						x			x	x	x		
16	Trip Blank	SL	G			6/11/2020	1429		1	x						x			x				
17	Trip Blank	SL	G			6/11/2020	1430		1	x						x			x				
18	Field Blank	SL	G			6/15/2020	1200		2	x						x			x				
19																							

P 9157 L7

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ira Adolphues	6/17/2020	1030	[signature] /ATC	6/17/20	1600	
				[signature]	6-18-20	0925	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adolphues

SIGNATURE of SAMPLER: DATE Signed: 6/17/2020

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 6.18.20 1601	Evaluated by: AWS	**Affix Workorder/Login Label Here or List Pace Workorder Number**	
Client: DETROIT AXLE - ATC		5026 0268	
Project Manager: BJH	Profile ID:		
Rush TAT Requested: YES (NO)	Due Date:		
Lab Notified of Rush or Short Holds: YES (NO)		**Non Conformance Form Required:** YES (NO)	

Samples Received Via: (FedEx) UPS Client Pace Courier Other: _____				**Comments:**
Custody Seals Present and Intact:	YES	NO	(NA)	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	(NA)	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	(N/A)	
Short Holds Present (< 72 Hours):	YES	(NO)		
Samples Received in Hold:	(YES)	NO		
Custody Signatures Present:	(YES)	NO		
Collector Signature Present:	(YES)	NO		
Packing Material Used:	(YES)	NO		
Samples Collected Today and On Ice:	YES	NO	(N/A)	

IR Gun #: (280) 281	**Digital Thermometer #:** 282 283
Ice Type: WET Bagged / (WET Loose) BLUE NONE	**1.** Cooler Temp Upon Receipt: 2.5/3.0 °C
Ice Location: TOP BOTTOM MIDDLE (DISPERSED)	Temp should be 0-6°C (Initial/Corrected)

Temp Blank Received:	(YES)	NO		
Containers Intact:	(YES)	NO		
Correct Containers:	(YES)	NO		
Sufficient Volume:	(YES)	NO		
Sample pH Acceptable: All containers needing preservation are found to be in compliance with EPA recommendation Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	(N/A)	
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	(N/A)	
VOA Headspace Acceptable (<6mm):	YES	NO	(N/A)	
Trip Blank Received: HCl MeOH TSP OTHER	YES	(NO)		

Comments:

N/A

2. Cooler Temp Upon Receipt: _____ °C

3. Cooler Temp Upon Receipt: _____ °C

4. Cooler Temp Upon Receipt: _____ °C

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

July 10, 2020

Ryann Scott
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Dear Ryann Scott:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

Revised Report. This report replaces the original dated 063020, it has been revised to add Chromium Speciation to sample -005 and 8270 TICs to sample -008, per client request.

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
Joshua Schuyler, ATC Group Services - Novi

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50260268001	**MW-122 (4-5')**	Solid	06/15/20 13:37	06/18/20 09:25
50260268002	**MW-123 (4-5')**	Solid	06/15/20 13:15	06/18/20 09:25
50260268003	**MW-124 (4-5')**	Solid	06/15/20 12:40	06/18/20 09:25
50260268004	**MW-125 (4-5')**	Solid	06/16/20 11:00	06/18/20 09:25
50260268005	**MW-126 (4-5')**	Solid	06/15/20 10:20	06/18/20 09:25
50260268006	**MW-126 (7.5-8.5')**	Solid	06/15/20 10:30	06/18/20 09:25
50260268007	**MW-127 (6-7')**	Solid	06/15/20 11:30	06/18/20 09:25
50260268008	**MW-127 (10-11')**	Solid	06/15/20 13:00	06/18/20 09:25
50260268009	**MW-128 (4-5')**	Solid	06/15/20 09:45	06/18/20 09:25
50260268010	**MW-128 (8-9')**	Solid	06/15/20 09:47	06/18/20 09:25
50260268011	**MW-129 (3-4')**	Solid	06/15/20 11:56	06/18/20 09:25
50260268012	**MW-130 (4-5')**	Solid	06/15/20 14:22	06/18/20 09:25
50260268013	**MW-131 (2-3')**	Solid	06/15/20 13:55	06/18/20 09:25
50260268014	**Dup. 1**	Solid	06/15/20 12:00	06/18/20 09:25
50260268015	**Dup. 2**	Solid	06/16/20 12:00	06/18/20 09:25
50260268016	**Trip Blank**	Solid	06/15/20 14:29	06/18/20 09:25
50260268017	**Trip Blank**	Solid	06/15/20 14:30	06/18/20 09:25
50260268018	**Field Blank**	Solid	06/15/20 12:00	06/18/20 09:25

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50260268001	**MW-122 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268002	**MW-123 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268003	**MW-124 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268004	**MW-125 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268005	**MW-126 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7196A	DAS	1
		Trivalent Chromium Calculation	DAC1	1
50260268006	**MW-126 (7.5-8.5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268007	**MW-127 (6-7')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268008	**MW-127 (10-11')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	97
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268009	**MW-128 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268010	**MW-128 (8-9')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268011	**MW-129 (3-4')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268012	**MW-130 (4-5')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 8082	RID	10
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268013	**MW-131 (2-3')**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268014	**Dup. 1**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75
		SM 2540G	RM1	1
50260268015	**Dup. 2**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6010	KJE	19
		EPA 6020	DMT	7
		EPA 7471	ILP	1
		EPA 8270	JCM	67
		EPA 8260	JPV	75

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540G	RM1	1
50260268016	**Trip Blank**	EPA 8260	JPV	75
50260268017	**Trip Blank**	EPA 8260	JPV	75
50260268018	**Field Blank**	EPA 8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4830**	ug/kg	4830	4830	1		06/22/20 15:32	71-36-3	
Ethanol	**<2750**	ug/kg	2750	2750	1		06/22/20 15:32	64-17-5	
Methanol	**<4830**	ug/kg	4830	4830	1		06/22/20 15:32	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1010**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-36-0	
Arsenic	**2510**	ug/kg	2020	2020	1	06/26/20 14:44	06/29/20 11:52	7440-38-2	
Barium	**48100**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-39-3	
Beryllium	**<506**	ug/kg	506	506	1	06/26/20 14:44	06/29/20 11:52	7440-41-7	
Boron	**<8090**	ug/kg	8090	8090	1	06/26/20 14:44	06/29/20 11:52	7440-42-8	
Calcium	**8920000**	ug/kg	50600	6710	1	06/26/20 14:44	06/29/20 11:52	7440-70-2	
Chromium	**8690**	ug/kg	2020	2020	1	06/26/20 14:44	06/29/20 11:52	7440-47-3	
Copper	**6720**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-50-8	
Iron	**5840000**	ug/kg	25300	7690	1	06/26/20 14:44	06/29/20 11:52	7439-89-6	
Lead	**50700**	ug/kg	10100	10100	1	06/26/20 14:44	06/29/20 11:52	7439-92-1	
Magnesium	**2440000**	ug/kg	25300	4050	1	06/26/20 14:44	06/29/20 11:52	7439-95-4	
Manganese	**89200**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7439-96-5	
Molybdenum	**<1010**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7439-98-7	
Nickel	**4940**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-02-0	
Potassium	**238000**	ug/kg	50600	4950	1	06/26/20 14:44	06/29/20 11:52	7440-09-7	
Sodium	**31000**	ug/kg	25300	13800	1	06/26/20 14:44	06/29/20 11:52	7440-23-5	
Strontium	**12200**	ug/kg	5060	5060	1	06/26/20 14:44	06/29/20 11:52	7440-24-6	
Vanadium	**14200**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-62-2	
Zinc	**48800**	ug/kg	1010	1010	1	06/26/20 14:44	06/29/20 11:52	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4330000**	ug/kg	109000	109000	100	06/24/20 09:22	06/30/20 00:18	7429-90-5	
Cadmium	**<218**	ug/kg	218	218	1	06/24/20 09:22	06/25/20 13:27	7440-43-9	
Cobalt	**1400**	ug/kg	544	544	1	06/24/20 09:22	06/25/20 13:27	7440-48-4	
Selenium	**262**	ug/kg	218	218	1	06/24/20 09:22	06/25/20 13:27	7782-49-2	
Silver	**157**	ug/kg	109	109	1	06/24/20 09:22	06/25/20 13:27	7440-22-4	
Thallium	**<544**	ug/kg	544	544	1	06/24/20 09:22	06/25/20 13:27	7440-28-0	
Titanium	**237000**	ug/kg	10900	2890	100	06/24/20 09:22	06/30/20 00:18	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**1110**	ug/kg	111	87.4	1	06/26/20 02:49	06/26/20 07:06	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	83-32-9	
Acenaphthylene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-12-7	
Benzo(a)anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	56-55-3	
Benzo(a)pyrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	50-32-8	
Benzo(b)fluoranthene	**427**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	205-99-2	
Benzo(g,h,i)perylene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	191-24-2	
Benzo(k)fluoranthene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	207-08-9	
4-Bromophenylphenyl ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	101-55-3	
Butylbenzylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	85-68-7	
Carbazole	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-74-8	
4-Chloro-3-methylphenol	**<299**	ug/kg	352	299	1	06/23/20 12:30	06/24/20 11:48	59-50-7	
bis(2-Chloroethoxy)methane	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	111-91-1	
bis(2-Chloroethyl) ether	**<171**	ug/kg	352	171	1	06/23/20 12:30	06/24/20 11:48	111-44-4	
bis(2-Chloroisopropyl) ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	108-60-1	
2-Chloronaphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-58-7	
2-Chlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	95-57-8	
4-Chlorophenylphenyl ether	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	7005-72-3	
Chrysene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	218-01-9	
Dibenz(a,h)anthracene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	53-70-3	
Dibenzofuran	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	132-64-9	
2,4-Dichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-83-2	
Diethylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	84-66-2	
2,4-Dimethylphenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	105-67-9	
Dimethylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	131-11-3	
Di-n-butylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	84-74-2	
4,6-Dinitro-2-methylphenol	**<885**	ug/kg	885	885	1	06/23/20 12:30	06/24/20 11:48	534-52-1	
2,4-Dinitrophenol	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	51-28-5	
2,4-Dinitrotoluene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	121-14-2	
2,6-Dinitrotoluene	**<94.4**	ug/kg	352	94.4	1	06/23/20 12:30	06/24/20 11:48	606-20-2	
Di-n-octylphthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	117-84-0	
1,2-Diphenylhydrazine	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	122-66-7	
bis(2-Ethylhexyl)phthalate	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	117-81-7	
Fluoranthene	**689**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	206-44-0	
Fluorene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-73-7	
Hexachloro-1,3-butadiene	**<102**	ug/kg	352	102	1	06/23/20 12:30	06/24/20 11:48	87-68-3	
Hexachlorobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	118-74-1	
Hexachlorocyclopentadiene	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48	77-47-4	
Hexachloroethane	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	67-72-1	
Indeno(1,2,3-cd)pyrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	193-39-5	
Isophorone	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	78-59-1	
2-Methylnaphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-57-6	
2-Methylphenol(o-Cresol)	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1070**	ug/kg	1070	1070	1	06/23/20 12:30	06/24/20 11:48		
Naphthalene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	91-20-3	
2-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	99-09-2	
4-Nitroaniline	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	100-01-6	
Nitrobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	98-95-3	
2-Nitrophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-75-5	
4-Nitrophenol	**<1710**	ug/kg	1710	1710	1	06/23/20 12:30	06/24/20 11:48	100-02-7	
N-Nitrosodimethylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	62-75-9	
N-Nitroso-di-n-propylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	621-64-7	
N-Nitrosodiphenylamine	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	86-30-6	
Pentachlorophenol	**<1570**	ug/kg	1710	1570	1	06/23/20 12:30	06/24/20 11:48	87-86-5	
Phenanthrene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	85-01-8	
Phenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	108-95-2	
Pyrene	**586**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	129-00-0	
1,2,4-Trichlorobenzene	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	120-82-1	
2,4,5-Trichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	95-95-4	
2,4,6-Trichlorophenol	**<352**	ug/kg	352	352	1	06/23/20 12:30	06/24/20 11:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	62	%.	26-96		1	06/23/20 12:30	06/24/20 11:48	4165-60-0	
Phenol-d5 (S)	74	%.	32-93		1	06/23/20 12:30	06/24/20 11:48	4165-62-2	
2-Fluorophenol (S)	79	%.	24-95		1	06/23/20 12:30	06/24/20 11:48	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 11:48	118-79-6	
2-Fluorobiphenyl (S)	74	%.	36-91		1	06/23/20 12:30	06/24/20 11:48	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 11:48	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1050**	ug/kg	1050	1050	1		06/24/20 03:37	67-64-1	
Acrylonitrile	**<105**	ug/kg	105	105	1		06/24/20 03:37	107-13-1	
tert-Amylmethyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	994-05-8	N2
Benzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	71-43-2	
Bromobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-86-1	
Bromochloromethane	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	74-97-5	
Bromodichloromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-27-4	
Bromoform	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-25-2	
Bromomethane	**<211**	ug/kg	211	211	1		06/24/20 03:37	74-83-9	
2-Butanone (MEK)	**<791**	ug/kg	791	791	1		06/24/20 03:37	78-93-3	
tert-Butyl Alcohol	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	75-65-0	
n-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	104-51-8	
sec-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	135-98-8	
tert-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	98-06-6	
Carbon disulfide	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-15-0	
Carbon tetrachloride	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	56-23-5	
Chlorobenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	108-90-7	
Chloroethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-00-3	
Chloroform	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	74-87-3	
Cyclohexane	**<527**	ug/kg	527	527	1		06/24/20 03:37	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	96-12-8	
Dibromochloromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	124-48-1	
1,2-Dibromoethane (EDB)	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	106-93-4	
Dibromomethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	74-95-3	
1,2-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	95-50-1	
1,3-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	541-73-1	
1,4-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	106-46-7	
trans-1,4-Dichloro-2-butene	**<105**	ug/kg	1050	105	1		06/24/20 03:37	110-57-6	
Dichlorodifluoromethane	**<264**	ug/kg	264	264	1		06/24/20 03:37	75-71-8	
1,1-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	75-34-3	
1,2-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	107-06-2	
1,1-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	75-35-4	
cis-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	156-59-2	
trans-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	156-60-5	
1,2-Dichloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	78-87-5	
cis-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 03:37	10061-01-5	
trans-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 03:37	10061-02-6	
Diethyl ether (Ethyl ether)	**<211**	ug/kg	211	211	1		06/24/20 03:37	60-29-7	
Diisopropyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	108-20-3	N2
Ethylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	100-41-4	
Ethyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	637-92-3	N2
Hexachloroethane	**<316**	ug/kg	316	316	1		06/24/20 03:37	67-72-1	N2
2-Hexanone	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	591-78-6	
Iodomethane	**<105**	ug/kg	1050	105	1		06/24/20 03:37	74-88-4	
Isopropylbenzene (Cumene)	**<264**	ug/kg	264	264	1		06/24/20 03:37	98-82-8	
p-Isopropyltoluene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	99-87-6	
Methylene Chloride	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-09-2	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1		06/24/20 03:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2640**	ug/kg	2640	2640	1		06/24/20 03:37	108-10-1	
Methyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 03:37	1634-04-4	
Naphthalene	**<348**	ug/kg	348	348	1		06/24/20 03:37	91-20-3	
n-Propylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	103-65-1	
Styrene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-34-5	
Tetrachloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	127-18-4	
Tetrahydrofuran	**<1050**	ug/kg	1050	1050	1		06/24/20 03:37	109-99-9	N2
Toluene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-88-3	
1,2,3-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	87-61-6	
1,2,4-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	120-82-1	
1,1,1-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	71-55-6	
1,1,2-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-122 (4-5') **Lab ID: 50260268001** Collected: 06/15/20 13:37 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 03:37	79-01-6	
Trichlorofluoromethane	**<105**	ug/kg	105	105	1		06/24/20 03:37	75-69-4	
1,2,3-Trichloropropane	**<105**	ug/kg	105	105	1		06/24/20 03:37	96-18-4	
1,2,3-Trimethylbenzene	**<264**	ug/kg	264	264	1		06/24/20 03:37	526-73-8	N2
1,2,4-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	95-63-6	
1,3,5-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 03:37	108-67-8	
Vinyl chloride	**<42.2**	ug/kg	42.2	42.2	1		06/24/20 03:37	75-01-4	
m&p-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	179601-23-1	
o-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 03:37	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 03:37	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 03:37	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 03:37	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**9.0**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:06	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:06	64-17-5	
Methanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:06	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	12674-11-2	
PCB-1221 (Aroclor 1221)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11096-82-5	
PCB-1262 (Aroclor 1262)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 18:06	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	69	%.	25-123		1	06/24/20 21:50	06/25/20 18:06	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<929**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-36-0	
Arsenic	**2530**	ug/kg	1860	1860	1	06/26/20 14:44	06/29/20 11:55	7440-38-2	
Barium	**12700**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-39-3	
Beryllium	**<464**	ug/kg	464	464	1	06/26/20 14:44	06/29/20 11:55	7440-41-7	
Boron	**<7430**	ug/kg	7430	7430	1	06/26/20 14:44	06/29/20 11:55	7440-42-8	
Calcium	**703000**	ug/kg	46400	6160	1	06/26/20 14:44	06/29/20 11:55	7440-70-2	
Chromium	**7230**	ug/kg	1860	1860	1	06/26/20 14:44	06/29/20 11:55	7440-47-3	
Copper	**2000**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-50-8	
Iron	**6680000**	ug/kg	23200	7060	1	06/26/20 14:44	06/29/20 11:55	7439-89-6	
Lead	**<9290**	ug/kg	9290	9290	1	06/26/20 14:44	06/29/20 11:55	7439-92-1	
Magnesium	**834000**	ug/kg	23200	3720	1	06/26/20 14:44	06/29/20 11:55	7439-95-4	
Manganese	**126000**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7439-96-5	
Molybdenum	**<929**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7439-98-7	
Nickel	**3880**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-02-0	
Potassium	**144000**	ug/kg	46400	4540	1	06/26/20 14:44	06/29/20 11:55	7440-09-7	
Sodium	**28100**	ug/kg	23200	12600	1	06/26/20 14:44	06/29/20 11:55	7440-23-5	
Strontium	**<4640**	ug/kg	4640	4640	1	06/26/20 14:44	06/29/20 11:55	7440-24-6	
Vanadium	**13300**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-62-2	
Zinc	**7510**	ug/kg	929	929	1	06/26/20 14:44	06/29/20 11:55	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2870000**	ug/kg	101000	101000	100	06/24/20 09:22	06/30/20 00:41	7429-90-5	
Cadmium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:22	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1720**	ug/kg	506	506	1	06/24/20 09:22	06/25/20 14:22	7440-48-4	
Selenium	**228**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:22	7782-49-2	
Silver	**<101**	ug/kg	101	101	1	06/24/20 09:22	06/25/20 14:22	7440-22-4	
Thallium	**<506**	ug/kg	506	506	1	06/24/20 09:22	06/25/20 14:22	7440-28-0	
Titanium	**228000**	ug/kg	10100	2690	100	06/24/20 09:22	06/30/20 00:41	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<85.3**	ug/kg	108	85.3	1	06/26/20 02:49	06/26/20 07:08	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	83-32-9	
Acenaphthylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	208-96-8	
Anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-12-7	
Benzo(a)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	56-55-3	
Benzo(a)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	50-32-8	
Benzo(b)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	205-99-2	
Benzo(g,h,i)perylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	191-24-2	
Benzo(k)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	207-08-9	
4-Bromophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	101-55-3	
Butylbenzylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	85-68-7	
Carbazole	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-74-8	
4-Chloro-3-methylphenol	**<292**	ug/kg	344	292	1	06/23/20 12:30	06/24/20 12:05	59-50-7	
bis(2-Chloroethoxy)methane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	111-91-1	
bis(2-Chloroethyl) ether	**<167**	ug/kg	344	167	1	06/23/20 12:30	06/24/20 12:05	111-44-4	
bis(2-Chloroisopropyl) ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	108-60-1	
2-Chloronaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-58-7	
2-Chlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	95-57-8	
4-Chlorophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	7005-72-3	
Chrysene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	218-01-9	
Dibenz(a,h)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	53-70-3	
Dibenzofuran	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	132-64-9	
2,4-Dichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-83-2	
Diethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	84-66-2	
2,4-Dimethylphenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	105-67-9	
Dimethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	131-11-3	
Di-n-butylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	84-74-2	
4,6-Dinitro-2-methylphenol	**<864**	ug/kg	864	864	1	06/23/20 12:30	06/24/20 12:05	534-52-1	
2,4-Dinitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	51-28-5	
2,4-Dinitrotoluene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	121-14-2	
2,6-Dinitrotoluene	**<92.2**	ug/kg	344	92.2	1	06/23/20 12:30	06/24/20 12:05	606-20-2	
Di-n-octylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	117-84-0	
1,2-Diphenylhydrazine	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	117-81-7	
Fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	206-44-0	
Fluorene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-73-7	
Hexachloro-1,3-butadiene	**<100**	ug/kg	344	100	1	06/23/20 12:30	06/24/20 12:05	87-68-3	
Hexachlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	118-74-1	
Hexachlorocyclopentadiene	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05	77-47-4	
Hexachloroethane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	67-72-1	
Indeno(1,2,3-cd)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	193-39-5	
Isophorone	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	78-59-1	
2-Methylnaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-57-6	
2-Methylphenol(o-Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:05		
Naphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	91-20-3	
2-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-74-4	
3-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	99-09-2	
4-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	100-01-6	
Nitrobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	98-95-3	
2-Nitrophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-75-5	
4-Nitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:05	100-02-7	
N-Nitrosodimethylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	62-75-9	
N-Nitroso-di-n-propylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	621-64-7	
N-Nitrosodiphenylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	86-30-6	
Pentachlorophenol	**<1530**	ug/kg	1670	1530	1	06/23/20 12:30	06/24/20 12:05	87-86-5	
Phenanthrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	85-01-8	
Phenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	108-95-2	
Pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	129-00-0	
1,2,4-Trichlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	120-82-1	
2,4,5-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	95-95-4	
2,4,6-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:05	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	57	%.	26-96		1	06/23/20 12:30	06/24/20 12:05	4165-60-0	
Phenol-d5 (S)	82	%.	32-93		1	06/23/20 12:30	06/24/20 12:05	4165-62-2	
2-Fluorophenol (S)	85	%.	24-95		1	06/23/20 12:30	06/24/20 12:05	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	20-109		1	06/23/20 12:30	06/24/20 12:05	118-79-6	
2-Fluorobiphenyl (S)	68	%.	36-91		1	06/23/20 12:30	06/24/20 12:05	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 12:05	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<957**	ug/kg	957	957	1		06/24/20 04:10	67-64-1	
Acrylonitrile	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	107-13-1	
tert-Amylmethyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	994-05-8	N2
Benzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	71-43-2	
Bromobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	74-97-5	
Bromodichloromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-27-4	
Bromoform	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-25-2	
Bromomethane	**<191**	ug/kg	191	191	1		06/24/20 04:10	74-83-9	
2-Butanone (MEK)	**<718**	ug/kg	718	718	1		06/24/20 04:10	78-93-3	
tert-Butyl Alcohol	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	75-65-0	
n-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	104-51-8	
sec-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	135-98-8	
tert-Butylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	98-06-6	
Carbon disulfide	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-15-0	
Carbon tetrachloride	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	56-23-5	
Chlorobenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	108-90-7	
Chloroethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-00-3	
Chloroform	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	67-66-3	
Chloromethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	74-87-3	
Cyclohexane	**<479**	ug/kg	479	479	1		06/24/20 04:10	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	96-12-8	
Dibromochloromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	124-48-1	
1,2-Dibromoethane (EDB)	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	106-93-4	
Dibromomethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	74-95-3	
1,2-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	95-50-1	
1,3-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	541-73-1	
1,4-Dichlorobenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	106-46-7	
trans-1,4-Dichloro-2-butene	**<95.7**	ug/kg	957	95.7	1		06/24/20 04:10	110-57-6	
Dichlorodifluoromethane	**<239**	ug/kg	239	239	1		06/24/20 04:10	75-71-8	
1,1-Dichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	75-34-3	
1,2-Dichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	107-06-2	
1,1-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	75-35-4	
cis-1,2-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	156-59-2	
trans-1,2-Dichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	156-60-5	
1,2-Dichloropropane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	78-87-5	
cis-1,3-Dichloropropene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	10061-01-5	
trans-1,3-Dichloropropene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	10061-02-6	
Diethyl ether (Ethyl ether)	**<191**	ug/kg	191	191	1		06/24/20 04:10	60-29-7	
Diisopropyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	108-20-3	N2
Ethylbenzene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	100-41-4	
Ethyl-tert-butyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	637-92-3	N2
Hexachloroethane	**<287**	ug/kg	287	287	1		06/24/20 04:10	67-72-1	N2
2-Hexanone	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	591-78-6	
Iodomethane	**<95.7**	ug/kg	957	95.7	1		06/24/20 04:10	74-88-4	
Isopropylbenzene (Cumene)	**<239**	ug/kg	239	239	1		06/24/20 04:10	98-82-8	
p-Isopropyltoluene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	99-87-6	
Methylene Chloride	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-09-2	
2-Methylnaphthalene	**<316**	ug/kg	316	316	1		06/24/20 04:10	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-123 (4-5') **Lab ID: 50260268002** Collected: 06/15/20 13:15 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2390**	ug/kg	2390	2390	1		06/24/20 04:10	108-10-1	
Methyl-tert-butyl ether	**<239**	ug/kg	239	239	1		06/24/20 04:10	1634-04-4	
Naphthalene	**<316**	ug/kg	316	316	1		06/24/20 04:10	91-20-3	
n-Propylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	103-65-1	
Styrene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	100-42-5	
1,1,1,2-Tetrachloroethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	630-20-6	
1,1,2,2-Tetrachloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-34-5	
Tetrachloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	127-18-4	
Tetrahydrofuran	**<957**	ug/kg	957	957	1		06/24/20 04:10	109-99-9	N2
Toluene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-88-3	
1,2,3-Trichlorobenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	87-61-6	
1,2,4-Trichlorobenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	120-82-1	
1,1,1-Trichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	71-55-6	
1,1,2-Trichloroethane	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-00-5	
Trichloroethene	**<47.9**	ug/kg	47.9	47.9	1		06/24/20 04:10	79-01-6	
Trichlorofluoromethane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	75-69-4	
1,2,3-Trichloropropane	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	96-18-4	
1,2,3-Trimethylbenzene	**<239**	ug/kg	239	239	1		06/24/20 04:10	526-73-8	N2
1,2,4-Trimethylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	95-63-6	
1,3,5-Trimethylbenzene	**<95.7**	ug/kg	95.7	95.7	1		06/24/20 04:10	108-67-8	
Vinyl chloride	**<38.3**	ug/kg	38.3	38.3	1		06/24/20 04:10	75-01-4	
m&p-Xylene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	179601-23-1	
o-Xylene	**<23.9**	ug/kg	47.9	23.9	1		06/24/20 04:10	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 04:10	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 04:10	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	60-142		1		06/24/20 04:10	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.5**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:15	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:15	64-17-5	
Methanol	**<4700**	ug/kg	4700	4700	1		06/22/20 16:15	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<957**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-36-0	
Arsenic	**<1910**	ug/kg	1910	1910	1	06/26/20 14:44	06/29/20 11:57	7440-38-2	
Barium	**8540**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-39-3	
Beryllium	**<478**	ug/kg	478	478	1	06/26/20 14:44	06/29/20 11:57	7440-41-7	
Boron	**<7650**	ug/kg	7650	7650	1	06/26/20 14:44	06/29/20 11:57	7440-42-8	
Calcium	**628000**	ug/kg	47800	6340	1	06/26/20 14:44	06/29/20 11:57	7440-70-2	
Chromium	**5880**	ug/kg	1910	1910	1	06/26/20 14:44	06/29/20 11:57	7440-47-3	
Copper	**1580**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-50-8	
Iron	**3940000**	ug/kg	23900	7270	1	06/26/20 14:44	06/29/20 11:57	7439-89-6	
Lead	**<9570**	ug/kg	9570	9570	1	06/26/20 14:44	06/29/20 11:57	7439-92-1	
Magnesium	**739000**	ug/kg	23900	3830	1	06/26/20 14:44	06/29/20 11:57	7439-95-4	
Manganese	**27300**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7439-96-5	
Molybdenum	**<957**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7439-98-7	
Nickel	**3880**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-02-0	
Potassium	**148000**	ug/kg	47800	4680	1	06/26/20 14:44	06/29/20 11:57	7440-09-7	
Sodium	**23200J**	ug/kg	23900	13000	1	06/26/20 14:44	06/29/20 11:57	7440-23-5	
Strontium	**<4780**	ug/kg	4780	4780	1	06/26/20 14:44	06/29/20 11:57	7440-24-6	
Vanadium	**8010**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-62-2	
Zinc	**8190**	ug/kg	957	957	1	06/26/20 14:44	06/29/20 11:57	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**3620000**	ug/kg	102000	102000	100	06/24/20 09:22	06/30/20 00:45	7429-90-5	
Cadmium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:31	7440-43-9	
Cobalt	**1350**	ug/kg	509	509	1	06/24/20 09:22	06/25/20 14:31	7440-48-4	
Selenium	**<203**	ug/kg	203	203	1	06/24/20 09:22	06/25/20 14:31	7782-49-2	
Silver	**<102**	ug/kg	102	102	1	06/24/20 09:22	06/25/20 14:31	7440-22-4	
Thallium	**<509**	ug/kg	509	509	1	06/24/20 09:22	06/25/20 14:31	7440-28-0	
Titanium	**220000**	ug/kg	10200	2710	100	06/24/20 09:22	06/30/20 00:45	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<86.7**	ug/kg	110	86.7	1	06/26/20 02:49	06/26/20 07:16	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	83-32-9	
Acenaphthylene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-12-7	
Benzo(a)anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	56-55-3	
Benzo(a)pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	50-32-8	
Benzo(b)fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	205-99-2	
Benzo(g,h,i)perylene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	191-24-2	
Benzo(k)fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	207-08-9	
4-Bromophenylphenyl ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	101-55-3	
Butylbenzylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	85-68-7	
Carbazole	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-74-8	
4-Chloro-3-methylphenol	**<297**	ug/kg	350	297	1	06/23/20 12:30	06/24/20 12:22	59-50-7	
bis(2-Chloroethoxy)methane	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	111-91-1	
bis(2-Chloroethyl) ether	**<170**	ug/kg	350	170	1	06/23/20 12:30	06/24/20 12:22	111-44-4	
bis(2-Chloroisopropyl) ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	108-60-1	
2-Chloronaphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-58-7	
2-Chlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	95-57-8	
4-Chlorophenylphenyl ether	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	7005-72-3	
Chrysene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	218-01-9	
Dibenz(a,h)anthracene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	53-70-3	
Dibenzofuran	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	132-64-9	
2,4-Dichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-83-2	
Diethylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	84-66-2	
2,4-Dimethylphenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	105-67-9	
Dimethylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	131-11-3	
Di-n-butylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	84-74-2	
4,6-Dinitro-2-methylphenol	**<880**	ug/kg	880	880	1	06/23/20 12:30	06/24/20 12:22	534-52-1	
2,4-Dinitrophenol	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	51-28-5	
2,4-Dinitrotoluene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	121-14-2	
2,6-Dinitrotoluene	**<93.9**	ug/kg	350	93.9	1	06/23/20 12:30	06/24/20 12:22	606-20-2	
Di-n-octylphthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	117-84-0	
1,2-Diphenylhydrazine	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	122-66-7	
bis(2-Ethylhexyl)phthalate	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	117-81-7	
Fluoranthene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	206-44-0	
Fluorene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-73-7	
Hexachloro-1,3-butadiene	**<102**	ug/kg	350	102	1	06/23/20 12:30	06/24/20 12:22	87-68-3	
Hexachlorobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	118-74-1	
Hexachlorocyclopentadiene	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22	77-47-4	
Hexachloroethane	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	67-72-1	
Indeno(1,2,3-cd)pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	193-39-5	
Isophorone	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	78-59-1	
2-Methylnaphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-57-6	
2-Methylphenol(o-Cresol)	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1060**	ug/kg	1060	1060	1	06/23/20 12:30	06/24/20 12:22		
Naphthalene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	91-20-3	
2-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	99-09-2	
4-Nitroaniline	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	100-01-6	
Nitrobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	98-95-3	
2-Nitrophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-75-5	
4-Nitrophenol	**<1700**	ug/kg	1700	1700	1	06/23/20 12:30	06/24/20 12:22	100-02-7	
N-Nitrosodimethylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	62-75-9	
N-Nitroso-di-n-propylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	621-64-7	
N-Nitrosodiphenylamine	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	86-30-6	
Pentachlorophenol	**<1560**	ug/kg	1700	1560	1	06/23/20 12:30	06/24/20 12:22	87-86-5	
Phenanthrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	85-01-8	
Phenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	108-95-2	
Pyrene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	129-00-0	
1,2,4-Trichlorobenzene	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	120-82-1	
2,4,5-Trichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	95-95-4	
2,4,6-Trichlorophenol	**<350**	ug/kg	350	350	1	06/23/20 12:30	06/24/20 12:22	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%.	26-96		1	06/23/20 12:30	06/24/20 12:22	4165-60-0	
Phenol-d5 (S)	81	%.	32-93		1	06/23/20 12:30	06/24/20 12:22	4165-62-2	
2-Fluorophenol (S)	83	%.	24-95		1	06/23/20 12:30	06/24/20 12:22	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 12:22	118-79-6	
2-Fluorobiphenyl (S)	79	%.	36-91		1	06/23/20 12:30	06/24/20 12:22	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/23/20 12:30	06/24/20 12:22	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<986**	ug/kg	986	986	1		06/24/20 04:43	67-64-1	
Acrylonitrile	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	107-13-1	
tert-Amylmethyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	994-05-8	N2
Benzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	71-43-2	
Bromobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-86-1	
Bromochloromethane	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	74-97-5	
Bromodichloromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-27-4	
Bromoform	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-25-2	
Bromomethane	**<197**	ug/kg	197	197	1		06/24/20 04:43	74-83-9	
2-Butanone (MEK)	**<740**	ug/kg	740	740	1		06/24/20 04:43	78-93-3	
tert-Butyl Alcohol	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	75-65-0	
n-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	104-51-8	
sec-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	135-98-8	
tert-Butylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	98-06-6	
Carbon disulfide	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-15-0	
Carbon tetrachloride	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	56-23-5	
Chlorobenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	108-90-7	
Chloroethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-00-3	
Chloroform	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	74-87-3	
Cyclohexane	**<493**	ug/kg	493	493	1		06/24/20 04:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	96-12-8	
Dibromochloromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	124-48-1	
1,2-Dibromoethane (EDB)	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	106-93-4	
Dibromomethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	74-95-3	
1,2-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	95-50-1	
1,3-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	541-73-1	
1,4-Dichlorobenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<98.6**	ug/kg	986	98.6	1		06/24/20 04:43	110-57-6	
Dichlorodifluoromethane	**<247**	ug/kg	247	247	1		06/24/20 04:43	75-71-8	
1,1-Dichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	75-34-3	
1,2-Dichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	107-06-2	
1,1-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	75-35-4	
cis-1,2-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	156-59-2	
trans-1,2-Dichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	156-60-5	
1,2-Dichloropropane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	78-87-5	
cis-1,3-Dichloropropene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	10061-01-5	
trans-1,3-Dichloropropene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<197**	ug/kg	197	197	1		06/24/20 04:43	60-29-7	
Diisopropyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	108-20-3	N2
Ethylbenzene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	100-41-4	
Ethyl-tert-butyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	637-92-3	N2
Hexachloroethane	**<296**	ug/kg	296	296	1		06/24/20 04:43	67-72-1	N2
2-Hexanone	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	591-78-6	
Iodomethane	**<98.6**	ug/kg	986	98.6	1		06/24/20 04:43	74-88-4	
Isopropylbenzene (Cumene)	**<247**	ug/kg	247	247	1		06/24/20 04:43	98-82-8	
p-Isopropyltoluene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	99-87-6	
Methylene Chloride	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-09-2	
2-Methylnaphthalene	**<326**	ug/kg	326	326	1		06/24/20 04:43	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2470**	ug/kg	2470	2470	1		06/24/20 04:43	108-10-1	
Methyl-tert-butyl ether	**<247**	ug/kg	247	247	1		06/24/20 04:43	1634-04-4	
Naphthalene	**<326**	ug/kg	326	326	1		06/24/20 04:43	91-20-3	
n-Propylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	103-65-1	
Styrene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-34-5	
Tetrachloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	127-18-4	
Tetrahydrofuran	**<986**	ug/kg	986	986	1		06/24/20 04:43	109-99-9	N2
Toluene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-88-3	
1,2,3-Trichlorobenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	87-61-6	
1,2,4-Trichlorobenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	120-82-1	
1,1,1-Trichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	71-55-6	
1,1,2-Trichloroethane	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-124 (4-5') **Lab ID: 50260268003** Collected: 06/15/20 12:40 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<49.3**	ug/kg	49.3	49.3	1		06/24/20 04:43	79-01-6	
Trichlorofluoromethane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	75-69-4	
1,2,3-Trichloropropane	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	96-18-4	
1,2,3-Trimethylbenzene	**<247**	ug/kg	247	247	1		06/24/20 04:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	95-63-6	
1,3,5-Trimethylbenzene	**<98.6**	ug/kg	98.6	98.6	1		06/24/20 04:43	108-67-8	
Vinyl chloride	**<39.5**	ug/kg	39.5	39.5	1		06/24/20 04:43	75-01-4	
m&p-Xylene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	179601-23-1	
o-Xylene	**<24.7**	ug/kg	49.3	24.7	1		06/24/20 04:43	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%.	62-137		1		06/24/20 04:43	1868-53-7	
Toluene-d8 (S)	97	%.	64-139		1		06/24/20 04:43	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	60-142		1		06/24/20 04:43	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.3**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4670**	ug/kg	4670	4670	1		06/22/20 16:25	71-36-3	
Ethanol	**<2650**	ug/kg	2650	2650	1		06/22/20 16:25	64-17-5	
Methanol	**<4670**	ug/kg	4670	4670	1		06/22/20 16:25	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11096-82-5	
PCB-1262 (Aroclor 1262)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<350**	ug/kg	350	350	1	06/24/20 21:50	06/25/20 21:22	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	69	%.	25-123		1	06/24/20 21:50	06/25/20 21:22	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1030**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-36-0	
Arsenic	**2940**	ug/kg	2070	2070	1	06/26/20 14:44	06/29/20 12:07	7440-38-2	
Barium	**33400**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-39-3	
Beryllium	**<517**	ug/kg	517	517	1	06/26/20 14:44	06/29/20 12:07	7440-41-7	
Boron	**<8260**	ug/kg	8260	8260	1	06/26/20 14:44	06/29/20 12:07	7440-42-8	
Calcium	**28700000**	ug/kg	258000	34200	5	06/26/20 14:44	06/29/20 12:43	7440-70-2	
Chromium	**11100**	ug/kg	2070	2070	1	06/26/20 14:44	06/29/20 12:07	7440-47-3	
Copper	**9020**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-50-8	
Iron	**5840000**	ug/kg	25800	7850	1	06/26/20 14:44	06/29/20 12:07	7439-89-6	
Lead	**33800**	ug/kg	10300	10300	1	06/26/20 14:44	06/29/20 12:07	7439-92-1	
Magnesium	**4260000**	ug/kg	25800	4130	1	06/26/20 14:44	06/29/20 12:07	7439-95-4	
Manganese	**122000**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7439-96-5	
Molybdenum	**<1030**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7439-98-7	
Nickel	**6660**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-02-0	
Potassium	**337000**	ug/kg	51700	5050	1	06/26/20 14:44	06/29/20 12:07	7440-09-7	
Sodium	**65200**	ug/kg	25800	14100	1	06/26/20 14:44	06/29/20 12:07	7440-23-5	
Strontium	**29300**	ug/kg	5170	5170	1	06/26/20 14:44	06/29/20 12:07	7440-24-6	
Vanadium	**13200**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-62-2	
Zinc	**50800**	ug/kg	1030	1030	1	06/26/20 14:44	06/29/20 12:07	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**5130000**	ug/kg	102000	102000	100	06/24/20 09:22	06/30/20 00:50	7429-90-5	
Cadmium	**290**	ug/kg	205	205	1	06/24/20 09:22	06/25/20 14:40	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**2270**	ug/kg	512	512	1	06/24/20 09:22	06/25/20 14:40	7440-48-4	
Selenium	**<1020**	ug/kg	1020	1020	5	06/24/20 09:22	06/30/20 02:36	7782-49-2	D3
Silver	**1840**	ug/kg	102	102	1	06/24/20 09:22	06/25/20 14:40	7440-22-4	
Thallium	**<512**	ug/kg	512	512	1	06/24/20 09:22	06/25/20 14:40	7440-28-0	
Titanium	**284000**	ug/kg	10200	2730	100	06/24/20 09:22	06/30/20 00:50	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**940**	ug/kg	103	81.6	1	06/26/20 02:49	06/26/20 07:18	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	83-32-9	
Acenaphthylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	208-96-8	
Anthracene	**549**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-12-7	
Benzo(a)anthracene	**2190**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	56-55-3	
Benzo(a)pyrene	**1860**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	50-32-8	
Benzo(b)fluoranthene	**2650**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	205-99-2	
Benzo(g,h,i)perylene	**1040**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	191-24-2	
Benzo(k)fluoranthene	**1000**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	207-08-9	
4-Bromophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	101-55-3	
Butylbenzylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	85-68-7	
Carbazole	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-74-8	
4-Chloro-3-methylphenol	**<294**	ug/kg	347	294	1	06/23/20 12:30	06/24/20 12:40	59-50-7	
bis(2-Chloroethoxy)methane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	111-91-1	
bis(2-Chloroethyl) ether	**<168**	ug/kg	347	168	1	06/23/20 12:30	06/24/20 12:40	111-44-4	
bis(2-Chloroisopropyl) ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	108-60-1	
2-Chloronaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-58-7	
2-Chlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	95-57-8	
4-Chlorophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	7005-72-3	
Chrysene	**2070**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	218-01-9	
Dibenz(a,h)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	53-70-3	
Dibenzofuran	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	132-64-9	
2,4-Dichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-83-2	
Diethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	84-66-2	
2,4-Dimethylphenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	105-67-9	
Dimethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	131-11-3	
Di-n-butylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	84-74-2	
4,6-Dinitro-2-methylphenol	**<872**	ug/kg	872	872	1	06/23/20 12:30	06/24/20 12:40	534-52-1	
2,4-Dinitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	51-28-5	
2,4-Dinitrotoluene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	121-14-2	
2,6-Dinitrotoluene	**<93.0**	ug/kg	347	93.0	1	06/23/20 12:30	06/24/20 12:40	606-20-2	
Di-n-octylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	117-84-0	
1,2-Diphenylhydrazine	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	122-66-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	117-81-7	
Fluoranthene	**4260**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	206-44-0	
Fluorene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	347	101	1	06/23/20 12:30	06/24/20 12:40	87-68-3	
Hexachlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40	77-47-4	
Hexachloroethane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	67-72-1	
Indeno(1,2,3-cd)pyrene	**914**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	193-39-5	
Isophorone	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	78-59-1	
2-Methylnaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 12:40		
Naphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	91-20-3	
2-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-74-4	
3-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	99-09-2	
4-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	100-01-6	
Nitrobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	98-95-3	
2-Nitrophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-75-5	
4-Nitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 12:40	100-02-7	
N-Nitrosodimethylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	62-75-9	
N-Nitroso-di-n-propylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	621-64-7	
N-Nitrosodiphenylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	86-30-6	
Pentachlorophenol	**<1540**	ug/kg	1680	1540	1	06/23/20 12:30	06/24/20 12:40	87-86-5	
Phenanthrene	**2250**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	85-01-8	
Phenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	108-95-2	
Pyrene	**3800**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	129-00-0	
1,2,4-Trichlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	120-82-1	
2,4,5-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	95-95-4	
2,4,6-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 12:40	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	56	%.	26-96		1	06/23/20 12:30	06/24/20 12:40	4165-60-0	
Phenol-d5 (S)	72	%.	32-93		1	06/23/20 12:30	06/24/20 12:40	4165-62-2	
2-Fluorophenol (S)	72	%.	24-95		1	06/23/20 12:30	06/24/20 12:40	367-12-4	
2,4,6-Tribromophenol (S)	44	%.	20-109		1	06/23/20 12:30	06/24/20 12:40	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/23/20 12:30	06/24/20 12:40	321-60-8	
p-Terphenyl-d14 (S)	85	%.	27-117		1	06/23/20 12:30	06/24/20 12:40	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1050**	ug/kg	1050	1050	1		06/24/20 05:16	67-64-1	
Acrylonitrile	**<105**	ug/kg	105	105	1		06/24/20 05:16	107-13-1	
tert-Amylmethyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	994-05-8	N2
Benzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	71-43-2	
Bromobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	74-97-5	
Bromodichloromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-27-4	
Bromoform	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-25-2	
Bromomethane	**<211**	ug/kg	211	211	1		06/24/20 05:16	74-83-9	
2-Butanone (MEK)	**<791**	ug/kg	791	791	1		06/24/20 05:16	78-93-3	
tert-Butyl Alcohol	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	75-65-0	
n-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	104-51-8	
sec-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	135-98-8	
tert-Butylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	98-06-6	
Carbon disulfide	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-15-0	
Carbon tetrachloride	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	56-23-5	
Chlorobenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	108-90-7	
Chloroethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-00-3	
Chloroform	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	67-66-3	
Chloromethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	74-87-3	
Cyclohexane	**<527**	ug/kg	527	527	1		06/24/20 05:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	96-12-8	
Dibromochloromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	124-48-1	
1,2-Dibromoethane (EDB)	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	106-93-4	
Dibromomethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	74-95-3	
1,2-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	95-50-1	
1,3-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	541-73-1	
1,4-Dichlorobenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<105**	ug/kg	1050	105	1		06/24/20 05:16	110-57-6	
Dichlorodifluoromethane	**<264**	ug/kg	264	264	1		06/24/20 05:16	75-71-8	
1,1-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	75-34-3	
1,2-Dichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	107-06-2	
1,1-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	75-35-4	
cis-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	156-59-2	
trans-1,2-Dichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	156-60-5	
1,2-Dichloropropane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	78-87-5	
cis-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 05:16	10061-01-5	
trans-1,3-Dichloropropene	**<105**	ug/kg	105	105	1		06/24/20 05:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<211**	ug/kg	211	211	1		06/24/20 05:16	60-29-7	
Diisopropyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	108-20-3	N2
Ethylbenzene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	100-41-4	
Ethyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	637-92-3	N2
Hexachloroethane	**<316**	ug/kg	316	316	1		06/24/20 05:16	67-72-1	N2
2-Hexanone	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	591-78-6	
Iodomethane	**<105**	ug/kg	1050	105	1		06/24/20 05:16	74-88-4	
Isopropylbenzene (Cumene)	**<264**	ug/kg	264	264	1		06/24/20 05:16	98-82-8	
p-Isopropyltoluene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	99-87-6	
Methylene Chloride	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-09-2	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1		06/24/20 05:16	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-125 (4-5') **Lab ID: 50260268004** Collected: 06/16/20 11:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2640**	ug/kg	2640	2640	1		06/24/20 05:16	108-10-1	
Methyl-tert-butyl ether	**<264**	ug/kg	264	264	1		06/24/20 05:16	1634-04-4	
Naphthalene	**<348**	ug/kg	348	348	1		06/24/20 05:16	91-20-3	
n-Propylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	103-65-1	
Styrene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-34-5	
Tetrachloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	127-18-4	
Tetrahydrofuran	**<1050**	ug/kg	1050	1050	1		06/24/20 05:16	109-99-9	N2
Toluene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-88-3	
1,2,3-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	87-61-6	
1,2,4-Trichlorobenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	120-82-1	
1,1,1-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	71-55-6	
1,1,2-Trichloroethane	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-00-5	
Trichloroethene	**<52.7**	ug/kg	52.7	52.7	1		06/24/20 05:16	79-01-6	
Trichlorofluoromethane	**<105**	ug/kg	105	105	1		06/24/20 05:16	75-69-4	
1,2,3-Trichloropropane	**<105**	ug/kg	105	105	1		06/24/20 05:16	96-18-4	
1,2,3-Trimethylbenzene	**<264**	ug/kg	264	264	1		06/24/20 05:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	95-63-6	
1,3,5-Trimethylbenzene	**<105**	ug/kg	105	105	1		06/24/20 05:16	108-67-8	
Vinyl chloride	**<42.2**	ug/kg	42.2	42.2	1		06/24/20 05:16	75-01-4	
m&p-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	179601-23-1	
o-Xylene	**<26.4**	ug/kg	52.7	26.4	1		06/24/20 05:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 05:16	1868-53-7	
Toluene-d8 (S)	102	%.	64-139		1		06/24/20 05:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 05:16	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.7**	%	0.10	0.10	1		06/23/20 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4610**	ug/kg	4610	4610	1		06/22/20 16:34	71-36-3	
Ethanol	**<2620**	ug/kg	2620	2620	1		06/22/20 16:34	64-17-5	
Methanol	**<4610**	ug/kg	4610	4610	1		06/22/20 16:34	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<910**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-36-0	
Arsenic	**3710**	ug/kg	1820	1820	1	06/26/20 14:44	06/29/20 12:10	7440-38-2	
Barium	**12300**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-39-3	
Beryllium	**<455**	ug/kg	455	455	1	06/26/20 14:44	06/29/20 12:10	7440-41-7	
Boron	**<7280**	ug/kg	7280	7280	1	06/26/20 14:44	06/29/20 12:10	7440-42-8	
Calcium	**3580000**	ug/kg	45500	6030	1	06/26/20 14:44	06/29/20 12:10	7440-70-2	
Chromium	**24700**	ug/kg	1820	1820	1	06/26/20 14:44	06/29/20 12:10	7440-47-3	
Copper	**23000**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-50-8	
Iron	**58100000**	ug/kg	114000	34600	5	06/26/20 14:44	06/29/20 12:45	7439-89-6	
Lead	**<9100**	ug/kg	9100	9100	1	06/26/20 14:44	06/29/20 12:10	7439-92-1	
Magnesium	**980000**	ug/kg	22700	3640	1	06/26/20 14:44	06/29/20 12:10	7439-95-4	
Manganese	**440000**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7439-96-5	
Molybdenum	**3830**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7439-98-7	
Nickel	**17700**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-02-0	
Potassium	**143000**	ug/kg	45500	4450	1	06/26/20 14:44	06/29/20 12:10	7440-09-7	
Sodium	**24500**	ug/kg	22700	12400	1	06/26/20 14:44	06/29/20 12:10	7440-23-5	
Strontium	**6300**	ug/kg	4550	4550	1	06/26/20 14:44	06/29/20 12:10	7440-24-6	
Vanadium	**8930**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-62-2	
Zinc	**16600**	ug/kg	910	910	1	06/26/20 14:44	06/29/20 12:10	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4740000**	ug/kg	104000	104000	100	06/24/20 09:22	06/30/20 00:55	7429-90-5	
Cadmium	**<208**	ug/kg	208	208	1	06/24/20 09:22	06/25/20 14:54	7440-43-9	
Cobalt	**1290**	ug/kg	521	521	1	06/24/20 09:22	06/25/20 14:54	7440-48-4	
Selenium	**245**	ug/kg	208	208	1	06/24/20 09:22	06/25/20 14:54	7782-49-2	
Silver	**<104**	ug/kg	104	104	1	06/24/20 09:22	06/25/20 14:54	7440-22-4	
Thallium	**<521**	ug/kg	521	521	1	06/24/20 09:22	06/25/20 14:54	7440-28-0	
Titanium	**187000**	ug/kg	10400	2770	100	06/24/20 09:22	06/30/20 00:55	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<78.6**	ug/kg	99.5	78.6	1	06/26/20 02:49	06/26/20 07:25	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	83-32-9	
Acenaphthylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-12-7	
Benzo(a)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	56-55-3	
Benzo(a)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	50-32-8	
Benzo(b)fluoranthene	**461**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	205-99-2	
Benzo(g,h,i)perylene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	191-24-2	
Benzo(k)fluoranthene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	207-08-9	
4-Bromophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	101-55-3	
Butylbenzylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	85-68-7	
Carbazole	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-74-8	
4-Chloro-3-methylphenol	**<292**	ug/kg	344	292	1	06/23/20 12:30	06/24/20 12:57	59-50-7	
bis(2-Chloroethoxy)methane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	111-91-1	
bis(2-Chloroethyl) ether	**<167**	ug/kg	344	167	1	06/23/20 12:30	06/24/20 12:57	111-44-4	
bis(2-Chloroisopropyl) ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	108-60-1	
2-Chloronaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-58-7	
2-Chlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	95-57-8	
4-Chlorophenylphenyl ether	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	7005-72-3	
Chrysene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	218-01-9	
Dibenz(a,h)anthracene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	53-70-3	
Dibenzofuran	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	132-64-9	
2,4-Dichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-83-2	
Diethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	84-66-2	
2,4-Dimethylphenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	105-67-9	
Dimethylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	131-11-3	
Di-n-butylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	84-74-2	
4,6-Dinitro-2-methylphenol	**<864**	ug/kg	864	864	1	06/23/20 12:30	06/24/20 12:57	534-52-1	
2,4-Dinitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	51-28-5	
2,4-Dinitrotoluene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	121-14-2	
2,6-Dinitrotoluene	**<92.1**	ug/kg	344	92.1	1	06/23/20 12:30	06/24/20 12:57	606-20-2	
Di-n-octylphthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	117-84-0	
1,2-Diphenylhydrazine	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	122-66-7	
bis(2-Ethylhexyl)phthalate	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	117-81-7	
Fluoranthene	**426**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	206-44-0	
Fluorene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-73-7	
Hexachloro-1,3-butadiene	**<100**	ug/kg	344	100	1	06/23/20 12:30	06/24/20 12:57	87-68-3	
Hexachlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	118-74-1	
Hexachlorocyclopentadiene	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57	77-47-4	
Hexachloroethane	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	67-72-1	
Indeno(1,2,3-cd)pyrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	193-39-5	
Isophorone	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	78-59-1	
2-Methylnaphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-57-6	
2-Methylphenol(o-Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1040**	ug/kg	1040	1040	1	06/23/20 12:30	06/24/20 12:57		
Naphthalene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	91-20-3	
2-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	99-09-2	
4-Nitroaniline	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	100-01-6	
Nitrobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	98-95-3	
2-Nitrophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-75-5	
4-Nitrophenol	**<1670**	ug/kg	1670	1670	1	06/23/20 12:30	06/24/20 12:57	100-02-7	
N-Nitrosodimethylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	62-75-9	
N-Nitroso-di-n-propylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	621-64-7	
N-Nitrosodiphenylamine	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	86-30-6	
Pentachlorophenol	**<1530**	ug/kg	1670	1530	1	06/23/20 12:30	06/24/20 12:57	87-86-5	
Phenanthrene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	85-01-8	
Phenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	108-95-2	
Pyrene	**436**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	129-00-0	
1,2,4-Trichlorobenzene	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	120-82-1	
2,4,5-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	95-95-4	
2,4,6-Trichlorophenol	**<344**	ug/kg	344	344	1	06/23/20 12:30	06/24/20 12:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%.	26-96		1	06/23/20 12:30	06/24/20 12:57	4165-60-0	
Phenol-d5 (S)	77	%.	32-93		1	06/23/20 12:30	06/24/20 12:57	4165-62-2	
2-Fluorophenol (S)	78	%.	24-95		1	06/23/20 12:30	06/24/20 12:57	367-12-4	
2,4,6-Tribromophenol (S)	77	%.	20-109		1	06/23/20 12:30	06/24/20 12:57	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/23/20 12:30	06/24/20 12:57	321-60-8	
p-Terphenyl-d14 (S)	88	%.	27-117		1	06/23/20 12:30	06/24/20 12:57	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<950**	ug/kg	950	950	1		06/24/20 05:50	67-64-1	
Acrylonitrile	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	107-13-1	
tert-Amylmethyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	994-05-8	N2
Benzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	71-43-2	
Bromobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-86-1	
Bromochloromethane	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	74-97-5	
Bromodichloromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-27-4	
Bromoform	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-25-2	
Bromomethane	**<190**	ug/kg	190	190	1		06/24/20 05:50	74-83-9	
2-Butanone (MEK)	**<712**	ug/kg	712	712	1		06/24/20 05:50	78-93-3	
tert-Butyl Alcohol	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	75-65-0	
n-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	104-51-8	
sec-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	135-98-8	
tert-Butylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	98-06-6	
Carbon disulfide	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-15-0	
Carbon tetrachloride	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	56-23-5	
Chlorobenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	108-90-7	
Chloroethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-00-3	
Chloroform	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	74-87-3	
Cyclohexane	**<475**	ug/kg	475	475	1		06/24/20 05:50	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	96-12-8	
Dibromochloromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	124-48-1	
1,2-Dibromoethane (EDB)	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	106-93-4	
Dibromomethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	74-95-3	
1,2-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	95-50-1	
1,3-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	541-73-1	
1,4-Dichlorobenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	106-46-7	
trans-1,4-Dichloro-2-butene	**<95.0**	ug/kg	950	95.0	1		06/24/20 05:50	110-57-6	
Dichlorodifluoromethane	**<237**	ug/kg	237	237	1		06/24/20 05:50	75-71-8	
1,1-Dichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	75-34-3	
1,2-Dichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	107-06-2	
1,1-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	75-35-4	
cis-1,2-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	156-59-2	
trans-1,2-Dichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	156-60-5	
1,2-Dichloropropane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	78-87-5	
cis-1,3-Dichloropropene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	10061-01-5	
trans-1,3-Dichloropropene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	10061-02-6	
Diethyl ether (Ethyl ether)	**<190**	ug/kg	190	190	1		06/24/20 05:50	60-29-7	
Diisopropyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	108-20-3	N2
Ethylbenzene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	100-41-4	
Ethyl-tert-butyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	637-92-3	N2
Hexachloroethane	**<285**	ug/kg	285	285	1		06/24/20 05:50	67-72-1	N2
2-Hexanone	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	591-78-6	
Iodomethane	**<95.0**	ug/kg	950	95.0	1		06/24/20 05:50	74-88-4	
Isopropylbenzene (Cumene)	**<237**	ug/kg	237	237	1		06/24/20 05:50	98-82-8	
p-Isopropyltoluene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	99-87-6	
Methylene Chloride	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-09-2	
2-Methylnaphthalene	**<313**	ug/kg	313	313	1		06/24/20 05:50	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2370**	ug/kg	2370	2370	1		06/24/20 05:50	108-10-1	
Methyl-tert-butyl ether	**<237**	ug/kg	237	237	1		06/24/20 05:50	1634-04-4	
Naphthalene	**<313**	ug/kg	313	313	1		06/24/20 05:50	91-20-3	
n-Propylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	103-65-1	
Styrene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	100-42-5	
1,1,1,2-Tetrachloroethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	630-20-6	
1,1,2,2-Tetrachloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-34-5	
Tetrachloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	127-18-4	
Tetrahydrofuran	**<950**	ug/kg	950	950	1		06/24/20 05:50	109-99-9	N2
Toluene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-88-3	
1,2,3-Trichlorobenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	87-61-6	
1,2,4-Trichlorobenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	120-82-1	
1,1,1-Trichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	71-55-6	
1,1,2-Trichloroethane	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (4-5') **Lab ID: 50260268005** Collected: 06/15/20 10:20 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Trichloroethene	**<47.5**	ug/kg	47.5	47.5	1		06/24/20 05:50	79-01-6	
Trichlorofluoromethane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	75-69-4	
1,2,3-Trichloropropane	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	96-18-4	
1,2,3-Trimethylbenzene	**<237**	ug/kg	237	237	1		06/24/20 05:50	526-73-8	N2
1,2,4-Trimethylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	95-63-6	
1,3,5-Trimethylbenzene	**<95.0**	ug/kg	95.0	95.0	1		06/24/20 05:50	108-67-8	
Vinyl chloride	**<38.0**	ug/kg	38.0	38.0	1		06/24/20 05:50	75-01-4	
m&p-Xylene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	179601-23-1	
o-Xylene	**<23.7**	ug/kg	47.5	23.7	1		06/24/20 05:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 05:50	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 05:50	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 05:50	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**4.6**	%	0.10	0.10	1		06/23/20 13:45		
7196 Chromium, Hexavalent	Analytical Method: EPA 7196A Preparation Method: EPA 3060A Pace Analytical Services - Indianapolis								
Chromium, Hexavalent	**<2.1**	mg/kg	2.1	2.1	1	07/06/20 10:50	07/07/20 16:14	18540-29-9	
Trivalent Chromium Calculation	Analytical Method: Trivalent Chromium Calculation Pace Analytical Services - Indianapolis								
Chromium, Trivalent	**24.7**	mg/kg	1.0		1		07/10/20 14:23	16065-83-1	

REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4710**	ug/kg	4710	4710	1		06/22/20 16:43	71-36-3	
Ethanol	**<2670**	ug/kg	2670	2670	1		06/22/20 16:43	64-17-5	
Methanol	**<4710**	ug/kg	4710	4710	1		06/22/20 16:43	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-36-0	
Arsenic	**<2040**	ug/kg	2040	2040	1	06/26/20 14:44	06/29/20 12:16	7440-38-2	
Barium	**8970**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-39-3	
Beryllium	**<511**	ug/kg	511	511	1	06/26/20 14:44	06/29/20 12:16	7440-41-7	
Boron	**<8180**	ug/kg	8180	8180	1	06/26/20 14:44	06/29/20 12:16	7440-42-8	
Calcium	**1790000**	ug/kg	51100	6780	1	06/26/20 14:44	06/29/20 12:16	7440-70-2	
Chromium	**5810**	ug/kg	2040	2040	1	06/26/20 14:44	06/29/20 12:16	7440-47-3	
Copper	**3020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-50-8	
Iron	**4180000**	ug/kg	25600	7770	1	06/26/20 14:44	06/29/20 12:16	7439-89-6	
Lead	**<10200**	ug/kg	10200	10200	1	06/26/20 14:44	06/29/20 12:16	7439-92-1	
Magnesium	**988000**	ug/kg	25600	4090	1	06/26/20 14:44	06/29/20 12:16	7439-95-4	
Manganese	**79400**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7439-96-5	
Molybdenum	**<1020**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7439-98-7	
Nickel	**3960**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-02-0	
Potassium	**175000**	ug/kg	51100	5000	1	06/26/20 14:44	06/29/20 12:16	7440-09-7	
Sodium	**23900J**	ug/kg	25600	13900	1	06/26/20 14:44	06/29/20 12:16	7440-23-5	
Strontium	**<5110**	ug/kg	5110	5110	1	06/26/20 14:44	06/29/20 12:16	7440-24-6	
Vanadium	**8380**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-62-2	
Zinc	**11600**	ug/kg	1020	1020	1	06/26/20 14:44	06/29/20 12:16	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2850000**	ug/kg	52800	52800	50	06/24/20 09:22	06/30/20 00:59	7429-90-5	
Cadmium	**<211**	ug/kg	211	211	1	06/24/20 09:22	06/25/20 15:03	7440-43-9	
Cobalt	**1710**	ug/kg	528	528	1	06/24/20 09:22	06/25/20 15:03	7440-48-4	
Selenium	**<1060**	ug/kg	1060	1060	5	06/24/20 09:22	06/30/20 02:40	7782-49-2	D3
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 15:03	7440-22-4	
Thallium	**<528**	ug/kg	528	528	1	06/24/20 09:22	06/25/20 15:03	7440-28-0	
Titanium	**159000**	ug/kg	5280	1400	50	06/24/20 09:22	06/30/20 00:59	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<87.7**	ug/kg	111	87.7	1	06/26/20 02:49	06/26/20 07:28	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	83-32-9	
Acenaphthylene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	208-96-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-12-7	
Benzo(a)anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	56-55-3	
Benzo(a)pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	50-32-8	
Benzo(b)fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	205-99-2	
Benzo(g,h,i)perylene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	191-24-2	
Benzo(k)fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	207-08-9	
4-Bromophenylphenyl ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	101-55-3	
Butylbenzylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	85-68-7	
Carbazole	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-74-8	
4-Chloro-3-methylphenol	**<282**	ug/kg	333	282	1	06/23/20 12:30	06/24/20 13:14	59-50-7	
bis(2-Chloroethoxy)methane	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	111-91-1	
bis(2-Chloroethyl) ether	**<161**	ug/kg	333	161	1	06/23/20 12:30	06/24/20 13:14	111-44-4	
bis(2-Chloroisopropyl) ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	108-60-1	
2-Chloronaphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-58-7	
2-Chlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	95-57-8	
4-Chlorophenylphenyl ether	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	7005-72-3	
Chrysene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	218-01-9	
Dibenz(a,h)anthracene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	53-70-3	
Dibenzofuran	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	132-64-9	
2,4-Dichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-83-2	
Diethylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	84-66-2	
2,4-Dimethylphenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	105-67-9	
Dimethylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	131-11-3	
Di-n-butylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	84-74-2	
4,6-Dinitro-2-methylphenol	**<837**	ug/kg	837	837	1	06/23/20 12:30	06/24/20 13:14	534-52-1	
2,4-Dinitrophenol	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	51-28-5	
2,4-Dinitrotoluene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	121-14-2	
2,6-Dinitrotoluene	**<89.3**	ug/kg	333	89.3	1	06/23/20 12:30	06/24/20 13:14	606-20-2	
Di-n-octylphthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	117-84-0	
1,2-Diphenylhydrazine	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	122-66-7	
bis(2-Ethylhexyl)phthalate	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	117-81-7	
Fluoranthene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	206-44-0	
Fluorene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-73-7	
Hexachloro-1,3-butadiene	**<96.9**	ug/kg	333	96.9	1	06/23/20 12:30	06/24/20 13:14	87-68-3	
Hexachlorobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	118-74-1	
Hexachlorocyclopentadiene	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14	77-47-4	
Hexachloroethane	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	67-72-1	
Indeno(1,2,3-cd)pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	193-39-5	
Isophorone	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	78-59-1	
2-Methylnaphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-57-6	
2-Methylphenol(o-Cresol)	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1010**	ug/kg	1010	1010	1	06/23/20 12:30	06/24/20 13:14		
Naphthalene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	91-20-3	
2-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	99-09-2	
4-Nitroaniline	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	100-01-6	
Nitrobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	98-95-3	
2-Nitrophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-75-5	
4-Nitrophenol	**<1610**	ug/kg	1610	1610	1	06/23/20 12:30	06/24/20 13:14	100-02-7	
N-Nitrosodimethylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	62-75-9	
N-Nitroso-di-n-propylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	621-64-7	
N-Nitrosodiphenylamine	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	86-30-6	
Pentachlorophenol	**<1480**	ug/kg	1610	1480	1	06/23/20 12:30	06/24/20 13:14	87-86-5	
Phenanthrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	85-01-8	
Phenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	108-95-2	
Pyrene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	129-00-0	
1,2,4-Trichlorobenzene	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	120-82-1	
2,4,5-Trichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	95-95-4	
2,4,6-Trichlorophenol	**<333**	ug/kg	333	333	1	06/23/20 12:30	06/24/20 13:14	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	53	%.	26-96		1	06/23/20 12:30	06/24/20 13:14	4165-60-0	
Phenol-d5 (S)	81	%.	32-93		1	06/23/20 12:30	06/24/20 13:14	4165-62-2	
2-Fluorophenol (S)	82	%.	24-95		1	06/23/20 12:30	06/24/20 13:14	367-12-4	
2,4,6-Tribromophenol (S)	75	%.	20-109		1	06/23/20 12:30	06/24/20 13:14	118-79-6	
2-Fluorobiphenyl (S)	68	%.	36-91		1	06/23/20 12:30	06/24/20 13:14	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/23/20 12:30	06/24/20 13:14	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<995**	ug/kg	995	995	1		06/24/20 06:23	67-64-1	
Acrylonitrile	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	107-13-1	
tert-Amylmethyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	994-05-8	N2
Benzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	71-43-2	
Bromobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-86-1	
Bromochloromethane	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	74-97-5	
Bromodichloromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-27-4	
Bromoform	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-25-2	
Bromomethane	**<199**	ug/kg	199	199	1		06/24/20 06:23	74-83-9	
2-Butanone (MEK)	**<746**	ug/kg	746	746	1		06/24/20 06:23	78-93-3	
tert-Butyl Alcohol	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	75-65-0	
n-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	104-51-8	
sec-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	135-98-8	
tert-Butylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	98-06-6	
Carbon disulfide	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-15-0	
Carbon tetrachloride	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	56-23-5	
Chlorobenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	108-90-7	
Chloroethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-00-3	
Chloroform	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	74-87-3	
Cyclohexane	**<497**	ug/kg	497	497	1		06/24/20 06:23	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	96-12-8	
Dibromochloromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	124-48-1	
1,2-Dibromoethane (EDB)	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	106-93-4	
Dibromomethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	74-95-3	
1,2-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	95-50-1	
1,3-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	541-73-1	
1,4-Dichlorobenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	106-46-7	
trans-1,4-Dichloro-2-butene	**<99.5**	ug/kg	995	99.5	1		06/24/20 06:23	110-57-6	
Dichlorodifluoromethane	**<249**	ug/kg	249	249	1		06/24/20 06:23	75-71-8	
1,1-Dichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	75-34-3	
1,2-Dichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	107-06-2	
1,1-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	75-35-4	
cis-1,2-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	156-59-2	
trans-1,2-Dichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	156-60-5	
1,2-Dichloropropane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	78-87-5	
cis-1,3-Dichloropropene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	10061-01-5	
trans-1,3-Dichloropropene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	10061-02-6	
Diethyl ether (Ethyl ether)	**<199**	ug/kg	199	199	1		06/24/20 06:23	60-29-7	
Diisopropyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	108-20-3	N2
Ethylbenzene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	100-41-4	
Ethyl-tert-butyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	637-92-3	N2
Hexachloroethane	**<298**	ug/kg	298	298	1		06/24/20 06:23	67-72-1	N2
2-Hexanone	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	591-78-6	
Iodomethane	**<99.5**	ug/kg	995	99.5	1		06/24/20 06:23	74-88-4	
Isopropylbenzene (Cumene)	**<249**	ug/kg	249	249	1		06/24/20 06:23	98-82-8	
p-Isopropyltoluene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	99-87-6	
Methylene Chloride	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-09-2	
2-Methylnaphthalene	**<328**	ug/kg	328	328	1		06/24/20 06:23	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2490**	ug/kg	2490	2490	1		06/24/20 06:23	108-10-1	
Methyl-tert-butyl ether	**<249**	ug/kg	249	249	1		06/24/20 06:23	1634-04-4	
Naphthalene	**<328**	ug/kg	328	328	1		06/24/20 06:23	91-20-3	
n-Propylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	103-65-1	
Styrene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	100-42-5	
1,1,1,2-Tetrachloroethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-34-5	
Tetrachloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	127-18-4	
Tetrahydrofuran	**<995**	ug/kg	995	995	1		06/24/20 06:23	109-99-9	N2
Toluene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-88-3	
1,2,3-Trichlorobenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	87-61-6	
1,2,4-Trichlorobenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	120-82-1	
1,1,1-Trichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	71-55-6	
1,1,2-Trichloroethane	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-126 (7.5-8.5') **Lab ID: 50260268006** Collected: 06/15/20 10:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<49.7**	ug/kg	49.7	49.7	1		06/24/20 06:23	79-01-6	
Trichlorofluoromethane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	75-69-4	
1,2,3-Trichloropropane	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	96-18-4	
1,2,3-Trimethylbenzene	**<249**	ug/kg	249	249	1		06/24/20 06:23	526-73-8	N2
1,2,4-Trimethylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	95-63-6	
1,3,5-Trimethylbenzene	**<99.5**	ug/kg	99.5	99.5	1		06/24/20 06:23	108-67-8	
Vinyl chloride	**<39.8**	ug/kg	39.8	39.8	1		06/24/20 06:23	75-01-4	
m&p-Xylene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	179601-23-1	
o-Xylene	**<24.9**	ug/kg	49.7	24.9	1		06/24/20 06:23	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 06:23	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/24/20 06:23	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 06:23	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**6.5**	%	0.10	0.10	1		06/23/20 13:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4990**	ug/kg	4990	4990	1		06/22/20 16:52	71-36-3	
Ethanol	**<2830**	ug/kg	2830	2830	1		06/22/20 16:52	64-17-5	
Methanol	**<4990**	ug/kg	4990	4990	1		06/22/20 16:52	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1040**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-36-0	
Arsenic	**<2080**	ug/kg	2080	2080	1	06/26/20 14:44	06/29/20 12:18	7440-38-2	
Barium	**7000**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-39-3	
Beryllium	**<519**	ug/kg	519	519	1	06/26/20 14:44	06/29/20 12:18	7440-41-7	
Boron	**<8310**	ug/kg	8310	8310	1	06/26/20 14:44	06/29/20 12:18	7440-42-8	
Calcium	**842000**	ug/kg	51900	6880	1	06/26/20 14:44	06/29/20 12:18	7440-70-2	
Chromium	**4330**	ug/kg	2080	2080	1	06/26/20 14:44	06/29/20 12:18	7440-47-3	
Copper	**2060**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-50-8	
Iron	**2510000**	ug/kg	26000	7890	1	06/26/20 14:44	06/29/20 12:18	7439-89-6	
Lead	**<10400**	ug/kg	10400	10400	1	06/26/20 14:44	06/29/20 12:18	7439-92-1	
Magnesium	**785000**	ug/kg	26000	4150	1	06/26/20 14:44	06/29/20 12:18	7439-95-4	
Manganese	**29500**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7439-96-5	
Molybdenum	**<1040**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7439-98-7	
Nickel	**3670**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-02-0	
Potassium	**184000**	ug/kg	51900	5080	1	06/26/20 14:44	06/29/20 12:18	7440-09-7	
Sodium	**28900**	ug/kg	26000	14100	1	06/26/20 14:44	06/29/20 12:18	7440-23-5	
Strontium	**<5190**	ug/kg	5190	5190	1	06/26/20 14:44	06/29/20 12:18	7440-24-6	
Vanadium	**5740**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-62-2	
Zinc	**7580**	ug/kg	1040	1040	1	06/26/20 14:44	06/29/20 12:18	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2480000**	ug/kg	56100	56100	50	06/24/20 09:22	06/30/20 01:13	7429-90-5	
Cadmium	**<224**	ug/kg	224	224	1	06/24/20 09:22	06/25/20 15:12	7440-43-9	
Cobalt	**1190**	ug/kg	561	561	1	06/24/20 09:22	06/25/20 15:12	7440-48-4	
Selenium	**<224**	ug/kg	224	224	1	06/24/20 09:22	06/25/20 15:12	7782-49-2	
Silver	**<112**	ug/kg	112	112	1	06/24/20 09:22	06/25/20 15:12	7440-22-4	
Thallium	**<561**	ug/kg	561	561	1	06/24/20 09:22	06/25/20 15:12	7440-28-0	
Titanium	**204000**	ug/kg	5610	1490	50	06/24/20 09:22	06/30/20 01:13	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<85.9**	ug/kg	109	85.9	1	06/26/20 02:49	06/26/20 07:30	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	83-32-9	
Acenaphthylene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-12-7	
Benzo(a)anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	56-55-3	
Benzo(a)pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	50-32-8	
Benzo(b)fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	205-99-2	
Benzo(g,h,i)perylene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	191-24-2	
Benzo(k)fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	207-08-9	
4-Bromophenylphenyl ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	101-55-3	
Butylbenzylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	85-68-7	
Carbazole	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-74-8	
4-Chloro-3-methylphenol	**<310**	ug/kg	366	310	1	06/23/20 12:30	06/24/20 13:32	59-50-7	
bis(2-Chloroethoxy)methane	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	111-91-1	
bis(2-Chloroethyl) ether	**<177**	ug/kg	366	177	1	06/23/20 12:30	06/24/20 13:32	111-44-4	
bis(2-Chloroisopropyl) ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	108-60-1	
2-Chloronaphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-58-7	
2-Chlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	95-57-8	
4-Chlorophenylphenyl ether	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	7005-72-3	
Chrysene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	218-01-9	
Dibenz(a,h)anthracene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	53-70-3	
Dibenzofuran	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	132-64-9	
2,4-Dichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-83-2	
Diethylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	84-66-2	
2,4-Dimethylphenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	105-67-9	
Dimethylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	131-11-3	
Di-n-butylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	84-74-2	
4,6-Dinitro-2-methylphenol	**<920**	ug/kg	920	920	1	06/23/20 12:30	06/24/20 13:32	534-52-1	
2,4-Dinitrophenol	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	51-28-5	
2,4-Dinitrotoluene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	121-14-2	
2,6-Dinitrotoluene	**<98.1**	ug/kg	366	98.1	1	06/23/20 12:30	06/24/20 13:32	606-20-2	
Di-n-octylphthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	117-84-0	
1,2-Diphenylhydrazine	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	122-66-7	
bis(2-Ethylhexyl)phthalate	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	117-81-7	
Fluoranthene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	206-44-0	
Fluorene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-73-7	
Hexachloro-1,3-butadiene	**<106**	ug/kg	366	106	1	06/23/20 12:30	06/24/20 13:32	87-68-3	
Hexachlorobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	118-74-1	
Hexachlorocyclopentadiene	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32	77-47-4	
Hexachloroethane	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	67-72-1	
Indeno(1,2,3-cd)pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	193-39-5	
Isophorone	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	78-59-1	
2-Methylnaphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-57-6	
2-Methylphenol(o-Cresol)	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1110**	ug/kg	1110	1110	1	06/23/20 12:30	06/24/20 13:32		
Naphthalene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	91-20-3	
2-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	99-09-2	
4-Nitroaniline	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	100-01-6	
Nitrobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	98-95-3	
2-Nitrophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-75-5	
4-Nitrophenol	**<1770**	ug/kg	1770	1770	1	06/23/20 12:30	06/24/20 13:32	100-02-7	
N-Nitrosodimethylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	62-75-9	
N-Nitroso-di-n-propylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	621-64-7	
N-Nitrosodiphenylamine	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	86-30-6	
Pentachlorophenol	**<1630**	ug/kg	1770	1630	1	06/23/20 12:30	06/24/20 13:32	87-86-5	
Phenanthrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	85-01-8	
Phenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	108-95-2	
Pyrene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	129-00-0	
1,2,4-Trichlorobenzene	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	120-82-1	
2,4,5-Trichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	95-95-4	
2,4,6-Trichlorophenol	**<366**	ug/kg	366	366	1	06/23/20 12:30	06/24/20 13:32	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%.	26-96		1	06/23/20 12:30	06/24/20 13:32	4165-60-0	
Phenol-d5 (S)	82	%.	32-93		1	06/23/20 12:30	06/24/20 13:32	4165-62-2	
2-Fluorophenol (S)	87	%.	24-95		1	06/23/20 12:30	06/24/20 13:32	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/23/20 12:30	06/24/20 13:32	118-79-6	
2-Fluorobiphenyl (S)	79	%.	36-91		1	06/23/20 12:30	06/24/20 13:32	321-60-8	
p-Terphenyl-d14 (S)	91	%.	27-117		1	06/23/20 12:30	06/24/20 13:32	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1220**	ug/kg	1220	1220	1		06/24/20 06:56	67-64-1	
Acrylonitrile	**<122**	ug/kg	122	122	1		06/24/20 06:56	107-13-1	
tert-Amylmethyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	994-05-8	N2
Benzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	71-43-2	
Bromobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-86-1	
Bromochloromethane	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	74-97-5	
Bromodichloromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-27-4	
Bromoform	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-25-2	
Bromomethane	**<245**	ug/kg	245	245	1		06/24/20 06:56	74-83-9	
2-Butanone (MEK)	**<918**	ug/kg	918	918	1		06/24/20 06:56	78-93-3	
tert-Butyl Alcohol	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	75-65-0	
n-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	104-51-8	
sec-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	135-98-8	
tert-Butylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	98-06-6	
Carbon disulfide	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-15-0	
Carbon tetrachloride	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	56-23-5	
Chlorobenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	108-90-7	
Chloroethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-00-3	
Chloroform	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	74-87-3	
Cyclohexane	**<612**	ug/kg	612	612	1		06/24/20 06:56	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	96-12-8	
Dibromochloromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	124-48-1	
1,2-Dibromoethane (EDB)	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	106-93-4	
Dibromomethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	74-95-3	
1,2-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	95-50-1	
1,3-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	541-73-1	
1,4-Dichlorobenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	106-46-7	
trans-1,4-Dichloro-2-butene	**<122**	ug/kg	1220	122	1		06/24/20 06:56	110-57-6	
Dichlorodifluoromethane	**<306**	ug/kg	306	306	1		06/24/20 06:56	75-71-8	
1,1-Dichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	75-34-3	
1,2-Dichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	107-06-2	
1,1-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	75-35-4	
cis-1,2-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	156-59-2	
trans-1,2-Dichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	156-60-5	
1,2-Dichloropropane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	78-87-5	
cis-1,3-Dichloropropene	**<122**	ug/kg	122	122	1		06/24/20 06:56	10061-01-5	
trans-1,3-Dichloropropene	**<122**	ug/kg	122	122	1		06/24/20 06:56	10061-02-6	
Diethyl ether (Ethyl ether)	**<245**	ug/kg	245	245	1		06/24/20 06:56	60-29-7	
Diisopropyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	108-20-3	N2
Ethylbenzene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	100-41-4	
Ethyl-tert-butyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	637-92-3	N2
Hexachloroethane	**<367**	ug/kg	367	367	1		06/24/20 06:56	67-72-1	N2
2-Hexanone	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	591-78-6	
Iodomethane	**<122**	ug/kg	1220	122	1		06/24/20 06:56	74-88-4	
Isopropylbenzene (Cumene)	**<306**	ug/kg	306	306	1		06/24/20 06:56	98-82-8	
p-Isopropyltoluene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	99-87-6	
Methylene Chloride	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-09-2	
2-Methylnaphthalene	**<404**	ug/kg	404	404	1		06/24/20 06:56	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3060**	ug/kg	3060	3060	1		06/24/20 06:56	108-10-1	
Methyl-tert-butyl ether	**<306**	ug/kg	306	306	1		06/24/20 06:56	1634-04-4	
Naphthalene	**<404**	ug/kg	404	404	1		06/24/20 06:56	91-20-3	
n-Propylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	103-65-1	
Styrene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	100-42-5	
1,1,1,2-Tetrachloroethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	630-20-6	
1,1,2,2-Tetrachloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-34-5	
Tetrachloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	127-18-4	
Tetrahydrofuran	**<1220**	ug/kg	1220	1220	1		06/24/20 06:56	109-99-9	N2
Toluene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-88-3	
1,2,3-Trichlorobenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	87-61-6	
1,2,4-Trichlorobenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	120-82-1	
1,1,1-Trichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	71-55-6	
1,1,2-Trichloroethane	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (6-7') **Lab ID: 50260268007** Collected: 06/15/20 11:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<61.2**	ug/kg	61.2	61.2	1		06/24/20 06:56	79-01-6	
Trichlorofluoromethane	**<122**	ug/kg	122	122	1		06/24/20 06:56	75-69-4	
1,2,3-Trichloropropane	**<122**	ug/kg	122	122	1		06/24/20 06:56	96-18-4	
1,2,3-Trimethylbenzene	**<306**	ug/kg	306	306	1		06/24/20 06:56	526-73-8	N2
1,2,4-Trimethylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	95-63-6	
1,3,5-Trimethylbenzene	**<122**	ug/kg	122	122	1		06/24/20 06:56	108-67-8	
Vinyl chloride	**<49.0**	ug/kg	49.0	49.0	1		06/24/20 06:56	75-01-4	
m&p-Xylene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	179601-23-1	
o-Xylene	**<30.6**	ug/kg	61.2	30.6	1		06/24/20 06:56	95-47-6	
Surrogates									
Dibromofluoromethane (S)	115	%.	62-137		1		06/24/20 06:56	1868-53-7	
Toluene-d8 (S)	114	%.	64-139		1		06/24/20 06:56	2037-26-5	
4-Bromofluorobenzene (S)	117	%.	60-142		1		06/24/20 06:56	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**11.8**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4770**	ug/kg	4770	4770	1		06/22/20 17:02	71-36-3	
Ethanol	**<2710**	ug/kg	2710	2710	1		06/22/20 17:02	64-17-5	
Methanol	**<4770**	ug/kg	4770	4770	1		06/22/20 17:02	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	12674-11-2	
PCB-1221 (Aroclor 1221)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11104-28-2	
PCB-1232 (Aroclor 1232)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11141-16-5	
PCB-1242 (Aroclor 1242)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	53469-21-9	
PCB-1248 (Aroclor 1248)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	12672-29-6	
PCB-1254 (Aroclor 1254)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11097-69-1	
PCB-1260 (Aroclor 1260)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11096-82-5	
PCB-1262 (Aroclor 1262)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<358**	ug/kg	358	358	1	06/24/20 21:50	06/25/20 21:37	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	53	%.	25-123		1	06/24/20 21:50	06/25/20 21:37	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-36-0	
Arsenic	**<2120**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:21	7440-38-2	
Barium	**4410**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-39-3	
Beryllium	**<529**	ug/kg	529	529	1	06/26/20 14:44	06/29/20 12:21	7440-41-7	
Boron	**<8470**	ug/kg	8470	8470	1	06/26/20 14:44	06/29/20 12:21	7440-42-8	
Calcium	**28100000**	ug/kg	265000	35100	5	06/26/20 14:44	06/29/20 12:47	7440-70-2	
Chromium	**3580**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:21	7440-47-3	
Copper	**2810**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-50-8	
Iron	**2440000**	ug/kg	26500	8040	1	06/26/20 14:44	06/29/20 12:21	7439-89-6	
Lead	**<10600**	ug/kg	10600	10600	1	06/26/20 14:44	06/29/20 12:21	7439-92-1	
Magnesium	**4010000**	ug/kg	26500	4230	1	06/26/20 14:44	06/29/20 12:21	7439-95-4	
Manganese	**61300**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7439-96-5	
Molybdenum	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7439-98-7	
Nickel	**4460**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-02-0	
Potassium	**195000**	ug/kg	52900	5170	1	06/26/20 14:44	06/29/20 12:21	7440-09-7	
Sodium	**56800**	ug/kg	26500	14400	1	06/26/20 14:44	06/29/20 12:21	7440-23-5	
Strontium	**24900**	ug/kg	5290	5290	1	06/26/20 14:44	06/29/20 12:21	7440-24-6	
Vanadium	**10200**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-62-2	
Zinc	**6750**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:21	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**1630000**	ug/kg	53000	53000	50	06/24/20 09:22	06/30/20 01:18	7429-90-5	
Cadmium	**<212**	ug/kg	212	212	1	06/24/20 09:22	06/25/20 15:26	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1150**	ug/kg	530	530	1	06/24/20 09:22	06/25/20 15:26	7440-48-4	
Selenium	**<212**	ug/kg	212	212	1	06/24/20 09:22	06/25/20 15:26	7782-49-2	
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 15:26	7440-22-4	
Thallium	**<530**	ug/kg	530	530	1	06/24/20 09:22	06/25/20 15:26	7440-28-0	
Titanium	**175000**	ug/kg	5300	1410	50	06/24/20 09:22	06/30/20 01:18	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<84.5**	ug/kg	107	84.5	1	06/26/20 02:49	06/26/20 07:33	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	83-32-9	
Acenaphthylene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	208-96-8	
Anthracene	**9250**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-12-7	
Benzo(a)anthracene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	56-55-3	
Benzo(a)pyrene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	50-32-8	
Benzo(b)fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	205-99-2	
Benzo(g,h,i)perylene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	191-24-2	
Benzo(k)fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	207-08-9	
4-Bromophenylphenyl ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	101-55-3	
Butylbenzylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	85-68-7	
Carbazole	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-74-8	
4-Chloro-3-methylphenol	**<7540**	ug/kg	8880	7540	5	06/23/20 12:30	06/24/20 13:49	59-50-7	
bis(2-Chloroethoxy)methane	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	111-91-1	
bis(2-Chloroethyl) ether	**<4310**	ug/kg	8880	4310	5	06/23/20 12:30	06/24/20 13:49	111-44-4	
bis(2-Chloroisopropyl) ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	108-60-1	
2-Chloronaphthalene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-58-7	
2-Chlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	95-57-8	
4-Chlorophenylphenyl ether	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	7005-72-3	
Chrysene	**11600**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	218-01-9	
Dibenz(a,h)anthracene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	53-70-3	
Dibenzofuran	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	132-64-9	
2,4-Dichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-83-2	
Diethylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	84-66-2	
2,4-Dimethylphenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	105-67-9	
Dimethylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	131-11-3	
Di-n-butylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	84-74-2	
4,6-Dinitro-2-methylphenol	**<22300**	ug/kg	22300	22300	5	06/23/20 12:30	06/24/20 13:49	534-52-1	
2,4-Dinitrophenol	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	51-28-5	
2,4-Dinitrotoluene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	121-14-2	
2,6-Dinitrotoluene	**<2380**	ug/kg	8880	2380	5	06/23/20 12:30	06/24/20 13:49	606-20-2	
Di-n-octylphthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	117-84-0	
1,2-Diphenylhydrazine	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	122-66-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	117-81-7	
Fluoranthene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	206-44-0	
Fluorene	**16500**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-73-7	
Hexachloro-1,3-butadiene	**<2580**	ug/kg	8880	2580	5	06/23/20 12:30	06/24/20 13:49	87-68-3	
Hexachlorobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	118-74-1	
Hexachlorocyclopentadiene	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49	77-47-4	
Hexachloroethane	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	67-72-1	
Indeno(1,2,3-cd)pyrene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	193-39-5	
Isophorone	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	78-59-1	
2-Methylnaphthalene	**61800**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-57-6	
2-Methylphenol(o-Cresol)	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<26900**	ug/kg	26900	26900	5	06/23/20 12:30	06/24/20 13:49		
Naphthalene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	91-20-3	
2-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-74-4	
3-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	99-09-2	
4-Nitroaniline	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	100-01-6	
Nitrobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	98-95-3	
2-Nitrophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-75-5	
4-Nitrophenol	**<43100**	ug/kg	43100	43100	5	06/23/20 12:30	06/24/20 13:49	100-02-7	
N-Nitrosodimethylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	62-75-9	
N-Nitroso-di-n-propylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	621-64-7	
N-Nitrosodiphenylamine	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	86-30-6	
Pentachlorophenol	**<39600**	ug/kg	43100	39600	5	06/23/20 12:30	06/24/20 13:49	87-86-5	
Phenanthrene	**68700**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	85-01-8	
Phenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	108-95-2	ED
Pyrene	**23800**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	129-00-0	
1,2,4-Trichlorobenzene	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	120-82-1	
2,4,5-Trichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	95-95-4	
2,4,6-Trichlorophenol	**<8880**	ug/kg	8880	8880	5	06/23/20 12:30	06/24/20 13:49	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	0	%.	26-96		5	06/23/20 12:30	06/24/20 13:49	4165-60-0	S4
Phenol-d5 (S)	0	%.	32-93		5	06/23/20 12:30	06/24/20 13:49	4165-62-2	S4
2-Fluorophenol (S)	0	%.	24-95		5	06/23/20 12:30	06/24/20 13:49	367-12-4	S4
2,4,6-Tribromophenol (S)	54	%.	20-109		5	06/23/20 12:30	06/24/20 13:49	118-79-6	
2-Fluorobiphenyl (S)	86	%.	36-91		5	06/23/20 12:30	06/24/20 13:49	321-60-8	
p-Terphenyl-d14 (S)	74	%.	27-117		5	06/23/20 12:30	06/24/20 13:49	1718-51-0	
Tentatively Identified Compounds									
Naphthalene, 1-ethyl-	**51900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1127-76-0	N
Naphthalene, 2,6-dimethy	**147000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-42-0	N
Naphthalene, 1,3-dimethy	**172000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	575-41-7	N
Naphthalene, 1,7-dimethy	**96100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	575-37-1	N
Naphthalene, 2,3-dimethy	**74500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-40-8	N
Naphthalene, 2,3-dimethy	**31100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	581-40-8	N
Naphthalene, 2-(1-methyl	**95800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2027-17-0	N

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546								
	Pace Analytical Services - Indianapolis								
Tentatively Identified Compounds									
Naphthalene, 2,3,6-trime	**64600J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	829-26-5	N
Naphthalene, 2,3,6-trime	**52700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	829-26-5	N
Naphthalene, 1,4,6-trime	**43900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2131-42-2	N
Naphthalene, 1,6,7-trime	**68400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2245-38-7	N
Benzene, [1-(2,4-cyclope	**97700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2320-32-3	N
Naphthalene, 2-methyl-1-	**35600J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	54774-89-9	N
Dibenzofuran, 4-methyl-	**34000J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	7320-53-8	N
Unknown	**48400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
4,4'-Dimethylbiphenyl	**55800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	613-33-2	N
Unknown	**36500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
9H-Fluorene, 2,3-dimethy	**32800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	4612-63-9	N
Anthracene, 1-methyl-	**64700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	610-48-0	N
1H-Indene, 1-phenyl-	**80400J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1961-96-2	N
Phenanthrene, 4-methyl-	**52100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	832-64-4	N
2,8-Dimethyldibenzo(B,D)	**32900J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1207-15-4	N
Phenanthrene, 4,5-dimeth	**38200J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-69-9	N
Phenanthrene, 3,6-dimeth	**48800J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	1576-67-6	N
Phenanthrene, 2,5-dimeth	**86700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-66-6	N
Unknown	**45700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
Phenanthrene, 2,3,5-trim	**16700J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	3674-73-5	N
Pyrene, 1-methyl-	**17100J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	2381-21-7	N
Pyrene, 1,3-dimethyl-	**15500J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49	64401-21-4	N
Unknown	**15200J**	ug/kg			5	06/23/20 12:30	06/24/20 13:49		
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Acetone	**<1070**	ug/kg	1070	1070	1		06/24/20 07:30	67-64-1	
Acrylonitrile	**<107**	ug/kg	107	107	1		06/24/20 07:30	107-13-1	
tert-Amylmethyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	994-05-8	N2
Benzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	71-43-2	
Bromobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-86-1	
Bromochloromethane	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	74-97-5	
Bromodichloromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-27-4	
Bromoform	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-25-2	
Bromomethane	**<214**	ug/kg	214	214	1		06/24/20 07:30	74-83-9	
2-Butanone (MEK)	**<802**	ug/kg	802	802	1		06/24/20 07:30	78-93-3	
tert-Butyl Alcohol	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	75-65-0	
n-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	104-51-8	
sec-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	135-98-8	
tert-Butylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	98-06-6	
Carbon disulfide	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-15-0	
Carbon tetrachloride	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	56-23-5	
Chlorobenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-00-3	
Chloroform	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	67-66-3	
Chloromethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	74-87-3	
Cyclohexane	**<535**	ug/kg	535	535	1		06/24/20 07:30	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	96-12-8	
Dibromochloromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	124-48-1	
1,2-Dibromoethane (EDB)	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	106-93-4	
Dibromomethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	74-95-3	
1,2-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	95-50-1	
1,3-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	541-73-1	
1,4-Dichlorobenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	106-46-7	
trans-1,4-Dichloro-2-butene	**<107**	ug/kg	1070	107	1		06/24/20 07:30	110-57-6	
Dichlorodifluoromethane	**<267**	ug/kg	267	267	1		06/24/20 07:30	75-71-8	
1,1-Dichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	75-34-3	
1,2-Dichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	107-06-2	
1,1-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	75-35-4	
cis-1,2-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	156-59-2	
trans-1,2-Dichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	156-60-5	
1,2-Dichloropropane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	78-87-5	
cis-1,3-Dichloropropene	**<107**	ug/kg	107	107	1		06/24/20 07:30	10061-01-5	
trans-1,3-Dichloropropene	**<107**	ug/kg	107	107	1		06/24/20 07:30	10061-02-6	
Diethyl ether (Ethyl ether)	**<214**	ug/kg	214	214	1		06/24/20 07:30	60-29-7	
Diisopropyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	108-20-3	N2
Ethylbenzene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	100-41-4	
Ethyl-tert-butyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	637-92-3	N2
Hexachloroethane	**<321**	ug/kg	321	321	1		06/24/20 07:30	67-72-1	N2
2-Hexanone	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	591-78-6	
Iodomethane	**<107**	ug/kg	1070	107	1		06/24/20 07:30	74-88-4	
Isopropylbenzene (Cumene)	**<267**	ug/kg	267	267	1		06/24/20 07:30	98-82-8	
p-Isopropyltoluene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	99-87-6	
Methylene Chloride	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-09-2	
2-Methylnaphthalene	**<353**	ug/kg	353	353	1		06/24/20 07:30	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2670**	ug/kg	2670	2670	1		06/24/20 07:30	108-10-1	
Methyl-tert-butyl ether	**<267**	ug/kg	267	267	1		06/24/20 07:30	1634-04-4	
Naphthalene	**<353**	ug/kg	353	353	1		06/24/20 07:30	91-20-3	
n-Propylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	103-65-1	
Styrene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	630-20-6	
1,1,2,2-Tetrachloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-34-5	
Tetrachloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	127-18-4	
Tetrahydrofuran	**<1070**	ug/kg	1070	1070	1		06/24/20 07:30	109-99-9	N2
Toluene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-88-3	
1,2,3-Trichlorobenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	87-61-6	
1,2,4-Trichlorobenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	120-82-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-127 (10-11') **Lab ID: 50260268008** Collected: 06/15/20 13:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
1,1,1-Trichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	71-55-6	
1,1,2-Trichloroethane	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-00-5	
Trichloroethene	**<53.5**	ug/kg	53.5	53.5	1		06/24/20 07:30	79-01-6	
Trichlorofluoromethane	**<107**	ug/kg	107	107	1		06/24/20 07:30	75-69-4	
1,2,3-Trichloropropane	**<107**	ug/kg	107	107	1		06/24/20 07:30	96-18-4	
1,2,3-Trimethylbenzene	**<267**	ug/kg	267	267	1		06/24/20 07:30	526-73-8	N2
1,2,4-Trimethylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	95-63-6	
1,3,5-Trimethylbenzene	**<107**	ug/kg	107	107	1		06/24/20 07:30	108-67-8	
Vinyl chloride	**<42.8**	ug/kg	42.8	42.8	1		06/24/20 07:30	75-01-4	
m&p-Xylene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	179601-23-1	
o-Xylene	**<26.7**	ug/kg	53.5	26.7	1		06/24/20 07:30	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%.	62-137		1		06/24/20 07:30	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 07:30	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	60-142		1		06/24/20 07:30	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**7.7**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5150**	ug/kg	5150	5150	1		06/22/20 17:11	71-36-3	
Ethanol	**<2920**	ug/kg	2920	2920	1		06/22/20 17:11	64-17-5	
Methanol	**<5150**	ug/kg	5150	5150	1		06/22/20 17:11	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	12674-11-2	
PCB-1221 (Aroclor 1221)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11104-28-2	
PCB-1232 (Aroclor 1232)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11141-16-5	
PCB-1242 (Aroclor 1242)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	53469-21-9	
PCB-1248 (Aroclor 1248)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	12672-29-6	
PCB-1254 (Aroclor 1254)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11097-69-1	
PCB-1260 (Aroclor 1260)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11096-82-5	
PCB-1262 (Aroclor 1262)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<383**	ug/kg	383	383	1	06/24/20 21:50	06/25/20 21:52	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	57	%.	25-123		1	06/24/20 21:50	06/25/20 21:52	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1080**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-36-0	
Arsenic	**2770**	ug/kg	2160	2160	1	06/26/20 14:44	06/29/20 12:23	7440-38-2	
Barium	**21400**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-39-3	
Beryllium	**<539**	ug/kg	539	539	1	06/26/20 14:44	06/29/20 12:23	7440-41-7	
Boron	**<8620**	ug/kg	8620	8620	1	06/26/20 14:44	06/29/20 12:23	7440-42-8	
Calcium	**62400000**	ug/kg	539000	71500	10	06/26/20 14:44	06/29/20 12:55	7440-70-2	
Chromium	**7200**	ug/kg	2160	2160	1	06/26/20 14:44	06/29/20 12:23	7440-47-3	
Copper	**8240**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-50-8	
Iron	**5040000**	ug/kg	26900	8190	1	06/26/20 14:44	06/29/20 12:23	7439-89-6	
Lead	**<10800**	ug/kg	10800	10800	1	06/26/20 14:44	06/29/20 12:23	7439-92-1	
Magnesium	**5520000**	ug/kg	26900	4310	1	06/26/20 14:44	06/29/20 12:23	7439-95-4	
Manganese	**110000**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7439-96-5	
Molybdenum	**1870**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7439-98-7	
Nickel	**5840**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-02-0	
Potassium	**390000**	ug/kg	53900	5270	1	06/26/20 14:44	06/29/20 12:23	7440-09-7	
Sodium	**90100**	ug/kg	26900	14700	1	06/26/20 14:44	06/29/20 12:23	7440-23-5	
Strontium	**45900**	ug/kg	5390	5390	1	06/26/20 14:44	06/29/20 12:23	7440-24-6	
Vanadium	**12000**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-62-2	
Zinc	**17800**	ug/kg	1080	1080	1	06/26/20 14:44	06/29/20 12:23	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4160000**	ug/kg	110000	110000	100	06/24/20 09:22	06/30/20 01:22	7429-90-5	
Cadmium	**<220**	ug/kg	220	220	1	06/24/20 09:22	06/25/20 15:35	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1520**	ug/kg	550	550	1	06/24/20 09:22	06/25/20 15:35	7440-48-4	
Selenium	**223**	ug/kg	220	220	1	06/24/20 09:22	06/25/20 15:35	7782-49-2	
Silver	**<110**	ug/kg	110	110	1	06/24/20 09:22	06/25/20 15:35	7440-22-4	
Thallium	**<550**	ug/kg	550	550	1	06/24/20 09:22	06/25/20 15:35	7440-28-0	
Titanium	**275000**	ug/kg	11000	2920	100	06/24/20 09:22	06/30/20 01:22	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<95.6**	ug/kg	121	95.6	1	06/26/20 02:49	06/26/20 07:35	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	83-32-9	
Acenaphthylene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	208-96-8	
Anthracene	**841**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-12-7	
Benzo(a)anthracene	**1510**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	56-55-3	
Benzo(a)pyrene	**765**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	50-32-8	
Benzo(b)fluoranthene	**1110**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	205-99-2	
Benzo(g,h,i)perylene	**545**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	191-24-2	
Benzo(k)fluoranthene	**496**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	207-08-9	
4-Bromophenylphenyl ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	101-55-3	
Butylbenzylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	85-68-7	
Carbazole	**620**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-74-8	
4-Chloro-3-methylphenol	**<363**	ug/kg	427	363	1	06/26/20 14:45	06/29/20 23:27	59-50-7	
bis(2-Chloroethoxy)methane	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	111-91-1	
bis(2-Chloroethyl) ether	**<207**	ug/kg	427	207	1	06/26/20 14:45	06/29/20 23:27	111-44-4	
bis(2-Chloroisopropyl) ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	108-60-1	
2-Chloronaphthalene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-58-7	
2-Chlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	95-57-8	
4-Chlorophenylphenyl ether	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	7005-72-3	
Chrysene	**1280**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	218-01-9	
Dibenz(a,h)anthracene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	53-70-3	
Dibenzofuran	**988**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	132-64-9	
2,4-Dichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-83-2	
Diethylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	84-66-2	
2,4-Dimethylphenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	105-67-9	
Dimethylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	131-11-3	
Di-n-butylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	84-74-2	
4,6-Dinitro-2-methylphenol	**<1070**	ug/kg	1070	1070	1	06/26/20 14:45	06/29/20 23:27	534-52-1	
2,4-Dinitrophenol	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	51-28-5	
2,4-Dinitrotoluene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	121-14-2	
2,6-Dinitrotoluene	**<115**	ug/kg	427	115	1	06/26/20 14:45	06/29/20 23:27	606-20-2	
Di-n-octylphthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	117-84-0	
1,2-Diphenylhydrazine	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	122-66-7	

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	117-81-7	
Fluoranthene	**5490**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	206-44-0	
Fluorene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-73-7	
Hexachloro-1,3-butadiene	**<124**	ug/kg	427	124	1	06/26/20 14:45	06/29/20 23:27	87-68-3	
Hexachlorobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	118-74-1	
Hexachlorocyclopentadiene	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27	77-47-4	
Hexachloroethane	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	67-72-1	
Indeno(1,2,3-cd)pyrene	**454**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	193-39-5	
Isophorone	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	78-59-1	
2-Methylnaphthalene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-57-6	
2-Methylphenol(o-Cresol)	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1290**	ug/kg	1290	1290	1	06/26/20 14:45	06/29/20 23:27		
Naphthalene	**591**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	91-20-3	
2-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-74-4	
3-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	99-09-2	
4-Nitroaniline	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	100-01-6	
Nitrobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	98-95-3	
2-Nitrophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-75-5	
4-Nitrophenol	**<2070**	ug/kg	2070	2070	1	06/26/20 14:45	06/29/20 23:27	100-02-7	
N-Nitrosodimethylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	62-75-9	
N-Nitroso-di-n-propylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	621-64-7	
N-Nitrosodiphenylamine	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	86-30-6	
Pentachlorophenol	**<1900**	ug/kg	2070	1900	1	06/26/20 14:45	06/29/20 23:27	87-86-5	
Phenanthrene	**6780**	ug/kg	2140	2140	5	06/26/20 14:45	06/30/20 13:16	85-01-8	
Phenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	108-95-2	
Pyrene	**4370**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	129-00-0	
1,2,4-Trichlorobenzene	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	120-82-1	
2,4,5-Trichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	95-95-4	
2,4,6-Trichlorophenol	**<427**	ug/kg	427	427	1	06/26/20 14:45	06/29/20 23:27	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	26-96		1	06/26/20 14:45	06/29/20 23:27	4165-60-0	
Phenol-d5 (S)	60	%.	32-93		1	06/26/20 14:45	06/29/20 23:27	4165-62-2	
2-Fluorophenol (S)	25	%.	24-95		1	06/26/20 14:45	06/29/20 23:27	367-12-4	
2,4,6-Tribromophenol (S)	10	%.	20-109		1	06/26/20 14:45	06/29/20 23:27	118-79-6	S0
2-Fluorobiphenyl (S)	64	%.	36-91		1	06/26/20 14:45	06/29/20 23:27	321-60-8	
p-Terphenyl-d14 (S)	83	%.	27-117		1	06/26/20 14:45	06/29/20 23:27	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1310**	ug/kg	1310	1310	1		06/24/20 08:03	67-64-1	
Acrylonitrile	**<131**	ug/kg	131	131	1		06/24/20 08:03	107-13-1	
tert-Amylmethyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	994-05-8	N2
Benzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	71-43-2	
Bromobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-86-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	74-97-5	
Bromodichloromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-27-4	
Bromoform	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-25-2	
Bromomethane	**<262**	ug/kg	262	262	1		06/24/20 08:03	74-83-9	
2-Butanone (MEK)	**<982**	ug/kg	982	982	1		06/24/20 08:03	78-93-3	
tert-Butyl Alcohol	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	75-65-0	
n-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	104-51-8	
sec-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	135-98-8	
tert-Butylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	98-06-6	
Carbon disulfide	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-15-0	
Carbon tetrachloride	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	56-23-5	
Chlorobenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	108-90-7	
Chloroethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-00-3	
Chloroform	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	67-66-3	
Chloromethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	74-87-3	
Cyclohexane	**<655**	ug/kg	655	655	1		06/24/20 08:03	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	96-12-8	
Dibromochloromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	124-48-1	
1,2-Dibromoethane (EDB)	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	106-93-4	
Dibromomethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	74-95-3	
1,2-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	95-50-1	
1,3-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	541-73-1	
1,4-Dichlorobenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	106-46-7	
trans-1,4-Dichloro-2-butene	**<131**	ug/kg	1310	131	1		06/24/20 08:03	110-57-6	
Dichlorodifluoromethane	**<327**	ug/kg	327	327	1		06/24/20 08:03	75-71-8	
1,1-Dichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	75-34-3	
1,2-Dichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	107-06-2	
1,1-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	75-35-4	
cis-1,2-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	156-59-2	
trans-1,2-Dichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	156-60-5	
1,2-Dichloropropane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	78-87-5	
cis-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		06/24/20 08:03	10061-01-5	
trans-1,3-Dichloropropene	**<131**	ug/kg	131	131	1		06/24/20 08:03	10061-02-6	
Diethyl ether (Ethyl ether)	**<262**	ug/kg	262	262	1		06/24/20 08:03	60-29-7	
Diisopropyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	108-20-3	N2
Ethylbenzene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	100-41-4	
Ethyl-tert-butyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	637-92-3	N2
Hexachloroethane	**<393**	ug/kg	393	393	1		06/24/20 08:03	67-72-1	N2
2-Hexanone	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	591-78-6	
Iodomethane	**<131**	ug/kg	1310	131	1		06/24/20 08:03	74-88-4	
Isopropylbenzene (Cumene)	**<327**	ug/kg	327	327	1		06/24/20 08:03	98-82-8	
p-Isopropyltoluene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	99-87-6	
Methylene Chloride	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-09-2	
2-Methylnaphthalene	**<432**	ug/kg	432	432	1		06/24/20 08:03	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (4-5') **Lab ID: 50260268009** Collected: 06/15/20 09:45 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<3270**	ug/kg	3270	3270	1		06/24/20 08:03	108-10-1	
Methyl-tert-butyl ether	**<327**	ug/kg	327	327	1		06/24/20 08:03	1634-04-4	
Naphthalene	**<432**	ug/kg	432	432	1		06/24/20 08:03	91-20-3	
n-Propylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	103-65-1	
Styrene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	100-42-5	
1,1,1,2-Tetrachloroethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	630-20-6	
1,1,2,2-Tetrachloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-34-5	
Tetrachloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	127-18-4	
Tetrahydrofuran	**<1310**	ug/kg	1310	1310	1		06/24/20 08:03	109-99-9	N2
Toluene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-88-3	
1,2,3-Trichlorobenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	87-61-6	
1,2,4-Trichlorobenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	120-82-1	
1,1,1-Trichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	71-55-6	
1,1,2-Trichloroethane	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-00-5	
Trichloroethene	**<65.5**	ug/kg	65.5	65.5	1		06/24/20 08:03	79-01-6	
Trichlorofluoromethane	**<131**	ug/kg	131	131	1		06/24/20 08:03	75-69-4	
1,2,3-Trichloropropane	**<131**	ug/kg	131	131	1		06/24/20 08:03	96-18-4	
1,2,3-Trimethylbenzene	**<327**	ug/kg	327	327	1		06/24/20 08:03	526-73-8	N2
1,2,4-Trimethylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	95-63-6	
1,3,5-Trimethylbenzene	**<131**	ug/kg	131	131	1		06/24/20 08:03	108-67-8	
Vinyl chloride	**<52.4**	ug/kg	52.4	52.4	1		06/24/20 08:03	75-01-4	
m&p-Xylene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	179601-23-1	
o-Xylene	**<32.7**	ug/kg	65.5	32.7	1		06/24/20 08:03	95-47-6	
Surrogates									
Dibromofluoromethane (S)	120	%.	62-137		1		06/24/20 08:03	1868-53-7	
Toluene-d8 (S)	114	%.	64-139		1		06/24/20 08:03	2037-26-5	
4-Bromofluorobenzene (S)	119	%.	60-142		1		06/24/20 08:03	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**14.5**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4890**	ug/kg	4890	4890	1		06/22/20 17:44	71-36-3	
Ethanol	**<2780**	ug/kg	2780	2780	1		06/22/20 17:44	64-17-5	
Methanol	**<4890**	ug/kg	4890	4890	1		06/22/20 17:44	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<961**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-36-0	
Arsenic	**<1920**	ug/kg	1920	1920	1	06/26/20 14:44	06/29/20 12:25	7440-38-2	
Barium	**7670**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-39-3	
Beryllium	**<480**	ug/kg	480	480	1	06/26/20 14:44	06/29/20 12:25	7440-41-7	
Boron	**<7690**	ug/kg	7690	7690	1	06/26/20 14:44	06/29/20 12:25	7440-42-8	
Calcium	**663000**	ug/kg	48000	6370	1	06/26/20 14:44	06/29/20 12:25	7440-70-2	
Chromium	**6740**	ug/kg	1920	1920	1	06/26/20 14:44	06/29/20 12:25	7440-47-3	
Copper	**2900**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-50-8	
Iron	**3950000**	ug/kg	24000	7300	1	06/26/20 14:44	06/29/20 12:25	7439-89-6	
Lead	**<9610**	ug/kg	9610	9610	1	06/26/20 14:44	06/29/20 12:25	7439-92-1	
Magnesium	**1110000**	ug/kg	24000	3840	1	06/26/20 14:44	06/29/20 12:25	7439-95-4	
Manganese	**148000**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7439-96-5	
Molybdenum	**<961**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7439-98-7	
Nickel	**5440**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-02-0	
Potassium	**232000**	ug/kg	48000	4700	1	06/26/20 14:44	06/29/20 12:25	7440-09-7	
Sodium	**26100**	ug/kg	24000	13100	1	06/26/20 14:44	06/29/20 12:25	7440-23-5	
Strontium	**<4800**	ug/kg	4800	4800	1	06/26/20 14:44	06/29/20 12:25	7440-24-6	
Vanadium	**6710**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-62-2	
Zinc	**9870**	ug/kg	961	961	1	06/26/20 14:44	06/29/20 12:25	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**2900000**	ug/kg	54000	54000	50	06/24/20 09:22	06/30/20 01:27	7429-90-5	
Cadmium	**<216**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 15:44	7440-43-9	
Cobalt	**1640**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 15:44	7440-48-4	
Selenium	**<1080**	ug/kg	1080	1080	5	06/24/20 09:22	06/30/20 02:45	7782-49-2	D3
Silver	**<108**	ug/kg	108	108	1	06/24/20 09:22	06/25/20 15:44	7440-22-4	
Thallium	**<540**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 15:44	7440-28-0	
Titanium	**179000**	ug/kg	5400	1440	50	06/24/20 09:22	06/30/20 01:27	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<93.4**	ug/kg	118	93.4	1	06/26/20 02:49	06/26/20 07:38	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	83-32-9	
Acenaphthylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-12-7	
Benzo(a)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	56-55-3	
Benzo(a)pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	50-32-8	
Benzo(b)fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	205-99-2	
Benzo(g,h,i)perylene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	191-24-2	
Benzo(k)fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	207-08-9	
4-Bromophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	101-55-3	
Butylbenzylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	85-68-7	
Carbazole	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-74-8	
4-Chloro-3-methylphenol	**<295**	ug/kg	347	295	1	06/23/20 12:30	06/24/20 14:24	59-50-7	
bis(2-Chloroethoxy)methane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	111-91-1	
bis(2-Chloroethyl) ether	**<168**	ug/kg	347	168	1	06/23/20 12:30	06/24/20 14:24	111-44-4	
bis(2-Chloroisopropyl) ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	108-60-1	
2-Chloronaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-58-7	
2-Chlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	95-57-8	
4-Chlorophenylphenyl ether	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	7005-72-3	
Chrysene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	218-01-9	
Dibenz(a,h)anthracene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	53-70-3	
Dibenzofuran	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	132-64-9	
2,4-Dichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-83-2	
Diethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	84-66-2	
2,4-Dimethylphenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	105-67-9	
Dimethylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	131-11-3	
Di-n-butylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	84-74-2	
4,6-Dinitro-2-methylphenol	**<873**	ug/kg	873	873	1	06/23/20 12:30	06/24/20 14:24	534-52-1	
2,4-Dinitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	51-28-5	
2,4-Dinitrotoluene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	121-14-2	
2,6-Dinitrotoluene	**<93.1**	ug/kg	347	93.1	1	06/23/20 12:30	06/24/20 14:24	606-20-2	
Di-n-octylphthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	117-84-0	
1,2-Diphenylhydrazine	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	122-66-7	
bis(2-Ethylhexyl)phthalate	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	117-81-7	
Fluoranthene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	206-44-0	
Fluorene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	347	101	1	06/23/20 12:30	06/24/20 14:24	87-68-3	
Hexachlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24	77-47-4	
Hexachloroethane	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	67-72-1	
Indeno(1,2,3-cd)pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	193-39-5	
Isophorone	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	78-59-1	
2-Methylnaphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/23/20 12:30	06/24/20 14:24		
Naphthalene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	91-20-3	
2-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	99-09-2	
4-Nitroaniline	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	100-01-6	
Nitrobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	98-95-3	
2-Nitrophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-75-5	
4-Nitrophenol	**<1680**	ug/kg	1680	1680	1	06/23/20 12:30	06/24/20 14:24	100-02-7	
N-Nitrosodimethylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	62-75-9	
N-Nitroso-di-n-propylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	621-64-7	
N-Nitrosodiphenylamine	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	86-30-6	
Pentachlorophenol	**<1550**	ug/kg	1680	1550	1	06/23/20 12:30	06/24/20 14:24	87-86-5	
Phenanthrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	85-01-8	
Phenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	108-95-2	
Pyrene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	129-00-0	
1,2,4-Trichlorobenzene	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	120-82-1	
2,4,5-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	95-95-4	
2,4,6-Trichlorophenol	**<347**	ug/kg	347	347	1	06/23/20 12:30	06/24/20 14:24	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	43	%.	26-96		1	06/23/20 12:30	06/24/20 14:24	4165-60-0	
Phenol-d5 (S)	79	%.	32-93		1	06/23/20 12:30	06/24/20 14:24	4165-62-2	
2-Fluorophenol (S)	81	%.	24-95		1	06/23/20 12:30	06/24/20 14:24	367-12-4	
2,4,6-Tribromophenol (S)	74	%.	20-109		1	06/23/20 12:30	06/24/20 14:24	118-79-6	
2-Fluorobiphenyl (S)	121	%.	36-91		1	06/23/20 12:30	06/24/20 14:24	321-60-8	S3
p-Terphenyl-d14 (S)	92	%.	27-117		1	06/23/20 12:30	06/24/20 14:24	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1270**	ug/kg	1270	1270	1		06/24/20 08:36	67-64-1	
Acrylonitrile	**<127**	ug/kg	127	127	1		06/24/20 08:36	107-13-1	
tert-Amylmethyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	994-05-8	N2
Benzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	71-43-2	
Bromobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-86-1	
Bromochloromethane	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	74-97-5	
Bromodichloromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-27-4	
Bromoform	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-25-2	
Bromomethane	**<254**	ug/kg	254	254	1		06/24/20 08:36	74-83-9	
2-Butanone (MEK)	**<952**	ug/kg	952	952	1		06/24/20 08:36	78-93-3	
tert-Butyl Alcohol	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	75-65-0	
n-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	104-51-8	
sec-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	135-98-8	
tert-Butylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	98-06-6	
Carbon disulfide	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-15-0	
Carbon tetrachloride	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	56-23-5	
Chlorobenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	108-90-7	
Chloroethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-00-3	
Chloroform	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	74-87-3	
Cyclohexane	**<635**	ug/kg	635	635	1		06/24/20 08:36	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	96-12-8	
Dibromochloromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	124-48-1	
1,2-Dibromoethane (EDB)	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	106-93-4	
Dibromomethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	74-95-3	
1,2-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	95-50-1	
1,3-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	541-73-1	
1,4-Dichlorobenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	106-46-7	
trans-1,4-Dichloro-2-butene	**<127**	ug/kg	1270	127	1		06/24/20 08:36	110-57-6	
Dichlorodifluoromethane	**<317**	ug/kg	317	317	1		06/24/20 08:36	75-71-8	
1,1-Dichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	75-34-3	
1,2-Dichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	107-06-2	
1,1-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	75-35-4	
cis-1,2-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	156-59-2	
trans-1,2-Dichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	156-60-5	
1,2-Dichloropropane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	78-87-5	
cis-1,3-Dichloropropene	**<127**	ug/kg	127	127	1		06/24/20 08:36	10061-01-5	
trans-1,3-Dichloropropene	**<127**	ug/kg	127	127	1		06/24/20 08:36	10061-02-6	
Diethyl ether (Ethyl ether)	**<254**	ug/kg	254	254	1		06/24/20 08:36	60-29-7	
Diisopropyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	108-20-3	N2
Ethylbenzene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	100-41-4	
Ethyl-tert-butyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	637-92-3	N2
Hexachloroethane	**<381**	ug/kg	381	381	1		06/24/20 08:36	67-72-1	N2
2-Hexanone	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	591-78-6	
Iodomethane	**<127**	ug/kg	1270	127	1		06/24/20 08:36	74-88-4	
Isopropylbenzene (Cumene)	**<317**	ug/kg	317	317	1		06/24/20 08:36	98-82-8	
p-Isopropyltoluene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	99-87-6	
Methylene Chloride	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-09-2	
2-Methylnaphthalene	**<419**	ug/kg	419	419	1		06/24/20 08:36	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3170**	ug/kg	3170	3170	1		06/24/20 08:36	108-10-1	
Methyl-tert-butyl ether	**<317**	ug/kg	317	317	1		06/24/20 08:36	1634-04-4	
Naphthalene	**<419**	ug/kg	419	419	1		06/24/20 08:36	91-20-3	
n-Propylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	103-65-1	
Styrene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	630-20-6	
1,1,2,2-Tetrachloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-34-5	
Tetrachloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	127-18-4	
Tetrahydrofuran	**<1270**	ug/kg	1270	1270	1		06/24/20 08:36	109-99-9	N2
Toluene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-88-3	
1,2,3-Trichlorobenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	87-61-6	
1,2,4-Trichlorobenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	120-82-1	
1,1,1-Trichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	71-55-6	
1,1,2-Trichloroethane	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-128 (8-9') **Lab ID: 50260268010** Collected: 06/15/20 09:47 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<63.5**	ug/kg	63.5	63.5	1		06/24/20 08:36	79-01-6	
Trichlorofluoromethane	**<127**	ug/kg	127	127	1		06/24/20 08:36	75-69-4	
1,2,3-Trichloropropane	**<127**	ug/kg	127	127	1		06/24/20 08:36	96-18-4	
1,2,3-Trimethylbenzene	**<317**	ug/kg	317	317	1		06/24/20 08:36	526-73-8	N2
1,2,4-Trimethylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	95-63-6	
1,3,5-Trimethylbenzene	**<127**	ug/kg	127	127	1		06/24/20 08:36	108-67-8	
Vinyl chloride	**<50.8**	ug/kg	50.8	50.8	1		06/24/20 08:36	75-01-4	
m&p-Xylene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	179601-23-1	
o-Xylene	**<31.7**	ug/kg	63.5	31.7	1		06/24/20 08:36	95-47-6	
Surrogates									
Dibromofluoromethane (S)	113	%.	62-137		1		06/24/20 08:36	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		06/24/20 08:36	2037-26-5	
4-Bromofluorobenzene (S)	113	%.	60-142		1		06/24/20 08:36	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**10.0**	%	0.10	0.10	1		06/23/20 14:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4620**	ug/kg	4620	4620	1		06/22/20 17:54	71-36-3	
Ethanol	**<2620**	ug/kg	2620	2620	1		06/22/20 17:54	64-17-5	
Methanol	**<4620**	ug/kg	4620	4620	1		06/22/20 17:54	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<926**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-36-0	
Arsenic	**2450**	ug/kg	1850	1850	1	06/26/20 14:44	06/29/20 12:27	7440-38-2	
Barium	**23100**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-39-3	
Beryllium	**<463**	ug/kg	463	463	1	06/26/20 14:44	06/29/20 12:27	7440-41-7	
Boron	**<7410**	ug/kg	7410	7410	1	06/26/20 14:44	06/29/20 12:27	7440-42-8	
Calcium	**24200000**	ug/kg	231000	30700	5	06/26/20 14:44	06/29/20 12:52	7440-70-2	
Chromium	**8290**	ug/kg	1850	1850	1	06/26/20 14:44	06/29/20 12:27	7440-47-3	
Copper	**20800**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-50-8	
Iron	**6060000**	ug/kg	23100	7040	1	06/26/20 14:44	06/29/20 12:27	7439-89-6	
Lead	**47200**	ug/kg	9260	9260	1	06/26/20 14:44	06/29/20 12:27	7439-92-1	
Magnesium	**3800000**	ug/kg	23100	3700	1	06/26/20 14:44	06/29/20 12:27	7439-95-4	
Manganese	**92200**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7439-96-5	
Molybdenum	**<926**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7439-98-7	
Nickel	**5930**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-02-0	
Potassium	**336000**	ug/kg	46300	4530	1	06/26/20 14:44	06/29/20 12:27	7440-09-7	
Sodium	**72400**	ug/kg	23100	12600	1	06/26/20 14:44	06/29/20 12:27	7440-23-5	
Strontium	**30000**	ug/kg	4630	4630	1	06/26/20 14:44	06/29/20 12:27	7440-24-6	
Vanadium	**10200**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-62-2	
Zinc	**43600**	ug/kg	926	926	1	06/26/20 14:44	06/29/20 12:27	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4190000**	ug/kg	99900	99900	100	06/24/20 09:22	06/30/20 01:31	7429-90-5	
Cadmium	**316**	ug/kg	200	200	1	06/24/20 09:22	06/25/20 15:58	7440-43-9	
Cobalt	**1610**	ug/kg	500	500	1	06/24/20 09:22	06/25/20 15:58	7440-48-4	
Selenium	**<999**	ug/kg	999	999	5	06/24/20 09:22	06/30/20 02:50	7782-49-2	D3
Silver	**<99.9**	ug/kg	99.9	99.9	1	06/24/20 09:22	06/25/20 15:58	7440-22-4	
Thallium	**<500**	ug/kg	500	500	1	06/24/20 09:22	06/25/20 15:58	7440-28-0	
Titanium	**247000**	ug/kg	9990	2660	100	06/24/20 09:22	06/30/20 01:31	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**666**	ug/kg	106	83.5	1	06/26/20 02:49	06/26/20 07:40	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	83-32-9	
Acenaphthylene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-12-7	
Benzo(a)anthracene	**1650**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	56-55-3	
Benzo(a)pyrene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	50-32-8	
Benzo(b)fluoranthene	**2220**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	205-99-2	
Benzo(g,h,i)perylene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	191-24-2	
Benzo(k)fluoranthene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	207-08-9	
4-Bromophenylphenyl ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	101-55-3	
Butylbenzylphthalate	**90700**	ug/kg	8150	8150	25	06/23/20 12:30	06/25/20 17:36	85-68-7	
Carbazole	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-74-8	
4-Chloro-3-methylphenol	**<1380**	ug/kg	1630	1380	5	06/23/20 12:30	06/24/20 14:42	59-50-7	
bis(2-Chloroethoxy)methane	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	111-91-1	
bis(2-Chloroethyl) ether	**<790**	ug/kg	1630	790	5	06/23/20 12:30	06/24/20 14:42	111-44-4	
bis(2-Chloroisopropyl) ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	108-60-1	
2-Chloronaphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-58-7	
2-Chlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	95-57-8	
4-Chlorophenylphenyl ether	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	7005-72-3	
Chrysene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	218-01-9	
Dibenz(a,h)anthracene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	53-70-3	
Dibenzofuran	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	132-64-9	
2,4-Dichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-83-2	
Diethylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	84-66-2	
2,4-Dimethylphenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	105-67-9	
Dimethylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	131-11-3	
Di-n-butylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	84-74-2	
4,6-Dinitro-2-methylphenol	**<4100**	ug/kg	4100	4100	5	06/23/20 12:30	06/24/20 14:42	534-52-1	
2,4-Dinitrophenol	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	51-28-5	
2,4-Dinitrotoluene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	121-14-2	
2,6-Dinitrotoluene	**<437**	ug/kg	1630	437	5	06/23/20 12:30	06/24/20 14:42	606-20-2	
Di-n-octylphthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	117-84-0	
1,2-Diphenylhydrazine	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	122-66-7	
bis(2-Ethylhexyl)phthalate	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	117-81-7	
Fluoranthene	**2960**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	206-44-0	
Fluorene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-73-7	
Hexachloro-1,3-butadiene	**<474**	ug/kg	1630	474	5	06/23/20 12:30	06/24/20 14:42	87-68-3	
Hexachlorobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	118-74-1	
Hexachlorocyclopentadiene	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42	77-47-4	
Hexachloroethane	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	67-72-1	
Indeno(1,2,3-cd)pyrene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	193-39-5	
Isophorone	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	78-59-1	
2-Methylnaphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-57-6	
2-Methylphenol(o-Cresol)	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<4940**	ug/kg	4940	4940	5	06/23/20 12:30	06/24/20 14:42		
Naphthalene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	91-20-3	
2-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	99-09-2	
4-Nitroaniline	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	100-01-6	
Nitrobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	98-95-3	
2-Nitrophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-75-5	
4-Nitrophenol	**<7900**	ug/kg	7900	7900	5	06/23/20 12:30	06/24/20 14:42	100-02-7	
N-Nitrosodimethylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	62-75-9	
N-Nitroso-di-n-propylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	621-64-7	
N-Nitrosodiphenylamine	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	86-30-6	
Pentachlorophenol	**<7260**	ug/kg	7900	7260	5	06/23/20 12:30	06/24/20 14:42	87-86-5	
Phenanthrene	**1870**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	85-01-8	
Phenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	108-95-2	ED
Pyrene	**2620**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	129-00-0	
1,2,4-Trichlorobenzene	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	120-82-1	
2,4,5-Trichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	95-95-4	
2,4,6-Trichlorophenol	**<1630**	ug/kg	1630	1630	5	06/23/20 12:30	06/24/20 14:42	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	26-96		5	06/23/20 12:30	06/24/20 14:42	4165-60-0	
Phenol-d5 (S)	73	%.	32-93		5	06/23/20 12:30	06/24/20 14:42	4165-62-2	
2-Fluorophenol (S)	83	%.	24-95		5	06/23/20 12:30	06/24/20 14:42	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	20-109		5	06/23/20 12:30	06/24/20 14:42	118-79-6	
2-Fluorobiphenyl (S)	92	%.	36-91		5	06/23/20 12:30	06/24/20 14:42	321-60-8	S0
p-Terphenyl-d14 (S)	97	%.	27-117		5	06/23/20 12:30	06/24/20 14:42	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1020**	ug/kg	1020	1020	1		06/24/20 09:09	67-64-1	
Acrylonitrile	**<102**	ug/kg	102	102	1		06/24/20 09:09	107-13-1	
tert-Amylmethyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	994-05-8	N2
Benzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	71-43-2	
Bromobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-86-1	
Bromochloromethane	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	74-97-5	
Bromodichloromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-27-4	
Bromoform	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-25-2	
Bromomethane	**<204**	ug/kg	204	204	1		06/24/20 09:09	74-83-9	
2-Butanone (MEK)	**<766**	ug/kg	766	766	1		06/24/20 09:09	78-93-3	
tert-Butyl Alcohol	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	75-65-0	
n-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	104-51-8	
sec-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	135-98-8	
tert-Butylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	98-06-6	
Carbon disulfide	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-15-0	
Carbon tetrachloride	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	56-23-5	
Chlorobenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	108-90-7	
Chloroethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-00-3	
Chloroform	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	74-87-3	
Cyclohexane	**<510**	ug/kg	510	510	1		06/24/20 09:09	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	96-12-8	
Dibromochloromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	124-48-1	
1,2-Dibromoethane (EDB)	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	106-93-4	
Dibromomethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	74-95-3	
1,2-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	95-50-1	
1,3-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	541-73-1	
1,4-Dichlorobenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	106-46-7	
trans-1,4-Dichloro-2-butene	**<102**	ug/kg	1020	102	1		06/24/20 09:09	110-57-6	
Dichlorodifluoromethane	**<255**	ug/kg	255	255	1		06/24/20 09:09	75-71-8	
1,1-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	75-34-3	
1,2-Dichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	107-06-2	
1,1-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	75-35-4	
cis-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	156-59-2	
trans-1,2-Dichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	156-60-5	
1,2-Dichloropropane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	78-87-5	
cis-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		06/24/20 09:09	10061-01-5	
trans-1,3-Dichloropropene	**<102**	ug/kg	102	102	1		06/24/20 09:09	10061-02-6	
Diethyl ether (Ethyl ether)	**<204**	ug/kg	204	204	1		06/24/20 09:09	60-29-7	
Diisopropyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	108-20-3	N2
Ethylbenzene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	100-41-4	
Ethyl-tert-butyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	637-92-3	N2
Hexachloroethane	**<306**	ug/kg	306	306	1		06/24/20 09:09	67-72-1	N2
2-Hexanone	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	591-78-6	
Iodomethane	**<102**	ug/kg	1020	102	1		06/24/20 09:09	74-88-4	
Isopropylbenzene (Cumene)	**<255**	ug/kg	255	255	1		06/24/20 09:09	98-82-8	
p-Isopropyltoluene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	99-87-6	
Methylene Chloride	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-09-2	
2-Methylnaphthalene	**<337**	ug/kg	337	337	1		06/24/20 09:09	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2550**	ug/kg	2550	2550	1		06/24/20 09:09	108-10-1	
Methyl-tert-butyl ether	**<255**	ug/kg	255	255	1		06/24/20 09:09	1634-04-4	
Naphthalene	**<337**	ug/kg	337	337	1		06/24/20 09:09	91-20-3	
n-Propylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	103-65-1	
Styrene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	100-42-5	
1,1,1,2-Tetrachloroethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	630-20-6	
1,1,2,2-Tetrachloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-34-5	
Tetrachloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	127-18-4	
Tetrahydrofuran	**<1020**	ug/kg	1020	1020	1		06/24/20 09:09	109-99-9	N2
Toluene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-88-3	
1,2,3-Trichlorobenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	87-61-6	
1,2,4-Trichlorobenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	120-82-1	
1,1,1-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	71-55-6	
1,1,2-Trichloroethane	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-129 (3-4') **Lab ID: 50260268011** Collected: 06/15/20 11:56 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<51.0**	ug/kg	51.0	51.0	1		06/24/20 09:09	79-01-6	
Trichlorofluoromethane	**<102**	ug/kg	102	102	1		06/24/20 09:09	75-69-4	
1,2,3-Trichloropropane	**<102**	ug/kg	102	102	1		06/24/20 09:09	96-18-4	
1,2,3-Trimethylbenzene	**<255**	ug/kg	255	255	1		06/24/20 09:09	526-73-8	N2
1,2,4-Trimethylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	95-63-6	
1,3,5-Trimethylbenzene	**<102**	ug/kg	102	102	1		06/24/20 09:09	108-67-8	
Vinyl chloride	**<40.8**	ug/kg	40.8	40.8	1		06/24/20 09:09	75-01-4	
m&p-Xylene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	179601-23-1	
o-Xylene	**<25.5**	ug/kg	51.0	25.5	1		06/24/20 09:09	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 09:09	1868-53-7	
Toluene-d8 (S)	100	%.	64-139		1		06/24/20 09:09	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 09:09	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**4.7**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4650**	ug/kg	4650	4650	1		06/22/20 18:03	71-36-3	
Ethanol	**<2640**	ug/kg	2640	2640	1		06/22/20 18:03	64-17-5	
Methanol	**<4650**	ug/kg	4650	4650	1		06/22/20 18:03	67-56-1	
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	12674-11-2	
PCB-1221 (Aroclor 1221)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11104-28-2	
PCB-1232 (Aroclor 1232)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11141-16-5	
PCB-1242 (Aroclor 1242)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	53469-21-9	
PCB-1248 (Aroclor 1248)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	12672-29-6	
PCB-1254 (Aroclor 1254)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11097-69-1	
PCB-1260 (Aroclor 1260)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11096-82-5	
PCB-1262 (Aroclor 1262)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<349**	ug/kg	349	349	1	06/24/20 21:50	06/25/20 18:22	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	75	%.	25-123		1	06/24/20 21:50	06/25/20 18:22	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<985**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-36-0	
Arsenic	**<1970**	ug/kg	1970	1970	1	06/26/20 14:44	06/29/20 12:30	7440-38-2	
Barium	**9000**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-39-3	
Beryllium	**<492**	ug/kg	492	492	1	06/26/20 14:44	06/29/20 12:30	7440-41-7	
Boron	**<7880**	ug/kg	7880	7880	1	06/26/20 14:44	06/29/20 12:30	7440-42-8	
Calcium	**927000**	ug/kg	49200	6530	1	06/26/20 14:44	06/29/20 12:30	7440-70-2	
Chromium	**5510**	ug/kg	1970	1970	1	06/26/20 14:44	06/29/20 12:30	7440-47-3	
Copper	**1440**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-50-8	
Iron	**3160000**	ug/kg	24600	7480	1	06/26/20 14:44	06/29/20 12:30	7439-89-6	
Lead	**<9850**	ug/kg	9850	9850	1	06/26/20 14:44	06/29/20 12:30	7439-92-1	
Magnesium	**730000**	ug/kg	24600	3940	1	06/26/20 14:44	06/29/20 12:30	7439-95-4	
Manganese	**25900**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7439-96-5	
Molybdenum	**<985**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7439-98-7	
Nickel	**4170**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-02-0	
Potassium	**143000**	ug/kg	49200	4810	1	06/26/20 14:44	06/29/20 12:30	7440-09-7	
Sodium	**21700J**	ug/kg	24600	13400	1	06/26/20 14:44	06/29/20 12:30	7440-23-5	
Strontium	**<4920**	ug/kg	4920	4920	1	06/26/20 14:44	06/29/20 12:30	7440-24-6	
Vanadium	**7980**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-62-2	
Zinc	**9160**	ug/kg	985	985	1	06/26/20 14:44	06/29/20 12:30	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4020000**	ug/kg	105000	105000	100	06/24/20 09:22	06/30/20 01:36	7429-90-5	
Cadmium	**<210**	ug/kg	210	210	1	06/24/20 09:22	06/25/20 16:07	7440-43-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Cobalt	**1260**	ug/kg	526	526	1	06/24/20 09:22	06/25/20 16:07	7440-48-4	
Selenium	**<210**	ug/kg	210	210	1	06/24/20 09:22	06/25/20 16:07	7782-49-2	
Silver	**<105**	ug/kg	105	105	1	06/24/20 09:22	06/25/20 16:07	7440-22-4	
Thallium	**<526**	ug/kg	526	526	1	06/24/20 09:22	06/25/20 16:07	7440-28-0	
Titanium	**229000**	ug/kg	10500	2800	100	06/24/20 09:22	06/30/20 01:36	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<83.0**	ug/kg	105	83.0	1	06/26/20 02:49	06/26/20 07:42	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	83-32-9	
Acenaphthylene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	208-96-8	
Anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-12-7	
Benzo(a)anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	56-55-3	
Benzo(a)pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	50-32-8	
Benzo(b)fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	205-99-2	
Benzo(g,h,i)perylene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	191-24-2	
Benzo(k)fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	207-08-9	
4-Bromophenylphenyl ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	101-55-3	
Butylbenzylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	85-68-7	
Carbazole	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-74-8	
4-Chloro-3-methylphenol	**<295**	ug/kg	348	295	1	06/24/20 23:00	06/25/20 19:21	59-50-7	
bis(2-Chloroethoxy)methane	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	111-91-1	
bis(2-Chloroethyl) ether	**<169**	ug/kg	348	169	1	06/24/20 23:00	06/25/20 19:21	111-44-4	
bis(2-Chloroisopropyl) ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	108-60-1	
2-Chloronaphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-58-7	
2-Chlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	95-57-8	
4-Chlorophenylphenyl ether	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	7005-72-3	
Chrysene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	218-01-9	
Dibenz(a,h)anthracene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	53-70-3	
Dibenzofuran	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	132-64-9	
2,4-Dichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-83-2	
Diethylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	84-66-2	
2,4-Dimethylphenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	105-67-9	
Dimethylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	131-11-3	
Di-n-butylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	84-74-2	
4,6-Dinitro-2-methylphenol	**<875**	ug/kg	875	875	1	06/24/20 23:00	06/25/20 19:21	534-52-1	
2,4-Dinitrophenol	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	51-28-5	
2,4-Dinitrotoluene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	121-14-2	
2,6-Dinitrotoluene	**<93.3**	ug/kg	348	93.3	1	06/24/20 23:00	06/25/20 19:21	606-20-2	
Di-n-octylphthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	117-84-0	
1,2-Diphenylhydrazine	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	122-66-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
bis(2-Ethylhexyl)phthalate	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	117-81-7	
Fluoranthene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	206-44-0	L1
Fluorene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-73-7	
Hexachloro-1,3-butadiene	**<101**	ug/kg	348	101	1	06/24/20 23:00	06/25/20 19:21	87-68-3	
Hexachlorobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	118-74-1	
Hexachlorocyclopentadiene	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21	77-47-4	
Hexachloroethane	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	67-72-1	
Indeno(1,2,3-cd)pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	193-39-5	
Isophorone	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	78-59-1	
2-Methylnaphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-57-6	
2-Methylphenol(o-Cresol)	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1050**	ug/kg	1050	1050	1	06/24/20 23:00	06/25/20 19:21		
Naphthalene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	91-20-3	
2-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-74-4	
3-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	99-09-2	
4-Nitroaniline	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	100-01-6	
Nitrobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	98-95-3	
2-Nitrophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-75-5	
4-Nitrophenol	**<1690**	ug/kg	1690	1690	1	06/24/20 23:00	06/25/20 19:21	100-02-7	
N-Nitrosodimethylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	62-75-9	
N-Nitroso-di-n-propylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	621-64-7	
N-Nitrosodiphenylamine	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	86-30-6	
Pentachlorophenol	**<1550**	ug/kg	1690	1550	1	06/24/20 23:00	06/25/20 19:21	87-86-5	
Phenanthrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	85-01-8	
Phenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	108-95-2	
Pyrene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	129-00-0	
1,2,4-Trichlorobenzene	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	120-82-1	
2,4,5-Trichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	95-95-4	
2,4,6-Trichlorophenol	**<348**	ug/kg	348	348	1	06/24/20 23:00	06/25/20 19:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	52	%.	26-96		1	06/24/20 23:00	06/25/20 19:21	4165-60-0	
Phenol-d5 (S)	77	%.	32-93		1	06/24/20 23:00	06/25/20 19:21	4165-62-2	
2-Fluorophenol (S)	90	%.	24-95		1	06/24/20 23:00	06/25/20 19:21	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	20-109		1	06/24/20 23:00	06/25/20 19:21	118-79-6	
2-Fluorobiphenyl (S)	78	%.	36-91		1	06/24/20 23:00	06/25/20 19:21	321-60-8	
p-Terphenyl-d14 (S)	79	%.	27-117		1	06/24/20 23:00	06/25/20 19:21	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<991**	ug/kg	991	991	1		06/24/20 09:43	67-64-1	
Acrylonitrile	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	107-13-1	
tert-Amylmethyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	994-05-8	N2
Benzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	71-43-2	
Bromobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-86-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Bromochloromethane	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	74-97-5	
Bromodichloromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-27-4	
Bromoform	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-25-2	
Bromomethane	**<198**	ug/kg	198	198	1		06/24/20 09:43	74-83-9	
2-Butanone (MEK)	**<743**	ug/kg	743	743	1		06/24/20 09:43	78-93-3	
tert-Butyl Alcohol	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	75-65-0	
n-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	104-51-8	
sec-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	135-98-8	
tert-Butylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	98-06-6	
Carbon disulfide	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-15-0	
Carbon tetrachloride	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	56-23-5	
Chlorobenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	108-90-7	
Chloroethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-00-3	
Chloroform	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	67-66-3	
Chloromethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	74-87-3	
Cyclohexane	**<496**	ug/kg	496	496	1		06/24/20 09:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	96-12-8	
Dibromochloromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	124-48-1	
1,2-Dibromoethane (EDB)	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	106-93-4	
Dibromomethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	74-95-3	
1,2-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	95-50-1	
1,3-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	541-73-1	
1,4-Dichlorobenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<99.1**	ug/kg	991	99.1	1		06/24/20 09:43	110-57-6	
Dichlorodifluoromethane	**<248**	ug/kg	248	248	1		06/24/20 09:43	75-71-8	
1,1-Dichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	75-34-3	
1,2-Dichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	107-06-2	
1,1-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	75-35-4	
cis-1,2-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	156-59-2	
trans-1,2-Dichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	156-60-5	
1,2-Dichloropropane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	78-87-5	
cis-1,3-Dichloropropene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	10061-01-5	
trans-1,3-Dichloropropene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<198**	ug/kg	198	198	1		06/24/20 09:43	60-29-7	
Diisopropyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	108-20-3	N2
Ethylbenzene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	100-41-4	
Ethyl-tert-butyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	637-92-3	N2
Hexachloroethane	**<297**	ug/kg	297	297	1		06/24/20 09:43	67-72-1	N2
2-Hexanone	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	591-78-6	
Iodomethane	**<99.1**	ug/kg	991	99.1	1		06/24/20 09:43	74-88-4	
Isopropylbenzene (Cumene)	**<248**	ug/kg	248	248	1		06/24/20 09:43	98-82-8	
p-Isopropyltoluene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	99-87-6	
Methylene Chloride	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-09-2	
2-Methylnaphthalene	**<327**	ug/kg	327	327	1		06/24/20 09:43	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-130 (4-5') **Lab ID: 50260268012** Collected: 06/15/20 14:22 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<2480**	ug/kg	2480	2480	1		06/24/20 09:43	108-10-1	
Methyl-tert-butyl ether	**<248**	ug/kg	248	248	1		06/24/20 09:43	1634-04-4	
Naphthalene	**<327**	ug/kg	327	327	1		06/24/20 09:43	91-20-3	
n-Propylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	103-65-1	
Styrene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-34-5	
Tetrachloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	127-18-4	
Tetrahydrofuran	**<991**	ug/kg	991	991	1		06/24/20 09:43	109-99-9	N2
Toluene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-88-3	
1,2,3-Trichlorobenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	87-61-6	
1,2,4-Trichlorobenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	120-82-1	
1,1,1-Trichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	71-55-6	
1,1,2-Trichloroethane	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-00-5	
Trichloroethene	**<49.6**	ug/kg	49.6	49.6	1		06/24/20 09:43	79-01-6	
Trichlorofluoromethane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	75-69-4	
1,2,3-Trichloropropane	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	96-18-4	
1,2,3-Trimethylbenzene	**<248**	ug/kg	248	248	1		06/24/20 09:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	95-63-6	
1,3,5-Trimethylbenzene	**<99.1**	ug/kg	99.1	99.1	1		06/24/20 09:43	108-67-8	
Vinyl chloride	**<39.6**	ug/kg	39.6	39.6	1		06/24/20 09:43	75-01-4	
m&p-Xylene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	179601-23-1	
o-Xylene	**<24.8**	ug/kg	49.6	24.8	1		06/24/20 09:43	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 09:43	1868-53-7	
Toluene-d8 (S)	102	%.	64-139		1		06/24/20 09:43	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 09:43	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**5.4**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<5650**	ug/kg	5650	5650	1		06/22/20 18:12	71-36-3	
Ethanol	**<3210**	ug/kg	3210	3210	1		06/22/20 18:12	64-17-5	
Methanol	**<5650**	ug/kg	5650	5650	1		06/22/20 18:12	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1140**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-36-0	
Arsenic	**<2290**	ug/kg	2290	2290	1	06/26/20 14:44	06/29/20 12:32	7440-38-2	
Barium	**14300**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-39-3	
Beryllium	**<572**	ug/kg	572	572	1	06/26/20 14:44	06/29/20 12:32	7440-41-7	
Boron	**<9160**	ug/kg	9160	9160	1	06/26/20 14:44	06/29/20 12:32	7440-42-8	
Calcium	**2600000**	ug/kg	57200	7590	1	06/26/20 14:44	06/29/20 12:32	7440-70-2	
Chromium	**7550**	ug/kg	2290	2290	1	06/26/20 14:44	06/29/20 12:32	7440-47-3	
Copper	**6650**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-50-8	
Iron	**5240000**	ug/kg	28600	8700	1	06/26/20 14:44	06/29/20 12:32	7439-89-6	
Lead	**16800**	ug/kg	11400	11400	1	06/26/20 14:44	06/29/20 12:32	7439-92-1	
Magnesium	**1130000**	ug/kg	28600	4580	1	06/26/20 14:44	06/29/20 12:32	7439-95-4	
Manganese	**66400**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7439-96-5	
Molybdenum	**<1140**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7439-98-7	
Nickel	**4460**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-02-0	
Potassium	**191000**	ug/kg	57200	5600	1	06/26/20 14:44	06/29/20 12:32	7440-09-7	
Sodium	**27700J**	ug/kg	28600	15600	1	06/26/20 14:44	06/29/20 12:32	7440-23-5	
Strontium	**<5720**	ug/kg	5720	5720	1	06/26/20 14:44	06/29/20 12:32	7440-24-6	
Vanadium	**10800**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-62-2	
Zinc	**33700**	ug/kg	1140	1140	1	06/26/20 14:44	06/29/20 12:32	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**5290000**	ug/kg	125000	125000	100	06/24/20 09:22	06/30/20 01:40	7429-90-5	
Cadmium	**<250**	ug/kg	250	250	1	06/24/20 09:22	06/25/20 16:17	7440-43-9	
Cobalt	**2120**	ug/kg	624	624	1	06/24/20 09:22	06/25/20 16:17	7440-48-4	
Selenium	**319**	ug/kg	250	250	1	06/24/20 09:22	06/25/20 16:17	7782-49-2	
Silver	**203**	ug/kg	125	125	1	06/24/20 09:22	06/25/20 16:17	7440-22-4	
Thallium	**<624**	ug/kg	624	624	1	06/24/20 09:22	06/25/20 16:17	7440-28-0	
Titanium	**218000**	ug/kg	12500	3320	100	06/24/20 09:22	06/30/20 01:40	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<101**	ug/kg	128	101	1	06/26/20 02:49	06/26/20 07:45	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	83-32-9	
Acenaphthylene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-12-7	
Benzo(a)anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	56-55-3	
Benzo(a)pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	50-32-8	
Benzo(b)fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	205-99-2	
Benzo(g,h,i)perylene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	191-24-2	
Benzo(k)fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	207-08-9	
4-Bromophenylphenyl ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	101-55-3	
Butylbenzylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	85-68-7	
Carbazole	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-74-8	
4-Chloro-3-methylphenol	**<358**	ug/kg	422	358	1	06/26/20 14:45	06/29/20 23:44	59-50-7	
bis(2-Chloroethoxy)methane	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	111-91-1	
bis(2-Chloroethyl) ether	**<205**	ug/kg	422	205	1	06/26/20 14:45	06/29/20 23:44	111-44-4	
bis(2-Chloroisopropyl) ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	108-60-1	
2-Chloronaphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-58-7	
2-Chlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	95-57-8	
4-Chlorophenylphenyl ether	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	7005-72-3	
Chrysene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	218-01-9	
Dibenz(a,h)anthracene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	53-70-3	
Dibenzofuran	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	132-64-9	
2,4-Dichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-83-2	
Diethylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	84-66-2	
2,4-Dimethylphenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	105-67-9	
Dimethylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	131-11-3	
Di-n-butylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	84-74-2	
4,6-Dinitro-2-methylphenol	**<1060**	ug/kg	1060	1060	1	06/26/20 14:45	06/29/20 23:44	534-52-1	
2,4-Dinitrophenol	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	51-28-5	
2,4-Dinitrotoluene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	121-14-2	
2,6-Dinitrotoluene	**<113**	ug/kg	422	113	1	06/26/20 14:45	06/29/20 23:44	606-20-2	
Di-n-octylphthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	117-84-0	
1,2-Diphenylhydrazine	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	122-66-7	
bis(2-Ethylhexyl)phthalate	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	117-81-7	
Fluoranthene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	206-44-0	
Fluorene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-73-7	
Hexachloro-1,3-butadiene	**<123**	ug/kg	422	123	1	06/26/20 14:45	06/29/20 23:44	87-68-3	
Hexachlorobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	118-74-1	
Hexachlorocyclopentadiene	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44	77-47-4	
Hexachloroethane	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	67-72-1	
Indeno(1,2,3-cd)pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	193-39-5	
Isophorone	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	78-59-1	
2-Methylnaphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-57-6	
2-Methylphenol(o-Cresol)	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1280**	ug/kg	1280	1280	1	06/26/20 14:45	06/29/20 23:44		
Naphthalene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	91-20-3	
2-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	99-09-2	
4-Nitroaniline	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	100-01-6	
Nitrobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	98-95-3	
2-Nitrophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-75-5	
4-Nitrophenol	**<2050**	ug/kg	2050	2050	1	06/26/20 14:45	06/29/20 23:44	100-02-7	
N-Nitrosodimethylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	62-75-9	
N-Nitroso-di-n-propylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	621-64-7	
N-Nitrosodiphenylamine	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	86-30-6	
Pentachlorophenol	**<1880**	ug/kg	2050	1880	1	06/26/20 14:45	06/29/20 23:44	87-86-5	
Phenanthrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	85-01-8	
Phenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	108-95-2	
Pyrene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	129-00-0	
1,2,4-Trichlorobenzene	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	120-82-1	
2,4,5-Trichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	95-95-4	
2,4,6-Trichlorophenol	**<422**	ug/kg	422	422	1	06/26/20 14:45	06/29/20 23:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%.	26-96		1	06/26/20 14:45	06/29/20 23:44	4165-60-0	
Phenol-d5 (S)	75	%.	32-93		1	06/26/20 14:45	06/29/20 23:44	4165-62-2	
2-Fluorophenol (S)	76	%.	24-95		1	06/26/20 14:45	06/29/20 23:44	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	20-109		1	06/26/20 14:45	06/29/20 23:44	118-79-6	
2-Fluorobiphenyl (S)	64	%.	36-91		1	06/26/20 14:45	06/29/20 23:44	321-60-8	
p-Terphenyl-d14 (S)	78	%.	27-117		1	06/26/20 14:45	06/29/20 23:44	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1480**	ug/kg	1480	1480	1		06/24/20 10:16	67-64-1	
Acrylonitrile	**<148**	ug/kg	148	148	1		06/24/20 10:16	107-13-1	
tert-Amylmethyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	994-05-8	N2
Benzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	71-43-2	
Bromobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-86-1	
Bromochloromethane	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	74-97-5	
Bromodichloromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-27-4	
Bromoform	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-25-2	
Bromomethane	**<297**	ug/kg	297	297	1		06/24/20 10:16	74-83-9	
2-Butanone (MEK)	**<1110**	ug/kg	1110	1110	1		06/24/20 10:16	78-93-3	
tert-Butyl Alcohol	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	75-65-0	
n-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	104-51-8	
sec-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	135-98-8	
tert-Butylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	98-06-6	
Carbon disulfide	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-15-0	
Carbon tetrachloride	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	56-23-5	
Chlorobenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	108-90-7	
Chloroethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-00-3	
Chloroform	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	74-87-3	
Cyclohexane	**<742**	ug/kg	742	742	1		06/24/20 10:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	96-12-8	
Dibromochloromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	124-48-1	
1,2-Dibromoethane (EDB)	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	106-93-4	
Dibromomethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	74-95-3	
1,2-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	95-50-1	
1,3-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	541-73-1	
1,4-Dichlorobenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<148**	ug/kg	1480	148	1		06/24/20 10:16	110-57-6	
Dichlorodifluoromethane	**<371**	ug/kg	371	371	1		06/24/20 10:16	75-71-8	
1,1-Dichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	75-34-3	
1,2-Dichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	107-06-2	
1,1-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	75-35-4	
cis-1,2-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	156-59-2	
trans-1,2-Dichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	156-60-5	
1,2-Dichloropropane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	78-87-5	
cis-1,3-Dichloropropene	**<148**	ug/kg	148	148	1		06/24/20 10:16	10061-01-5	
trans-1,3-Dichloropropene	**<148**	ug/kg	148	148	1		06/24/20 10:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<297**	ug/kg	297	297	1		06/24/20 10:16	60-29-7	
Diisopropyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	108-20-3	N2
Ethylbenzene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	100-41-4	
Ethyl-tert-butyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	637-92-3	N2
Hexachloroethane	**<445**	ug/kg	445	445	1		06/24/20 10:16	67-72-1	N2
2-Hexanone	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	591-78-6	
Iodomethane	**<148**	ug/kg	1480	148	1		06/24/20 10:16	74-88-4	
Isopropylbenzene (Cumene)	**<371**	ug/kg	371	371	1		06/24/20 10:16	98-82-8	
p-Isopropyltoluene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	99-87-6	
Methylene Chloride	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-09-2	
2-Methylnaphthalene	**<490**	ug/kg	490	490	1		06/24/20 10:16	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3710**	ug/kg	3710	3710	1		06/24/20 10:16	108-10-1	
Methyl-tert-butyl ether	**<371**	ug/kg	371	371	1		06/24/20 10:16	1634-04-4	
Naphthalene	**<490**	ug/kg	490	490	1		06/24/20 10:16	91-20-3	
n-Propylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	103-65-1	
Styrene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-34-5	
Tetrachloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	127-18-4	
Tetrahydrofuran	**<1480**	ug/kg	1480	1480	1		06/24/20 10:16	109-99-9	N2
Toluene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-88-3	
1,2,3-Trichlorobenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	87-61-6	
1,2,4-Trichlorobenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	120-82-1	
1,1,1-Trichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	71-55-6	
1,1,2-Trichloroethane	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: MW-131 (2-3') **Lab ID: 50260268013** Collected: 06/15/20 13:55 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<74.2**	ug/kg	74.2	74.2	1		06/24/20 10:16	79-01-6	
Trichlorofluoromethane	**<148**	ug/kg	148	148	1		06/24/20 10:16	75-69-4	
1,2,3-Trichloropropane	**<148**	ug/kg	148	148	1		06/24/20 10:16	96-18-4	
1,2,3-Trimethylbenzene	**<371**	ug/kg	371	371	1		06/24/20 10:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	95-63-6	
1,3,5-Trimethylbenzene	**<148**	ug/kg	148	148	1		06/24/20 10:16	108-67-8	
Vinyl chloride	**<59.4**	ug/kg	59.4	59.4	1		06/24/20 10:16	75-01-4	
m&p-Xylene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	179601-23-1	
o-Xylene	**<37.1**	ug/kg	74.2	37.1	1		06/24/20 10:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	126	%.	62-137		1		06/24/20 10:16	1868-53-7	
Toluene-d8 (S)	122	%.	64-139		1		06/24/20 10:16	2037-26-5	
4-Bromofluorobenzene (S)	126	%.	60-142		1		06/24/20 10:16	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**22.1**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4770**	ug/kg	4770	4770	1		06/22/20 18:21	71-36-3	
Ethanol	**<2710**	ug/kg	2710	2710	1		06/22/20 18:21	64-17-5	
Methanol	**<4770**	ug/kg	4770	4770	1		06/22/20 18:21	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1050**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-36-0	
Arsenic	**<2100**	ug/kg	2100	2100	1	06/26/20 14:44	06/29/20 12:34	7440-38-2	
Barium	**9360**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-39-3	
Beryllium	**<525**	ug/kg	525	525	1	06/26/20 14:44	06/29/20 12:34	7440-41-7	
Boron	**<8400**	ug/kg	8400	8400	1	06/26/20 14:44	06/29/20 12:34	7440-42-8	
Calcium	**8810000**	ug/kg	52500	6970	1	06/26/20 14:44	06/29/20 12:34	7440-70-2	
Chromium	**5570**	ug/kg	2100	2100	1	06/26/20 14:44	06/29/20 12:34	7440-47-3	
Copper	**3040**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-50-8	
Iron	**4110000**	ug/kg	26300	7980	1	06/26/20 14:44	06/29/20 12:34	7439-89-6	
Lead	**<10500**	ug/kg	10500	10500	1	06/26/20 14:44	06/29/20 12:34	7439-92-1	
Magnesium	**1640000**	ug/kg	26300	4200	1	06/26/20 14:44	06/29/20 12:34	7439-95-4	
Manganese	**75400**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7439-96-5	
Molybdenum	**<1050**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7439-98-7	
Nickel	**4020**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-02-0	
Potassium	**172000**	ug/kg	52500	5140	1	06/26/20 14:44	06/29/20 12:34	7440-09-7	
Sodium	**27800**	ug/kg	26300	14300	1	06/26/20 14:44	06/29/20 12:34	7440-23-5	
Strontium	**9550**	ug/kg	5250	5250	1	06/26/20 14:44	06/29/20 12:34	7440-24-6	
Vanadium	**7890**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-62-2	
Zinc	**10300**	ug/kg	1050	1050	1	06/26/20 14:44	06/29/20 12:34	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**3230000**	ug/kg	106000	106000	100	06/24/20 09:22	06/30/20 01:45	7429-90-5	
Cadmium	**<213**	ug/kg	213	213	1	06/24/20 09:22	06/25/20 16:30	7440-43-9	
Cobalt	**1550**	ug/kg	532	532	1	06/24/20 09:22	06/25/20 16:30	7440-48-4	
Selenium	**<213**	ug/kg	213	213	1	06/24/20 09:22	06/25/20 16:30	7782-49-2	
Silver	**<106**	ug/kg	106	106	1	06/24/20 09:22	06/25/20 16:30	7440-22-4	
Thallium	**<532**	ug/kg	532	532	1	06/24/20 09:22	06/25/20 16:30	7440-28-0	
Titanium	**211000**	ug/kg	10600	2830	100	06/24/20 09:22	06/30/20 01:45	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<89.4**	ug/kg	113	89.4	1	06/26/20 02:49	06/26/20 07:47	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	83-32-9	
Acenaphthylene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-12-7	
Benzo(a)anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	56-55-3	
Benzo(a)pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	50-32-8	
Benzo(b)fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	205-99-2	
Benzo(g,h,i)perylene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	191-24-2	
Benzo(k)fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	207-08-9	
4-Bromophenylphenyl ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	101-55-3	
Butylbenzylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	85-68-7	
Carbazole	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-74-8	
4-Chloro-3-methylphenol	**<301**	ug/kg	355	301	1	06/24/20 23:00	06/26/20 07:01	59-50-7	
bis(2-Chloroethoxy)methane	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	111-91-1	
bis(2-Chloroethyl) ether	**<172**	ug/kg	355	172	1	06/24/20 23:00	06/26/20 07:01	111-44-4	
bis(2-Chloroisopropyl) ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	108-60-1	
2-Chloronaphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-58-7	
2-Chlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	95-57-8	
4-Chlorophenylphenyl ether	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	7005-72-3	
Chrysene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	218-01-9	
Dibenz(a,h)anthracene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	53-70-3	
Dibenzofuran	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	132-64-9	
2,4-Dichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-83-2	
Diethylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	84-66-2	
2,4-Dimethylphenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	105-67-9	
Dimethylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	131-11-3	
Di-n-butylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	84-74-2	
4,6-Dinitro-2-methylphenol	**<893**	ug/kg	893	893	1	06/24/20 23:00	06/26/20 07:01	534-52-1	
2,4-Dinitrophenol	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	51-28-5	
2,4-Dinitrotoluene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	121-14-2	
2,6-Dinitrotoluene	**<95.2**	ug/kg	355	95.2	1	06/24/20 23:00	06/26/20 07:01	606-20-2	
Di-n-octylphthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	117-84-0	
1,2-Diphenylhydrazine	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	122-66-7	
bis(2-Ethylhexyl)phthalate	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	117-81-7	
Fluoranthene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	206-44-0	L1
Fluorene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-73-7	
Hexachloro-1,3-butadiene	**<103**	ug/kg	355	103	1	06/24/20 23:00	06/26/20 07:01	87-68-3	
Hexachlorobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	118-74-1	
Hexachlorocyclopentadiene	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01	77-47-4	
Hexachloroethane	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	67-72-1	
Indeno(1,2,3-cd)pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	193-39-5	
Isophorone	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	78-59-1	
2-Methylnaphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-57-6	
2-Methylphenol(o-Cresol)	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1080**	ug/kg	1080	1080	1	06/24/20 23:00	06/26/20 07:01		
Naphthalene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	91-20-3	
2-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	99-09-2	
4-Nitroaniline	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	100-01-6	
Nitrobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	98-95-3	
2-Nitrophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-75-5	
4-Nitrophenol	**<1720**	ug/kg	1720	1720	1	06/24/20 23:00	06/26/20 07:01	100-02-7	
N-Nitrosodimethylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	62-75-9	
N-Nitroso-di-n-propylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	621-64-7	
N-Nitrosodiphenylamine	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	86-30-6	
Pentachlorophenol	**<1580**	ug/kg	1720	1580	1	06/24/20 23:00	06/26/20 07:01	87-86-5	
Phenanthrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	85-01-8	
Phenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	108-95-2	
Pyrene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	129-00-0	
1,2,4-Trichlorobenzene	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	120-82-1	
2,4,5-Trichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	95-95-4	
2,4,6-Trichlorophenol	**<355**	ug/kg	355	355	1	06/24/20 23:00	06/26/20 07:01	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	43	%.	26-96		1	06/24/20 23:00	06/26/20 07:01	4165-60-0	
Phenol-d5 (S)	68	%.	32-93		1	06/24/20 23:00	06/26/20 07:01	4165-62-2	
2-Fluorophenol (S)	72	%.	24-95		1	06/24/20 23:00	06/26/20 07:01	367-12-4	
2,4,6-Tribromophenol (S)	76	%.	20-109		1	06/24/20 23:00	06/26/20 07:01	118-79-6	
2-Fluorobiphenyl (S)	75	%.	36-91		1	06/24/20 23:00	06/26/20 07:01	321-60-8	
p-Terphenyl-d14 (S)	93	%.	27-117		1	06/24/20 23:00	06/26/20 07:01	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1400**	ug/kg	1400	1400	1		06/24/20 10:49	67-64-1	
Acrylonitrile	**<140**	ug/kg	140	140	1		06/24/20 10:49	107-13-1	
tert-Amylmethyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	994-05-8	N2
Benzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	71-43-2	
Bromobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-86-1	
Bromochloromethane	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	74-97-5	
Bromodichloromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-27-4	
Bromoform	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-25-2	
Bromomethane	**<279**	ug/kg	279	279	1		06/24/20 10:49	74-83-9	
2-Butanone (MEK)	**<1050**	ug/kg	1050	1050	1		06/24/20 10:49	78-93-3	
tert-Butyl Alcohol	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	75-65-0	
n-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	104-51-8	
sec-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	135-98-8	
tert-Butylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	98-06-6	
Carbon disulfide	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-15-0	
Carbon tetrachloride	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	56-23-5	
Chlorobenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	108-90-7	
Chloroethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-00-3	
Chloroform	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	74-87-3	
Cyclohexane	**<698**	ug/kg	698	698	1		06/24/20 10:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	96-12-8	
Dibromochloromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	124-48-1	
1,2-Dibromoethane (EDB)	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	106-93-4	
Dibromomethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	74-95-3	
1,2-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	95-50-1	
1,3-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	541-73-1	
1,4-Dichlorobenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<140**	ug/kg	1400	140	1		06/24/20 10:49	110-57-6	
Dichlorodifluoromethane	**<349**	ug/kg	349	349	1		06/24/20 10:49	75-71-8	
1,1-Dichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	75-34-3	
1,2-Dichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	107-06-2	
1,1-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	75-35-4	
cis-1,2-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	156-59-2	
trans-1,2-Dichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	156-60-5	
1,2-Dichloropropane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	78-87-5	
cis-1,3-Dichloropropene	**<140**	ug/kg	140	140	1		06/24/20 10:49	10061-01-5	
trans-1,3-Dichloropropene	**<140**	ug/kg	140	140	1		06/24/20 10:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<279**	ug/kg	279	279	1		06/24/20 10:49	60-29-7	
Diisopropyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	108-20-3	N2
Ethylbenzene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	100-41-4	
Ethyl-tert-butyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	637-92-3	N2
Hexachloroethane	**<419**	ug/kg	419	419	1		06/24/20 10:49	67-72-1	N2
2-Hexanone	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	591-78-6	
Iodomethane	**<140**	ug/kg	1400	140	1		06/24/20 10:49	74-88-4	
Isopropylbenzene (Cumene)	**<349**	ug/kg	349	349	1		06/24/20 10:49	98-82-8	
p-Isopropyltoluene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	99-87-6	
Methylene Chloride	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-09-2	
2-Methylnaphthalene	**<460**	ug/kg	460	460	1		06/24/20 10:49	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<3490**	ug/kg	3490	3490	1		06/24/20 10:49	108-10-1	
Methyl-tert-butyl ether	**<349**	ug/kg	349	349	1		06/24/20 10:49	1634-04-4	
Naphthalene	**<460**	ug/kg	460	460	1		06/24/20 10:49	91-20-3	
n-Propylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	103-65-1	
Styrene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-34-5	
Tetrachloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	127-18-4	
Tetrahydrofuran	**<1400**	ug/kg	1400	1400	1		06/24/20 10:49	109-99-9	N2
Toluene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-88-3	
1,2,3-Trichlorobenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	87-61-6	
1,2,4-Trichlorobenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	120-82-1	
1,1,1-Trichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	71-55-6	
1,1,2-Trichloroethane	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 1 **Lab ID: 50260268014** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<69.8**	ug/kg	69.8	69.8	1		06/24/20 10:49	79-01-6	
Trichlorofluoromethane	**<140**	ug/kg	140	140	1		06/24/20 10:49	75-69-4	
1,2,3-Trichloropropane	**<140**	ug/kg	140	140	1		06/24/20 10:49	96-18-4	
1,2,3-Trimethylbenzene	**<349**	ug/kg	349	349	1		06/24/20 10:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	95-63-6	
1,3,5-Trimethylbenzene	**<140**	ug/kg	140	140	1		06/24/20 10:49	108-67-8	
Vinyl chloride	**<55.8**	ug/kg	55.8	55.8	1		06/24/20 10:49	75-01-4	
m&p-Xylene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	179601-23-1	
o-Xylene	**<34.9**	ug/kg	69.8	34.9	1		06/24/20 10:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%.	62-137		1		06/24/20 10:49	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 10:49	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	60-142		1		06/24/20 10:49	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**7.7**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in solids	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<4940**	ug/kg	4940	4940	1		06/22/20 18:31	71-36-3	
Ethanol	**<2810**	ug/kg	2810	2810	1		06/22/20 18:31	64-17-5	
Methanol	**<4940**	ug/kg	4940	4940	1		06/22/20 18:31	67-56-1	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-36-0	
Arsenic	**<2120**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:36	7440-38-2	
Barium	**14900**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-39-3	
Beryllium	**<529**	ug/kg	529	529	1	06/26/20 14:44	06/29/20 12:36	7440-41-7	
Boron	**<8470**	ug/kg	8470	8470	1	06/26/20 14:44	06/29/20 12:36	7440-42-8	
Calcium	**10200000**	ug/kg	52900	7020	1	06/26/20 14:44	06/29/20 12:36	7440-70-2	
Chromium	**6530**	ug/kg	2120	2120	1	06/26/20 14:44	06/29/20 12:36	7440-47-3	
Copper	**5830**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-50-8	
Iron	**4680000**	ug/kg	26500	8050	1	06/26/20 14:44	06/29/20 12:36	7439-89-6	
Lead	**18400**	ug/kg	10600	10600	1	06/26/20 14:44	06/29/20 12:36	7439-92-1	
Magnesium	**2120000**	ug/kg	26500	4230	1	06/26/20 14:44	06/29/20 12:36	7439-95-4	
Manganese	**64900**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7439-96-5	
Molybdenum	**<1060**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7439-98-7	
Nickel	**4420**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-02-0	
Potassium	**285000**	ug/kg	52900	5180	1	06/26/20 14:44	06/29/20 12:36	7440-09-7	
Sodium	**46000**	ug/kg	26500	14400	1	06/26/20 14:44	06/29/20 12:36	7440-23-5	
Strontium	**15800**	ug/kg	5290	5290	1	06/26/20 14:44	06/29/20 12:36	7440-24-6	
Vanadium	**10300**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-62-2	
Zinc	**21400**	ug/kg	1060	1060	1	06/26/20 14:44	06/29/20 12:36	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**4930000**	ug/kg	108000	108000	100	06/24/20 09:22	06/30/20 01:50	7429-90-5	
Cadmium	**<216**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 16:39	7440-43-9	
Cobalt	**1960**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 16:39	7440-48-4	
Selenium	**239**	ug/kg	216	216	1	06/24/20 09:22	06/25/20 16:39	7782-49-2	
Silver	**<108**	ug/kg	108	108	1	06/24/20 09:22	06/25/20 16:39	7440-22-4	
Thallium	**<540**	ug/kg	540	540	1	06/24/20 09:22	06/25/20 16:39	7440-28-0	
Titanium	**212000**	ug/kg	10800	2870	100	06/24/20 09:22	06/30/20 01:50	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**<93.3**	ug/kg	118	93.3	1	06/26/20 02:49	06/26/20 07:57	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	83-32-9	
Acenaphthylene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	208-96-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Anthracene	**407**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-12-7	
Benzo(a)anthracene	**1700**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	56-55-3	
Benzo(a)pyrene	**1600**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	50-32-8	
Benzo(b)fluoranthene	**2210**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	205-99-2	
Benzo(g,h,i)perylene	**894**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	191-24-2	
Benzo(k)fluoranthene	**1020**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	207-08-9	
4-Bromophenylphenyl ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	101-55-3	
Butylbenzylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	85-68-7	
Carbazole	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-74-8	
4-Chloro-3-methylphenol	**<314**	ug/kg	370	314	1	06/24/20 23:00	06/26/20 07:18	59-50-7	
bis(2-Chloroethoxy)methane	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	111-91-1	
bis(2-Chloroethyl) ether	**<180**	ug/kg	370	180	1	06/24/20 23:00	06/26/20 07:18	111-44-4	
bis(2-Chloroisopropyl) ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	108-60-1	
2-Chloronaphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-58-7	
2-Chlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	95-57-8	
4-Chlorophenylphenyl ether	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	7005-72-3	
Chrysene	**1750**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	218-01-9	
Dibenz(a,h)anthracene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	53-70-3	
Dibenzofuran	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	132-64-9	
2,4-Dichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-83-2	
Diethylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	84-66-2	
2,4-Dimethylphenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	105-67-9	
Dimethylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	131-11-3	
Di-n-butylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	84-74-2	
4,6-Dinitro-2-methylphenol	**<931**	ug/kg	931	931	1	06/24/20 23:00	06/26/20 07:18	534-52-1	
2,4-Dinitrophenol	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	51-28-5	
2,4-Dinitrotoluene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	121-14-2	
2,6-Dinitrotoluene	**<99.3**	ug/kg	370	99.3	1	06/24/20 23:00	06/26/20 07:18	606-20-2	
Di-n-octylphthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	117-84-0	
1,2-Diphenylhydrazine	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	122-66-7	
bis(2-Ethylhexyl)phthalate	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	117-81-7	
Fluoranthene	**3640**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	206-44-0	L1
Fluorene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-73-7	
Hexachloro-1,3-butadiene	**<108**	ug/kg	370	108	1	06/24/20 23:00	06/26/20 07:18	87-68-3	
Hexachlorobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	118-74-1	
Hexachlorocyclopentadiene	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18	77-47-4	
Hexachloroethane	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	67-72-1	
Indeno(1,2,3-cd)pyrene	**808**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	193-39-5	
Isophorone	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	78-59-1	
2-Methylnaphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-57-6	
2-Methylphenol(o-Cresol)	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1120**	ug/kg	1120	1120	1	06/24/20 23:00	06/26/20 07:18		
Naphthalene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	91-20-3	
2-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	99-09-2	
4-Nitroaniline	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	100-01-6	
Nitrobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	98-95-3	
2-Nitrophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-75-5	
4-Nitrophenol	**<1800**	ug/kg	1800	1800	1	06/24/20 23:00	06/26/20 07:18	100-02-7	
N-Nitrosodimethylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	62-75-9	
N-Nitroso-di-n-propylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	621-64-7	
N-Nitrosodiphenylamine	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	86-30-6	
Pentachlorophenol	**<1650**	ug/kg	1800	1650	1	06/24/20 23:00	06/26/20 07:18	87-86-5	
Phenanthrene	**1890**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	85-01-8	
Phenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	108-95-2	
Pyrene	**2880**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	129-00-0	
1,2,4-Trichlorobenzene	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	120-82-1	
2,4,5-Trichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	95-95-4	
2,4,6-Trichlorophenol	**<370**	ug/kg	370	370	1	06/24/20 23:00	06/26/20 07:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	41	%.	26-96		1	06/24/20 23:00	06/26/20 07:18	4165-60-0	
Phenol-d5 (S)	78	%.	32-93		1	06/24/20 23:00	06/26/20 07:18	4165-62-2	
2-Fluorophenol (S)	80	%.	24-95		1	06/24/20 23:00	06/26/20 07:18	367-12-4	
2,4,6-Tribromophenol (S)	62	%.	20-109		1	06/24/20 23:00	06/26/20 07:18	118-79-6	
2-Fluorobiphenyl (S)	72	%.	36-91		1	06/24/20 23:00	06/26/20 07:18	321-60-8	
p-Terphenyl-d14 (S)	85	%.	27-117		1	06/24/20 23:00	06/26/20 07:18	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1180**	ug/kg	1180	1180	1		06/24/20 11:22	67-64-1	
Acrylonitrile	**<118**	ug/kg	118	118	1		06/24/20 11:22	107-13-1	
tert-Amylmethyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	994-05-8	N2
Benzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	71-43-2	
Bromobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-86-1	
Bromochloromethane	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	74-97-5	
Bromodichloromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-27-4	
Bromoform	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-25-2	
Bromomethane	**<236**	ug/kg	236	236	1		06/24/20 11:22	74-83-9	
2-Butanone (MEK)	**<884**	ug/kg	884	884	1		06/24/20 11:22	78-93-3	
tert-Butyl Alcohol	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	75-65-0	
n-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	104-51-8	
sec-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	135-98-8	
tert-Butylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	98-06-6	
Carbon disulfide	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-15-0	
Carbon tetrachloride	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	56-23-5	
Chlorobenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	108-90-7	
Chloroethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-00-3	
Chloroform	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Chloromethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	74-87-3	
Cyclohexane	**<590**	ug/kg	590	590	1		06/24/20 11:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	96-12-8	
Dibromochloromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	124-48-1	
1,2-Dibromoethane (EDB)	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	106-93-4	
Dibromomethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	74-95-3	
1,2-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	95-50-1	
1,3-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	541-73-1	
1,4-Dichlorobenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<118**	ug/kg	1180	118	1		06/24/20 11:22	110-57-6	
Dichlorodifluoromethane	**<295**	ug/kg	295	295	1		06/24/20 11:22	75-71-8	
1,1-Dichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	75-34-3	
1,2-Dichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	107-06-2	
1,1-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	75-35-4	
cis-1,2-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	156-59-2	
trans-1,2-Dichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	156-60-5	
1,2-Dichloropropane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	78-87-5	
cis-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		06/24/20 11:22	10061-01-5	
trans-1,3-Dichloropropene	**<118**	ug/kg	118	118	1		06/24/20 11:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<236**	ug/kg	236	236	1		06/24/20 11:22	60-29-7	
Diisopropyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	108-20-3	N2
Ethylbenzene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	100-41-4	
Ethyl-tert-butyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	637-92-3	N2
Hexachloroethane	**<354**	ug/kg	354	354	1		06/24/20 11:22	67-72-1	N2
2-Hexanone	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	591-78-6	
Iodomethane	**<118**	ug/kg	1180	118	1		06/24/20 11:22	74-88-4	
Isopropylbenzene (Cumene)	**<295**	ug/kg	295	295	1		06/24/20 11:22	98-82-8	
p-Isopropyltoluene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	99-87-6	
Methylene Chloride	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-09-2	
2-Methylnaphthalene	**<389**	ug/kg	389	389	1		06/24/20 11:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2950**	ug/kg	2950	2950	1		06/24/20 11:22	108-10-1	
Methyl-tert-butyl ether	**<295**	ug/kg	295	295	1		06/24/20 11:22	1634-04-4	
Naphthalene	**<389**	ug/kg	389	389	1		06/24/20 11:22	91-20-3	
n-Propylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	103-65-1	
Styrene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-34-5	
Tetrachloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	127-18-4	
Tetrahydrofuran	**<1180**	ug/kg	1180	1180	1		06/24/20 11:22	109-99-9	N2
Toluene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-88-3	
1,2,3-Trichlorobenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	87-61-6	
1,2,4-Trichlorobenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	120-82-1	
1,1,1-Trichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	71-55-6	
1,1,2-Trichloroethane	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Dup. 2 **Lab ID: 50260268015** Collected: 06/16/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Trichloroethene	**<59.0**	ug/kg	59.0	59.0	1		06/24/20 11:22	79-01-6	
Trichlorofluoromethane	**<118**	ug/kg	118	118	1		06/24/20 11:22	75-69-4	
1,2,3-Trichloropropane	**<118**	ug/kg	118	118	1		06/24/20 11:22	96-18-4	
1,2,3-Trimethylbenzene	**<295**	ug/kg	295	295	1		06/24/20 11:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	95-63-6	
1,3,5-Trimethylbenzene	**<118**	ug/kg	118	118	1		06/24/20 11:22	108-67-8	
Vinyl chloride	**<47.2**	ug/kg	47.2	47.2	1		06/24/20 11:22	75-01-4	
m&p-Xylene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	179601-23-1	
o-Xylene	**<29.5**	ug/kg	59.0	29.5	1		06/24/20 11:22	95-47-6	
Surrogates									
Dibromofluoromethane (S)	114	%.	62-137		1		06/24/20 11:22	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		06/24/20 11:22	2037-26-5	
4-Bromofluorobenzene (S)	115	%.	60-142		1		06/24/20 11:22	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**10.9**	%	0.10	0.10	1		06/23/20 14:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268016** Collected: 06/15/20 14:29 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/24/20 11:55	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/24/20 11:55	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/24/20 11:55	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/24/20 11:55	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/24/20 11:55	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/24/20 11:55	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/24/20 11:55	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 11:55	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 11:55	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/24/20 11:55	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/24/20 11:55	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268016** Collected: 06/15/20 14:29 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/24/20 11:55	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/24/20 11:55	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/24/20 11:55	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/24/20 11:55	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 11:55	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/24/20 11:55	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/24/20 11:55	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 11:55	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/24/20 11:55	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/24/20 11:55	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/24/20 11:55	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 11:55	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/24/20 11:55	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 11:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%.	62-137		1		06/24/20 11:55	1868-53-7	
Toluene-d8 (S)	98	%.	64-139		1		06/24/20 11:55	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	60-142		1		06/24/20 11:55	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268017** Collected: 06/15/20 14:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/24/20 12:29	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/24/20 12:29	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/24/20 12:29	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/24/20 12:29	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/24/20 12:29	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/24/20 12:29	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/24/20 12:29	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 12:29	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/24/20 12:29	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/24/20 12:29	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/24/20 12:29	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Trip Blank **Lab ID: 50260268017** Collected: 06/15/20 14:30 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/24/20 12:29	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/24/20 12:29	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/24/20 12:29	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/24/20 12:29	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/24/20 12:29	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/24/20 12:29	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/24/20 12:29	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/24/20 12:29	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/24/20 12:29	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/24/20 12:29	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/24/20 12:29	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/24/20 12:29	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/24/20 12:29	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/24/20 12:29	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%.	62-137		1		06/24/20 12:29	1868-53-7	
Toluene-d8 (S)	101	%.	64-139		1		06/24/20 12:29	2037-26-5	
4-Bromofluorobenzene (S)	104	%.	60-142		1		06/24/20 12:29	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Field Blank **Lab ID: 50260268018** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<1000**	ug/kg	1000	1000	1		06/23/20 16:34	67-64-1	
Acrylonitrile	**<100**	ug/kg	100	100	1		06/23/20 16:34	107-13-1	
tert-Amylmethyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	994-05-8	N2
Benzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	71-43-2	
Bromobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-86-1	
Bromochloromethane	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	74-97-5	
Bromodichloromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-27-4	
Bromoform	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-25-2	
Bromomethane	**<200**	ug/kg	200	200	1		06/23/20 16:34	74-83-9	
2-Butanone (MEK)	**<750**	ug/kg	750	750	1		06/23/20 16:34	78-93-3	
tert-Butyl Alcohol	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	75-65-0	
n-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	104-51-8	
sec-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	135-98-8	
tert-Butylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	98-06-6	
Carbon disulfide	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-15-0	
Carbon tetrachloride	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	56-23-5	
Chlorobenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	108-90-7	
Chloroethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-00-3	
Chloroform	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	67-66-3	
Chloromethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	74-87-3	
Cyclohexane	**<500**	ug/kg	500	500	1		06/23/20 16:34	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	96-12-8	
Dibromochloromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	124-48-1	
1,2-Dibromoethane (EDB)	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	106-93-4	
Dibromomethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	74-95-3	
1,2-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	95-50-1	
1,3-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	541-73-1	
1,4-Dichlorobenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	106-46-7	
trans-1,4-Dichloro-2-butene	**<100**	ug/kg	1000	100	1		06/23/20 16:34	110-57-6	
Dichlorodifluoromethane	**<250**	ug/kg	250	250	1		06/23/20 16:34	75-71-8	
1,1-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	75-34-3	
1,2-Dichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	107-06-2	
1,1-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	75-35-4	
cis-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	156-59-2	
trans-1,2-Dichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	156-60-5	
1,2-Dichloropropane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/23/20 16:34	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/kg	100	100	1		06/23/20 16:34	10061-02-6	
Diethyl ether (Ethyl ether)	**<200**	ug/kg	200	200	1		06/23/20 16:34	60-29-7	
Diisopropyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	108-20-3	N2
Ethylbenzene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	100-41-4	
Ethyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	637-92-3	N2
Hexachloroethane	**<300**	ug/kg	300	300	1		06/23/20 16:34	67-72-1	N2
2-Hexanone	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	591-78-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Sample: Field Blank **Lab ID: 50260268018** Collected: 06/15/20 12:00 Received: 06/18/20 09:25 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Iodomethane	**<100**	ug/kg	1000	100	1		06/23/20 16:34	74-88-4	
Isopropylbenzene (Cumene)	**<250**	ug/kg	250	250	1		06/23/20 16:34	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	99-87-6	
Methylene Chloride	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-09-2	
2-Methylnaphthalene	**<330**	ug/kg	330	330	1		06/23/20 16:34	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2500**	ug/kg	2500	2500	1		06/23/20 16:34	108-10-1	
Methyl-tert-butyl ether	**<250**	ug/kg	250	250	1		06/23/20 16:34	1634-04-4	
Naphthalene	**<330**	ug/kg	330	330	1		06/23/20 16:34	91-20-3	
n-Propylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	103-65-1	
Styrene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	100-42-5	
1,1,1,2-Tetrachloroethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	630-20-6	
1,1,2,2-Tetrachloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-34-5	
Tetrachloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	127-18-4	
Tetrahydrofuran	**<1000**	ug/kg	1000	1000	1		06/23/20 16:34	109-99-9	N2
Toluene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	87-61-6	
1,2,4-Trichlorobenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	71-55-6	
1,1,2-Trichloroethane	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-00-5	
Trichloroethene	**<50.0**	ug/kg	50.0	50.0	1		06/23/20 16:34	79-01-6	
Trichlorofluoromethane	**<100**	ug/kg	100	100	1		06/23/20 16:34	75-69-4	
1,2,3-Trichloropropane	**<100**	ug/kg	100	100	1		06/23/20 16:34	96-18-4	
1,2,3-Trimethylbenzene	**<250**	ug/kg	250	250	1		06/23/20 16:34	526-73-8	N2
1,2,4-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	95-63-6	
1,3,5-Trimethylbenzene	**<100**	ug/kg	100	100	1		06/23/20 16:34	108-67-8	
Vinyl chloride	**<40.0**	ug/kg	40.0	40.0	1		06/23/20 16:34	75-01-4	
m&p-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	179601-23-1	
o-Xylene	**<25.0**	ug/kg	50.0	25.0	1		06/23/20 16:34	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%.	62-137		1		06/23/20 16:34	1868-53-7	
Toluene-d8 (S)	99	%.	64-139		1		06/23/20 16:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	60-142		1		06/23/20 16:34	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568440
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2622641 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/kg	<2500	2500	2500	06/22/20 12:25	
Methanol	ug/kg	<4400	4400	4400	06/22/20 12:25	
n-Butanol	ug/kg	<4400	4400	4400	06/22/20 12:25	

LABORATORY CONTROL SAMPLE: 2622642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/kg	50000	60600	121	79-113	L5
Methanol	ug/kg	50000	49900	100	75-111	
n-Butanol	ug/kg	50000	50400	101	80-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2622873 2622874

Parameter	Units	50260268001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/kg	<2750	54900	54900	57600	55400	105	101	46-120	4	20	
Methanol	ug/kg	<4830	54900	54900	48000	45700	87	83	42-119	5	20	
n-Butanol	ug/kg	<4830	54900	54900	47600	46100	87	84	10-142	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569181
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2625731
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<75.5	95.5	75.5	06/26/20 06:56	

LABORATORY CONTROL SAMPLE: 2625732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	493	530	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625733 2625734

Parameter	Units	50260268002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	<85.3	553	531	564	528	102	99	75-125	7	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568327
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2622338 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/kg	<1000	1000	1000	06/29/20 11:44	
Arsenic	ug/kg	<2000	2000	2000	06/29/20 11:44	
Barium	ug/kg	<1000	1000	1000	06/29/20 11:44	
Beryllium	ug/kg	<500	500	500	06/29/20 11:44	
Boron	ug/kg	<8000	8000	8000	06/29/20 11:44	
Calcium	ug/kg	<6630	50000	6630	06/29/20 11:44	
Chromium	ug/kg	<2000	2000	2000	06/29/20 11:44	
Copper	ug/kg	<1000	1000	1000	06/29/20 11:44	
Iron	ug/kg	<7600	25000	7600	06/29/20 11:44	
Lead	ug/kg	<10000	10000	10000	06/29/20 11:44	
Magnesium	ug/kg	<4000	25000	4000	06/29/20 11:44	
Manganese	ug/kg	<1000	1000	1000	06/29/20 11:44	
Molybdenum	ug/kg	<1000	1000	1000	06/29/20 11:44	
Nickel	ug/kg	<1000	1000	1000	06/29/20 11:44	
Potassium	ug/kg	<4890	50000	4890	06/29/20 11:44	
Sodium	ug/kg	<13600	25000	13600	06/29/20 11:44	
Strontium	ug/kg	<5000	5000	5000	06/29/20 11:44	
Vanadium	ug/kg	<1000	1000	1000	06/29/20 11:44	
Zinc	ug/kg	<1000	1000	1000	06/29/20 11:44	

LABORATORY CONTROL SAMPLE: 2622339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/kg	50000	49700	99	80-120	
Arsenic	ug/kg	50000	50300	101	80-120	
Barium	ug/kg	50000	48800	98	80-120	
Beryllium	ug/kg	50000	51000	102	80-120	
Boron	ug/kg	50000	49600	99	80-120	
Calcium	ug/kg	500000	499000	100	80-120	
Chromium	ug/kg	50000	49800	100	80-120	
Copper	ug/kg	50000	47500	95	80-120	
Iron	ug/kg	500000	492000	98	80-120	
Lead	ug/kg	50000	49500	99	80-120	
Magnesium	ug/kg	500000	492000	98	80-120	
Manganese	ug/kg	50000	50000	100	80-120	

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2622339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum	ug/kg	50000	52100	104	80-120	
Nickel	ug/kg	50000	50100	100	80-120	
Potassium	ug/kg	500000	489000	98	80-120	
Sodium	ug/kg	500000	495000	99	80-120	
Strontium	ug/kg	50000	49700	99	80-120	
Vanadium	ug/kg	50000	49300	99	80-120	
Zinc	ug/kg	50000	50600	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2622340 2622341

Parameter	Units	50260268003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/kg	<957	45300	46300	25100	26600	56	58	75-125	6	20	M3
Arsenic	ug/kg	<1910	45300	46300	43400	44700	94	94	75-125	3	20	
Barium	ug/kg	8540	45300	46300	50100	51600	92	93	75-125	3	20	
Beryllium	ug/kg	<478	45300	46300	42700	44200	94	95	75-125	3	20	
Boron	ug/kg	<7650	45300	46300	43500	45300	94	95	75-125	4	20	
Calcium	ug/kg	628000	453000	463000	1260000	1270000	141	139	75-125	1	20	M3
Chromium	ug/kg	5880	45300	46300	47300	48700	92	92	75-125	3	20	
Copper	ug/kg	1580	45300	46300	41100	42600	87	88	75-125	4	20	
Iron	ug/kg	3940000	453000	463000	4610000	4510000	147	124	75-125	2	20	P6
Lead	ug/kg	<9570	45300	46300	42700	44100	90	91	75-125	3	20	
Magnesium	ug/kg	739000	453000	463000	1290000	1260000	121	112	75-125	2	20	
Manganese	ug/kg	27300	45300	46300	74600	74200	105	101	75-125	1	20	
Molybdenum	ug/kg	<957	45300	46300	42400	44100	93	95	75-125	4	20	
Nickel	ug/kg	3880	45300	46300	45100	46500	91	92	75-125	3	20	
Potassium	ug/kg	148000	453000	463000	649000	658000	111	110	75-125	1	20	
Sodium	ug/kg	23200J	453000	463000	453000	464000	95	95	75-125	2	20	
Strontium	ug/kg	<4780	45300	46300	46500	48000	96	97	75-125	3	20	
Vanadium	ug/kg	8010	45300	46300	50800	52400	95	96	75-125	3	20	
Zinc	ug/kg	8190	45300	46300	50500	51800	94	94	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568592
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

METHOD BLANK: 2623199 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/kg	<970	970	970	06/25/20 13:18	
Cadmium	ug/kg	<194	194	194	06/25/20 13:18	
Cobalt	ug/kg	<485	485	485	06/25/20 13:18	
Selenium	ug/kg	<194	194	194	06/25/20 13:18	
Silver	ug/kg	<97.0	97.0	97.0	06/25/20 13:18	
Thallium	ug/kg	<485	485	485	06/25/20 13:18	
Titanium	ug/kg	<25.8	97.0	25.8	06/25/20 13:18	N2

LABORATORY CONTROL SAMPLE: 2623200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/kg	38000	38700	102	80-120	
Cadmium	ug/kg	3800	3510	92	80-120	
Cobalt	ug/kg	3800	3870	102	80-120	
Selenium	ug/kg	3800	3430	90	80-120	
Silver	ug/kg	3800	3760	99	80-120	
Thallium	ug/kg	3800	3860	102	80-120	
Titanium	ug/kg	3800	3910	103	80-120	N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623201 2623205

Parameter	Units	50260268001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/kg	4330000	43000	41000	4780000	5450000	1060	2740	75-125	13	20	P6
Cadmium	ug/kg	<218	4300	4100	4200	4010	94	94	75-125	5	20	
Cobalt	ug/kg	1400	4300	4100	5290	5080	91	90	75-125	4	20	
Selenium	ug/kg	262	4300	4100	3390	3280	73	74	75-125	3	20	M3
Silver	ug/kg	157	4300	4100	4190	3910	94	91	75-125	7	20	
Thallium	ug/kg	<544	4300	4100	4420	4210	102	102	75-125	5	20	
Titanium	ug/kg	237000	4300	4100	256000	280000	438	1060	75-125	9	20	N2,P6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568677
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50260268018

METHOD BLANK: 2623525 Matrix: Solid
Associated Lab Samples: 50260268018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	06/23/20 15:27	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	06/23/20 15:27	
1,2,3-Trichloropropane	ug/kg	<100	100	100	06/23/20 15:27	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	06/23/20 15:27	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	06/23/20 15:27	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,3-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
1,4-Dichlorobenzene	ug/kg	<100	100	100	06/23/20 15:27	
2-Butanone (MEK)	ug/kg	<750	750	750	06/23/20 15:27	
2-Hexanone	ug/kg	<2500	2500	2500	06/23/20 15:27	
2-Methylnaphthalene	ug/kg	<330	330	330	06/23/20 15:27	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	06/23/20 15:27	
Acetone	ug/kg	<1000	1000	1000	06/23/20 15:27	
Acrylonitrile	ug/kg	<100	100	100	06/23/20 15:27	
Benzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Bromobenzene	ug/kg	<100	100	100	06/23/20 15:27	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
Bromodichloromethane	ug/kg	<100	100	100	06/23/20 15:27	
Bromoform	ug/kg	<100	100	100	06/23/20 15:27	
Bromomethane	ug/kg	<200	200	200	06/23/20 15:27	
Carbon disulfide	ug/kg	<250	250	250	06/23/20 15:27	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chloroethane	ug/kg	<250	250	250	06/23/20 15:27	
Chloroform	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Chloromethane	ug/kg	<250	250	250	06/23/20 15:27	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	06/23/20 15:27	
Cyclohexane	ug/kg	<500	500	500	06/23/20 15:27	N2

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623525 Matrix: Solid
Associated Lab Samples: 50260268018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	06/23/20 15:27	
Dibromomethane	ug/kg	<250	250	250	06/23/20 15:27	
Dichlorodifluoromethane	ug/kg	<250	250	250	06/23/20 15:27	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	06/23/20 15:27	
Diisopropyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Hexachloroethane	ug/kg	<300	300	300	06/23/20 15:27	N2
Iodomethane	ug/kg	<100	1000	100	06/23/20 15:27	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	06/23/20 15:27	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
Methyl-tert-butyl ether	ug/kg	<250	250	250	06/23/20 15:27	
Methylene Chloride	ug/kg	<100	100	100	06/23/20 15:27	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
n-Propylbenzene	ug/kg	<100	100	100	06/23/20 15:27	
Naphthalene	ug/kg	<330	330	330	06/23/20 15:27	
o-Xylene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	06/23/20 15:27	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Styrene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
tert-Amylmethyl ether	ug/kg	<250	250	250	06/23/20 15:27	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	06/23/20 15:27	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Tetrahydrofuran	ug/kg	<1000	1000	1000	06/23/20 15:27	N2
Toluene	ug/kg	<100	100	100	06/23/20 15:27	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	06/23/20 15:27	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	06/23/20 15:27	
Trichloroethene	ug/kg	<50.0	50.0	50.0	06/23/20 15:27	
Trichlorofluoromethane	ug/kg	<100	100	100	06/23/20 15:27	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	06/23/20 15:27	
4-Bromofluorobenzene (S)	%.	99	60-142		06/23/20 15:27	
Dibromofluoromethane (S)	%.	104	62-137		06/23/20 15:27	
Toluene-d8 (S)	%.	96	64-139		06/23/20 15:27	

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	87	82-119	
1,1,1-Trichloroethane	ug/kg	100	98.9	99	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	84.8	85	54-137	
1,1,2-Trichloroethane	ug/kg	100	84.1	84	77-122	
1,1-Dichloroethane	ug/kg	100	101	101	68-126	

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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	96.3	96	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	88	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	76	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	91	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	82	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	85.6	86	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	83.0	83	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	80	79-117	
1,2-Dichloroethane	ug/kg	100	90.2	90	74-116	
1,2-Dichloropropane	ug/kg	100	90.0	90	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	83	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	84	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	80	76-115	
2-Butanone (MEK)	ug/kg	500	<750	89	65-126	
2-Hexanone	ug/kg	500	<2500	97	54-141	
2-Methylnaphthalene	ug/kg	100	<330	71	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	85	60-133	
Acetone	ug/kg	500	<1000	108	49-139	
Acrylonitrile	ug/kg	400	349	87	66-133	
Benzene	ug/kg	100	90.2	90	71-126	
Bromobenzene	ug/kg	100	<100	82	77-119	
Bromochloromethane	ug/kg	100	79.0	79	60-117	
Bromodichloromethane	ug/kg	100	<100	83	79-122	
Bromoform	ug/kg	100	<100	76	64-121	
Bromomethane	ug/kg	100	<200	103	10-200	
Carbon disulfide	ug/kg	100	<250	97	54-129	
Carbon tetrachloride	ug/kg	100	105	105	78-120	
Chlorobenzene	ug/kg	100	87.5	87	81-117	
Chloroethane	ug/kg	100	<250	102	54-134	
Chloroform	ug/kg	100	83.3	83	80-119	
Chloromethane	ug/kg	100	<250	93	31-118	
cis-1,2-Dichloroethene	ug/kg	100	87.4	87	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	93	74-133	
Cyclohexane	ug/kg	100	<500	103	49-128	N2
Dibromochloromethane	ug/kg	100	<100	87	78-124	
Dibromomethane	ug/kg	100	<250	86	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	119	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	90	50-150	
Ethylbenzene	ug/kg	100	90.8	91	74-127	
Iodomethane	ug/kg	200	132J	66	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	94	85-121	
m&p-Xylene	ug/kg	200	179	90	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	88	78-135	
Methylene Chloride	ug/kg	100	<100	91	73-119	
n-Butylbenzene	ug/kg	100	90.4	90	69-126	
n-Propylbenzene	ug/kg	100	<100	85	73-124	
Naphthalene	ug/kg	100	<330	92	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	89.0	89	74-128	
p-Isopropyltoluene	ug/kg	100	89.8	90	74-124	
sec-Butylbenzene	ug/kg	100	87.4	87	72-124	
Styrene	ug/kg	100	88.8	89	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	103	50-150	
tert-Butylbenzene	ug/kg	100	65.8	66	54-104	
Tetrachloroethene	ug/kg	100	95.5	95	74-120	
Tetrahydrofuran	ug/kg	100	<1000	93	53-135	N2
Toluene	ug/kg	100	<100	90	71-124	
trans-1,2-Dichloroethene	ug/kg	100	93.9	94	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	83	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	311J	78	22-132	
Trichloroethene	ug/kg	100	92.2	92	75-121	
Trichlorofluoromethane	ug/kg	100	125	125	64-135	
Vinyl chloride	ug/kg	100	109	109	51-137	
4-Bromofluorobenzene (S)	%.			100	60-142	
Dibromofluoromethane (S)	%.			95	62-137	
Toluene-d8 (S)	%.			98	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568681
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

METHOD BLANK: 2623538
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	06/24/20 03:04	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	06/24/20 03:04	
1,2,3-Trichloropropane	ug/kg	<100	100	100	06/24/20 03:04	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	06/24/20 03:04	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	06/24/20 03:04	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,3-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
1,4-Dichlorobenzene	ug/kg	<100	100	100	06/24/20 03:04	
2-Butanone (MEK)	ug/kg	<750	750	750	06/24/20 03:04	
2-Hexanone	ug/kg	<2500	2500	2500	06/24/20 03:04	
2-Methylnaphthalene	ug/kg	<330	330	330	06/24/20 03:04	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	06/24/20 03:04	
Acetone	ug/kg	<1000	1000	1000	06/24/20 03:04	
Acrylonitrile	ug/kg	<100	100	100	06/24/20 03:04	
Benzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Bromobenzene	ug/kg	<100	100	100	06/24/20 03:04	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
Bromodichloromethane	ug/kg	<100	100	100	06/24/20 03:04	
Bromoform	ug/kg	<100	100	100	06/24/20 03:04	
Bromomethane	ug/kg	<200	200	200	06/24/20 03:04	
Carbon disulfide	ug/kg	<250	250	250	06/24/20 03:04	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chloroethane	ug/kg	<250	250	250	06/24/20 03:04	
Chloroform	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Chloromethane	ug/kg	<250	250	250	06/24/20 03:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623538 Matrix: Solid

Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015, 50260268016, 50260268017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	06/24/20 03:04	
Cyclohexane	ug/kg	<500	500	500	06/24/20 03:04	N2
Dibromochloromethane	ug/kg	<100	100	100	06/24/20 03:04	
Dibromomethane	ug/kg	<250	250	250	06/24/20 03:04	
Dichlorodifluoromethane	ug/kg	<250	250	250	06/24/20 03:04	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	06/24/20 03:04	
Diisopropyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Hexachloroethane	ug/kg	<300	300	300	06/24/20 03:04	N2
Iodomethane	ug/kg	<100	1000	100	06/24/20 03:04	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	06/24/20 03:04	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
Methyl-tert-butyl ether	ug/kg	<250	250	250	06/24/20 03:04	
Methylene Chloride	ug/kg	<100	100	100	06/24/20 03:04	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
n-Propylbenzene	ug/kg	<100	100	100	06/24/20 03:04	
Naphthalene	ug/kg	<330	330	330	06/24/20 03:04	
o-Xylene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	06/24/20 03:04	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Styrene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
tert-Amylmethyl ether	ug/kg	<250	250	250	06/24/20 03:04	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	06/24/20 03:04	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Tetrahydrofuran	ug/kg	<1000	1000	1000	06/24/20 03:04	N2
Toluene	ug/kg	<100	100	100	06/24/20 03:04	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	06/24/20 03:04	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	06/24/20 03:04	
Trichloroethene	ug/kg	<50.0	50.0	50.0	06/24/20 03:04	
Trichlorofluoromethane	ug/kg	<100	100	100	06/24/20 03:04	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	06/24/20 03:04	
4-Bromofluorobenzene (S)	%.	103	60-142		06/24/20 03:04	
Dibromofluoromethane (S)	%.	106	62-137		06/24/20 03:04	
Toluene-d8 (S)	%.	98	64-139		06/24/20 03:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	96	82-119	
1,1,1-Trichloroethane	ug/kg	100	103	103	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	93.9	94	54-137	
1,1,2-Trichloroethane	ug/kg	100	94.6	95	77-122	
1,1-Dichloroethane	ug/kg	100	103	103	68-126	
1,1-Dichloroethene	ug/kg	100	101	101	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	97	72-126	
1,2,3-Trichloropropane	ug/kg	100	<100	85	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	98	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	86	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	91.3	91	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	92.3	92	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	86	79-117	
1,2-Dichloroethane	ug/kg	100	93.3	93	74-116	
1,2-Dichloropropane	ug/kg	100	95.2	95	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	88	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	87	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	83	76-115	
2-Butanone (MEK)	ug/kg	500	<750	96	65-126	
2-Hexanone	ug/kg	500	<2500	112	54-141	
2-Methylnaphthalene	ug/kg	100	<330	79	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	98	60-133	
Acetone	ug/kg	500	<1000	113	49-139	
Acrylonitrile	ug/kg	400	384	96	66-133	
Benzene	ug/kg	100	95.7	96	71-126	
Bromobenzene	ug/kg	100	<100	89	77-119	
Bromochloromethane	ug/kg	100	85.2	85	60-117	
Bromodichloromethane	ug/kg	100	<100	88	79-122	
Bromoform	ug/kg	100	<100	84	64-121	
Bromomethane	ug/kg	100	<200	80	10-200	
Carbon disulfide	ug/kg	100	<250	98	54-129	
Carbon tetrachloride	ug/kg	100	105	105	78-120	
Chlorobenzene	ug/kg	100	93.6	94	81-117	
Chloroethane	ug/kg	100	<250	101	54-134	
Chloroform	ug/kg	100	87.3	87	80-119	
Chloromethane	ug/kg	100	<250	95	31-118	
cis-1,2-Dichloroethene	ug/kg	100	92.5	93	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	97	74-133	
Cyclohexane	ug/kg	100	<500	107	49-128	N2
Dibromochloromethane	ug/kg	100	<100	97	78-124	
Dibromomethane	ug/kg	100	<250	90	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	124	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	95	50-150	
Ethylbenzene	ug/kg	100	96.6	97	74-127	
Iodomethane	ug/kg	200	110J	55	10-200	
Isopropylbenzene (Cumene)	ug/kg	100	<250	101	85-121	
m&p-Xylene	ug/kg	200	195	97	72-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl-tert-butyl ether	ug/kg	100	<250	97	78-135	
Methylene Chloride	ug/kg	100	<100	99	73-119	
n-Butylbenzene	ug/kg	100	90.0	90	69-126	
n-Propylbenzene	ug/kg	100	<100	90	73-124	
Naphthalene	ug/kg	100	<330	101	71-128	
o-Xylene	ug/kg	100	93.9	94	74-128	
p-Isopropyltoluene	ug/kg	100	92.0	92	74-124	
sec-Butylbenzene	ug/kg	100	91.0	91	72-124	
Styrene	ug/kg	100	94.1	94	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	131	50-150	
tert-Butylbenzene	ug/kg	100	68.8	69	54-104	
Tetrachloroethene	ug/kg	100	98.8	99	74-120	
Tetrahydrofuran	ug/kg	100	<1000	108	53-135	N2
Toluene	ug/kg	100	<100	99	71-124	
trans-1,2-Dichloroethene	ug/kg	100	98.3	98	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	89	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	313J	78	22-132	
Trichloroethene	ug/kg	100	94.1	94	75-121	
Trichlorofluoromethane	ug/kg	100	128	128	64-135	
Vinyl chloride	ug/kg	100	113	113	51-137	
4-Bromofluorobenzene (S)	%.			105	60-142	
Dibromofluoromethane (S)	%.			99	62-137	
Toluene-d8 (S)	%.			102	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569057
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268002, 50260268004, 50260268008, 50260268009, 50260268012

METHOD BLANK: 2625307 Matrix: Solid
Associated Lab Samples: 50260268002, 50260268004, 50260268008, 50260268009, 50260268012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1221 (Aroclor 1221)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1232 (Aroclor 1232)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1242 (Aroclor 1242)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1248 (Aroclor 1248)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1254 (Aroclor 1254)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1260 (Aroclor 1260)	ug/kg	<328	328	328	06/25/20 23:23	
PCB-1262 (Aroclor 1262)	ug/kg	<328	328	328	06/25/20 23:23	N2
PCB-1268 (Aroclor 1268)	ug/kg	<328	328	328	06/25/20 23:23	N2
Tetrachloro-m-xylene (S)	%.	69	25-123		06/25/20 23:23	

LABORATORY CONTROL SAMPLE: 2625308

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	164	<326	84	54-128	
PCB-1260 (Aroclor 1260)	ug/kg	164	<326	76	36-118	
Tetrachloro-m-xylene (S)	%.			76	25-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625309 2625310

Parameter	Units	50260681001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	166	167	<32800	<33000	585	659	10-145		20	M0
PCB-1260 (Aroclor 1260)	ug/kg	16.1 mg/kg	166	167	<32800	<33000	-3130	-2820	11-124	4	20	M0
Tetrachloro-m-xylene (S)	%.						0	0	25-123			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568613
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

METHOD BLANK: 2623260
Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<318	318	318	06/24/20 08:01	
1,2-Diphenylhydrazine	ug/kg	<1540	1540	1540	06/24/20 08:01	
2,4,5-Trichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4,6-Trichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dichlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dimethylphenol	ug/kg	<318	318	318	06/24/20 08:01	
2,4-Dinitrophenol	ug/kg	<1540	1540	1540	06/24/20 08:01	
2,4-Dinitrotoluene	ug/kg	<318	318	318	06/24/20 08:01	
2,6-Dinitrotoluene	ug/kg	<85.4	318	85.4	06/24/20 08:01	
2-Chloronaphthalene	ug/kg	<318	318	318	06/24/20 08:01	
2-Chlorophenol	ug/kg	<318	318	318	06/24/20 08:01	
2-Methylnaphthalene	ug/kg	<318	318	318	06/24/20 08:01	
2-Methylphenol(o-Cresol)	ug/kg	<965	965	965	06/24/20 08:01	
2-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
2-Nitrophenol	ug/kg	<318	318	318	06/24/20 08:01	
3&4-Methylphenol(m&p Cresol)	ug/kg	<965	965	965	06/24/20 08:01	
3-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
4,6-Dinitro-2-methylphenol	ug/kg	<801	801	801	06/24/20 08:01	
4-Bromophenylphenyl ether	ug/kg	<318	318	318	06/24/20 08:01	
4-Chloro-3-methylphenol	ug/kg	<270	318	270	06/24/20 08:01	
4-Chlorophenylphenyl ether	ug/kg	<318	318	318	06/24/20 08:01	
4-Nitroaniline	ug/kg	<318	318	318	06/24/20 08:01	
4-Nitrophenol	ug/kg	<1540	1540	1540	06/24/20 08:01	
Acenaphthene	ug/kg	<318	318	318	06/24/20 08:01	
Acenaphthylene	ug/kg	<318	318	318	06/24/20 08:01	
Anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(a)anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(a)pyrene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(b)fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(g,h,i)perylene	ug/kg	<318	318	318	06/24/20 08:01	
Benzo(k)fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Chloroethoxy)methane	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Chloroethyl) ether	ug/kg	<154	318	154	06/24/20 08:01	
bis(2-Chloroisopropyl) ether	ug/kg	<318	318	318	06/24/20 08:01	
bis(2-Ethylhexyl)phthalate	ug/kg	<318	318	318	06/24/20 08:01	
Butylbenzylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Carbazole	ug/kg	<318	318	318	06/24/20 08:01	
Chrysene	ug/kg	<318	318	318	06/24/20 08:01	
Di-n-butylphthalate	ug/kg	<318	318	318	06/24/20 08:01	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2623260 Matrix: Solid
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006, 50260268007, 50260268008, 50260268010, 50260268011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Di-n-octylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Dibenz(a,h)anthracene	ug/kg	<318	318	318	06/24/20 08:01	
Dibenzofuran	ug/kg	<318	318	318	06/24/20 08:01	
Diethylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Dimethylphthalate	ug/kg	<318	318	318	06/24/20 08:01	
Fluoranthene	ug/kg	<318	318	318	06/24/20 08:01	
Fluorene	ug/kg	<318	318	318	06/24/20 08:01	
Hexachloro-1,3-butadiene	ug/kg	<92.6	318	92.6	06/24/20 08:01	
Hexachlorobenzene	ug/kg	<318	318	318	06/24/20 08:01	
Hexachlorocyclopentadiene	ug/kg	<965	965	965	06/24/20 08:01	
Hexachloroethane	ug/kg	<318	318	318	06/24/20 08:01	
Indeno(1,2,3-cd)pyrene	ug/kg	<318	318	318	06/24/20 08:01	
Isophorone	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitroso-di-n-propylamine	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitrosodimethylamine	ug/kg	<318	318	318	06/24/20 08:01	
N-Nitrosodiphenylamine	ug/kg	<318	318	318	06/24/20 08:01	
Naphthalene	ug/kg	<318	318	318	06/24/20 08:01	
Nitrobenzene	ug/kg	<318	318	318	06/24/20 08:01	
Pentachlorophenol	ug/kg	<1420	1540	1420	06/24/20 08:01	
Phenanthrene	ug/kg	<318	318	318	06/24/20 08:01	
Phenol	ug/kg	<318	318	318	06/24/20 08:01	
Pyrene	ug/kg	<318	318	318	06/24/20 08:01	
2,4,6-Tribromophenol (S)	%.	84	20-109		06/24/20 08:01	
2-Fluorobiphenyl (S)	%.	81	36-91		06/24/20 08:01	
2-Fluorophenol (S)	%.	96	24-95		06/24/20 08:01	S3
Nitrobenzene-d5 (S)	%.	59	26-96		06/24/20 08:01	
p-Terphenyl-d14 (S)	%.	107	27-117		06/24/20 08:01	
Phenol-d5 (S)	%.	82	32-93		06/24/20 08:01	

LABORATORY CONTROL SAMPLE: 2623261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1570	1290	82	52-89	
2,4-Dinitrotoluene	ug/kg	1570	1340	86	41-116	
2-Chlorophenol	ug/kg	1570	1450	92	48-97	
2-Methylnaphthalene	ug/kg	1570	1410	90	51-98	
4-Chloro-3-methylphenol	ug/kg	1570	1670	106	51-108	
4-Nitrophenol	ug/kg	1570	<1500	75	42-118	
Acenaphthene	ug/kg	1570	1270	81	58-94	
Acenaphthylene	ug/kg	1570	1240	79	56-94	
Anthracene	ug/kg	1570	1350	86	59-98	
Benzo(a)anthracene	ug/kg	1570	1390	89	60-103	
Benzo(a)pyrene	ug/kg	1570	1430	91	57-96	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2623261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(b)fluoranthene	ug/kg	1570	1500	96	57-104	
Benzo(g,h,i)perylene	ug/kg	1570	1260	80	56-103	
Benzo(k)fluoranthene	ug/kg	1570	1440	92	55-104	
Chrysene	ug/kg	1570	1390	89	59-105	
Dibenz(a,h)anthracene	ug/kg	1570	1260	80	54-103	
Fluoranthene	ug/kg	1570	1440	92	57-107	
Fluorene	ug/kg	1570	1100	70	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1570	1250	80	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1570	1240	79	43-94	
Naphthalene	ug/kg	1570	1330	85	51-90	
Pentachlorophenol	ug/kg	1570	<1380	71	24-118	
Phenanthrene	ug/kg	1570	1380	88	60-96	
Phenol	ug/kg	1570	1330	85	44-101	
Pyrene	ug/kg	1570	1360	87	59-108	
2,4,6-Tribromophenol (S)	%.			86	20-109	
2-Fluorobiphenyl (S)	%.			92	36-91	S0
2-Fluorophenol (S)	%.			98	24-95	S0
Nitrobenzene-d5 (S)	%.			72	26-96	
p-Terphenyl-d14 (S)	%.			113	27-117	
Phenol-d5 (S)	%.			92	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623262 2623263

Parameter	Units	50259803017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1920	1950	1510	1780	79	91	30-96	16	20	
2,4-Dinitrotoluene	ug/kg	ND	1920	1950	1230	804	64	41	10-127	42	20	R1
2-Chlorophenol	ug/kg	ND	1920	1950	1620	1540	84	79	17-107	5	20	
2-Methylnaphthalene	ug/kg	ND	1920	1950	1980	1560	103	80	20-120	23	20	R1
4-Chloro-3-methylphenol	ug/kg	ND	1920	1950	2320	1760	121	90	22-117	28	20	M1,R1
4-Nitrophenol	ug/kg	ND	1920	1950	<1850	<1870	72	61	10-131		20	
Acenaphthene	ug/kg	ND	1920	1950	1500	1530	78	78	19-115	2	20	
Acenaphthylene	ug/kg	ND	1920	1950	1460	1530	76	78	11-122	5	20	
Anthracene	ug/kg	ND	1920	1950	1370	1460	71	75	10-133	6	20	
Benzo(a)anthracene	ug/kg	ND	1920	1950	1290	1440	67	74	10-137	11	20	
Benzo(a)pyrene	ug/kg	ND	1920	1950	1270	1410	66	72	10-132	11	20	
Benzo(b)fluoranthene	ug/kg	ND	1920	1950	1410	1470	73	75	10-134	4	20	
Benzo(g,h,i)perylene	ug/kg	ND	1920	1950	1130	1250	59	64	10-138	10	20	
Benzo(k)fluoranthene	ug/kg	ND	1920	1950	1330	1280	69	66	10-140	4	20	
Chrysene	ug/kg	ND	1920	1950	1420	1500	74	77	10-150	5	20	
Dibenz(a,h)anthracene	ug/kg	ND	1920	1950	1230	1320	64	67	10-126	7	20	
Fluoranthene	ug/kg	ND	1920	1950	1280	1480	66	76	10-128	15	20	
Fluorene	ug/kg	ND	1920	1950	1570	1520	81	78	12-127	3	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1920	1950	1130	1250	58	64	10-125	10	20	
N-Nitroso-di-n-propylamine	ug/kg	ND	1920	1950	1480	1990	77	102	23-101	29	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2623262 2623263

Parameter	Units	50259803017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/kg	ND	1920	1950	1550	1410	81	72	12-120	9	20	
Pentachlorophenol	ug/kg	ND	1920	1950	<1700	<1720	82	78	10-112		20	
Phenanthrene	ug/kg	ND	1920	1950	1430	1530	74	79	10-125	7	20	
Phenol	ug/kg	ND	1920	1950	1500	1500	78	77	22-105	0	20	
Pyrene	ug/kg	ND	1920	1950	1390	1750	72	90	10-146	23	20	R1
2,4,6-Tribromophenol (S)	%.						79	76	20-109			
2-Fluorobiphenyl (S)	%.						99	79	36-91			S0
2-Fluorophenol (S)	%.						81	82	24-95			
Nitrobenzene-d5 (S)	%.						75	79	26-96			
p-Terphenyl-d14 (S)	%.						85	87	27-117			
Phenol-d5 (S)	%.						84	82	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569058
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268012, 50260268014, 50260268015

METHOD BLANK: 2625311 Matrix: Solid
Associated Lab Samples: 50260268012, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<330	330	330	06/25/20 14:54	
1,2-Diphenylhydrazine	ug/kg	<1600	1600	1600	06/25/20 14:54	
2,4,5-Trichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4,6-Trichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dichlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dimethylphenol	ug/kg	<330	330	330	06/25/20 14:54	
2,4-Dinitrophenol	ug/kg	<1600	1600	1600	06/25/20 14:54	
2,4-Dinitrotoluene	ug/kg	<330	330	330	06/25/20 14:54	
2,6-Dinitrotoluene	ug/kg	<88.5	330	88.5	06/25/20 14:54	
2-Chloronaphthalene	ug/kg	<330	330	330	06/25/20 14:54	
2-Chlorophenol	ug/kg	<330	330	330	06/25/20 14:54	
2-Methylnaphthalene	ug/kg	<330	330	330	06/25/20 14:54	
2-Methylphenol(o-Cresol)	ug/kg	<1000	1000	1000	06/25/20 14:54	
2-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
2-Nitrophenol	ug/kg	<330	330	330	06/25/20 14:54	
3&4-Methylphenol(m&p Cresol)	ug/kg	<1000	1000	1000	06/25/20 14:54	
3-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
4,6-Dinitro-2-methylphenol	ug/kg	<830	830	830	06/25/20 14:54	
4-Bromophenylphenyl ether	ug/kg	<330	330	330	06/25/20 14:54	
4-Chloro-3-methylphenol	ug/kg	<280	330	280	06/25/20 14:54	
4-Chlorophenylphenyl ether	ug/kg	<330	330	330	06/25/20 14:54	
4-Nitroaniline	ug/kg	<330	330	330	06/25/20 14:54	
4-Nitrophenol	ug/kg	<1600	1600	1600	06/25/20 14:54	
Acenaphthene	ug/kg	<330	330	330	06/25/20 14:54	
Acenaphthylene	ug/kg	<330	330	330	06/25/20 14:54	
Anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(a)anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(a)pyrene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(b)fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(g,h,i)perylene	ug/kg	<330	330	330	06/25/20 14:54	
Benzo(k)fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Chloroethoxy)methane	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Chloroethyl) ether	ug/kg	<160	330	160	06/25/20 14:54	
bis(2-Chloroisopropyl) ether	ug/kg	<330	330	330	06/25/20 14:54	
bis(2-Ethylhexyl)phthalate	ug/kg	<330	330	330	06/25/20 14:54	
Butylbenzylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Carbazole	ug/kg	<330	330	330	06/25/20 14:54	
Chrysene	ug/kg	<330	330	330	06/25/20 14:54	
Di-n-butylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Di-n-octylphthalate	ug/kg	<330	330	330	06/25/20 14:54	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2625311 Matrix: Solid
Associated Lab Samples: 50260268012, 50260268014, 50260268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<330	330	330	06/25/20 14:54	
Dibenzofuran	ug/kg	<330	330	330	06/25/20 14:54	
Diethylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Dimethylphthalate	ug/kg	<330	330	330	06/25/20 14:54	
Fluoranthene	ug/kg	<330	330	330	06/25/20 14:54	
Fluorene	ug/kg	<330	330	330	06/25/20 14:54	
Hexachloro-1,3-butadiene	ug/kg	<96.0	330	96.0	06/25/20 14:54	
Hexachlorobenzene	ug/kg	<330	330	330	06/25/20 14:54	
Hexachlorocyclopentadiene	ug/kg	<1000	1000	1000	06/25/20 14:54	
Hexachloroethane	ug/kg	<330	330	330	06/25/20 14:54	
Indeno(1,2,3-cd)pyrene	ug/kg	<330	330	330	06/25/20 14:54	
Isophorone	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitroso-di-n-propylamine	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitrosodimethylamine	ug/kg	<330	330	330	06/25/20 14:54	
N-Nitrosodiphenylamine	ug/kg	<330	330	330	06/25/20 14:54	
Naphthalene	ug/kg	<330	330	330	06/25/20 14:54	
Nitrobenzene	ug/kg	<330	330	330	06/25/20 14:54	
Pentachlorophenol	ug/kg	<1470	1600	1470	06/25/20 14:54	
Phenanthrene	ug/kg	<330	330	330	06/25/20 14:54	
Phenol	ug/kg	<330	330	330	06/25/20 14:54	
Pyrene	ug/kg	<330	330	330	06/25/20 14:54	
2,4,6-Tribromophenol (S)	%.	83	20-109		06/25/20 14:54	
2-Fluorobiphenyl (S)	%.	110	36-91		06/25/20 14:54	S3
2-Fluorophenol (S)	%.	95	24-95		06/25/20 14:54	
Nitrobenzene-d5 (S)	%.	53	26-96		06/25/20 14:54	
p-Terphenyl-d14 (S)	%.	111	27-117		06/25/20 14:54	
Phenol-d5 (S)	%.	93	32-93		06/25/20 14:54	

LABORATORY CONTROL SAMPLE: 2625312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1280	77	52-89	
2,4-Dinitrotoluene	ug/kg	1670	1360	81	41-116	
2-Chlorophenol	ug/kg	1670	1370	82	48-97	
2-Methylnaphthalene	ug/kg	1670	1250	75	51-98	
4-Chloro-3-methylphenol	ug/kg	1670	1470	88	51-108	
4-Nitrophenol	ug/kg	1670	<1600	69	42-118	
Acenaphthene	ug/kg	1670	1330	80	58-94	
Acenaphthylene	ug/kg	1670	1310	79	56-94	
Anthracene	ug/kg	1670	1320	79	59-98	
Benzo(a)anthracene	ug/kg	1670	1400	84	60-103	
Benzo(a)pyrene	ug/kg	1670	1370	82	57-96	
Benzo(b)fluoranthene	ug/kg	1670	1490	89	57-104	
Benzo(g,h,i)perylene	ug/kg	1670	1220	73	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2625312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1670	1320	79	55-104	
Chrysene	ug/kg	1670	1320	79	59-105	
Dibenz(a,h)anthracene	ug/kg	1670	1240	75	54-103	
Fluoranthene	ug/kg	1670	1890	113	57-107	L1
Fluorene	ug/kg	1670	1330	80	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1230	74	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1670	1300	78	43-94	
Naphthalene	ug/kg	1670	1250	75	51-90	
Pentachlorophenol	ug/kg	1670	<1470	73	24-118	
Phenanthrene	ug/kg	1670	1350	81	60-96	
Phenol	ug/kg	1670	1320	79	44-101	
Pyrene	ug/kg	1670	1590	95	59-108	
2,4,6-Tribromophenol (S)	%.			83	20-109	
2-Fluorobiphenyl (S)	%.			94	36-91	S0
2-Fluorophenol (S)	%.			90	24-95	
Nitrobenzene-d5 (S)	%.			74	26-96	
p-Terphenyl-d14 (S)	%.			150	27-117	S0
Phenol-d5 (S)	%.			84	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625313 2625314

Parameter	Units	50259803013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1830	1860	1500	1510	81	81	30-96	1	20	
2,4-Dinitrotoluene	ug/kg	ND	1830	1860	1530	1510	83	82	10-127	1	20	
2-Chlorophenol	ug/kg	ND	1830	1860	1420	1510	77	81	17-107	6	20	
2-Methylnaphthalene	ug/kg	ND	1830	1860	1260	1290	69	70	20-120	2	20	
4-Chloro-3-methylphenol	ug/kg	ND	1830	1860	1550	1640	84	88	22-117	5	20	
4-Nitrophenol	ug/kg	ND	1830	1860	<1770	<1780	75	75	10-131		20	
Acenaphthene	ug/kg	ND	1830	1860	1530	1490	83	80	19-115	3	20	
Acenaphthylene	ug/kg	ND	1830	1860	1450	1490	79	80	11-122	2	20	
Anthracene	ug/kg	ND	1830	1860	1500	1460	82	78	10-133	3	20	
Benzo(a)anthracene	ug/kg	ND	1830	1860	1530	1540	83	83	10-137	1	20	
Benzo(a)pyrene	ug/kg	ND	1830	1860	1610	1520	88	82	10-132	6	20	
Benzo(b)fluoranthene	ug/kg	ND	1830	1860	2480	1690	135	91	10-134	38	20	M1,R1
Benzo(g,h,i)perylene	ug/kg	ND	1830	1860	1340	1380	73	75	10-138	3	20	
Benzo(k)fluoranthene	ug/kg	ND	1830	1860	2230	1520	121	82	10-140	38	20	R1
Chrysene	ug/kg	ND	1830	1860	1500	1500	82	81	10-150	0	20	
Dibenz(a,h)anthracene	ug/kg	ND	1830	1860	1380	1380	75	74	10-126	0	20	
Fluoranthene	ug/kg	ND	1830	1860	2390	1510	130	81	10-128	45	20	M0,R1
Fluorene	ug/kg	ND	1830	1860	1470	1550	80	84	12-127	5	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1830	1860	1360	1370	74	74	10-125	1	20	
N-Nitroso-di-n-propylamine	ug/kg	ND	1830	1860	1740	1860	94	100	23-101	7	20	
Naphthalene	ug/kg	ND	1830	1860	1400	1420	76	77	12-120	2	20	
Pentachlorophenol	ug/kg	ND	1830	1860	<1620	<1640	76	71	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2625313 2625314

Parameter	Units	50259803013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	ND	1830	1860	1510	1480	82	80	10-125	2	20	
Phenol	ug/kg	ND	1830	1860	1320	1350	72	73	22-105	2	20	
Pyrene	ug/kg	ND	1830	1860	1640	2360	89	127	10-146	36	20	R1
2,4,6-Tribromophenol (S)	%.						78	64	20-109			
2-Fluorobiphenyl (S)	%.						96	79	36-91			S0
2-Fluorophenol (S)	%.						75	77	24-95			
Nitrobenzene-d5 (S)	%.						78	85	26-96			
p-Terphenyl-d14 (S)	%.						161	95	27-117			S0
Phenol-d5 (S)	%.						75	78	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 569491
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268009, 50260268013

METHOD BLANK: 2627633 Matrix: Solid
Associated Lab Samples: 50260268009, 50260268013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<326	326	326	06/29/20 22:54	
1,2-Diphenylhydrazine	ug/kg	<1580	1580	1580	06/29/20 22:54	
2,4,5-Trichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4,6-Trichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dichlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dimethylphenol	ug/kg	<326	326	326	06/29/20 22:54	
2,4-Dinitrophenol	ug/kg	<1580	1580	1580	06/29/20 22:54	
2,4-Dinitrotoluene	ug/kg	<326	326	326	06/29/20 22:54	
2,6-Dinitrotoluene	ug/kg	<87.3	326	87.3	06/29/20 22:54	
2-Chloronaphthalene	ug/kg	<326	326	326	06/29/20 22:54	
2-Chlorophenol	ug/kg	<326	326	326	06/29/20 22:54	
2-Methylnaphthalene	ug/kg	<326	326	326	06/29/20 22:54	
2-Methylphenol(o-Cresol)	ug/kg	<987	987	987	06/29/20 22:54	
2-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
2-Nitrophenol	ug/kg	<326	326	326	06/29/20 22:54	
3&4-Methylphenol(m&p Cresol)	ug/kg	<987	987	987	06/29/20 22:54	
3-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
4,6-Dinitro-2-methylphenol	ug/kg	<819	819	819	06/29/20 22:54	
4-Bromophenylphenyl ether	ug/kg	<326	326	326	06/29/20 22:54	
4-Chloro-3-methylphenol	ug/kg	<276	326	276	06/29/20 22:54	
4-Chlorophenylphenyl ether	ug/kg	<326	326	326	06/29/20 22:54	
4-Nitroaniline	ug/kg	<326	326	326	06/29/20 22:54	
4-Nitrophenol	ug/kg	<1580	1580	1580	06/29/20 22:54	
Acenaphthene	ug/kg	<326	326	326	06/29/20 22:54	
Acenaphthylene	ug/kg	<326	326	326	06/29/20 22:54	
Anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(a)anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(a)pyrene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(b)fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(g,h,i)perylene	ug/kg	<326	326	326	06/29/20 22:54	
Benzo(k)fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Chloroethoxy)methane	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Chloroethyl) ether	ug/kg	<158	326	158	06/29/20 22:54	
bis(2-Chloroisopropyl) ether	ug/kg	<326	326	326	06/29/20 22:54	
bis(2-Ethylhexyl)phthalate	ug/kg	<326	326	326	06/29/20 22:54	
Butylbenzylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Carbazole	ug/kg	<326	326	326	06/29/20 22:54	
Chrysene	ug/kg	<326	326	326	06/29/20 22:54	
Di-n-butylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Di-n-octylphthalate	ug/kg	<326	326	326	06/29/20 22:54	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

METHOD BLANK: 2627633 Matrix: Solid
Associated Lab Samples: 50260268009, 50260268013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<326	326	326	06/29/20 22:54	
Dibenzofuran	ug/kg	<326	326	326	06/29/20 22:54	
Diethylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Dimethylphthalate	ug/kg	<326	326	326	06/29/20 22:54	
Fluoranthene	ug/kg	<326	326	326	06/29/20 22:54	
Fluorene	ug/kg	<326	326	326	06/29/20 22:54	
Hexachloro-1,3-butadiene	ug/kg	<94.7	326	94.7	06/29/20 22:54	
Hexachlorobenzene	ug/kg	<326	326	326	06/29/20 22:54	
Hexachlorocyclopentadiene	ug/kg	<987	987	987	06/29/20 22:54	
Hexachloroethane	ug/kg	<326	326	326	06/29/20 22:54	
Indeno(1,2,3-cd)pyrene	ug/kg	<326	326	326	06/29/20 22:54	
Isophorone	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitroso-di-n-propylamine	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitrosodimethylamine	ug/kg	<326	326	326	06/29/20 22:54	
N-Nitrosodiphenylamine	ug/kg	<326	326	326	06/29/20 22:54	
Naphthalene	ug/kg	<326	326	326	06/29/20 22:54	
Nitrobenzene	ug/kg	<326	326	326	06/29/20 22:54	
Pentachlorophenol	ug/kg	<1450	1580	1450	06/29/20 22:54	
Phenanthrene	ug/kg	<326	326	326	06/29/20 22:54	
Phenol	ug/kg	<326	326	326	06/29/20 22:54	
Pyrene	ug/kg	<326	326	326	06/29/20 22:54	
2,4,6-Tribromophenol (S)	%.	82	20-109		06/29/20 22:54	
2-Fluorobiphenyl (S)	%.	79	36-91		06/29/20 22:54	
2-Fluorophenol (S)	%.	84	24-95		06/29/20 22:54	
Nitrobenzene-d5 (S)	%.	77	26-96		06/29/20 22:54	
p-Terphenyl-d14 (S)	%.	108	27-117		06/29/20 22:54	
Phenol-d5 (S)	%.	84	32-93		06/29/20 22:54	

LABORATORY CONTROL SAMPLE: 2627634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1590	1240	78	52-89	
2,4-Dinitrotoluene	ug/kg	1590	1250	79	41-116	
2-Chlorophenol	ug/kg	1590	1320	83	48-97	
2-Methylnaphthalene	ug/kg	1590	1260	79	51-98	
4-Chloro-3-methylphenol	ug/kg	1590	1450	92	51-108	
4-Nitrophenol	ug/kg	1590	<1520	85	42-118	
Acenaphthene	ug/kg	1590	1310	83	58-94	
Acenaphthylene	ug/kg	1590	1320	83	56-94	
Anthracene	ug/kg	1590	1340	85	59-98	
Benzo(a)anthracene	ug/kg	1590	1340	85	60-103	
Benzo(a)pyrene	ug/kg	1590	1360	86	57-96	
Benzo(b)fluoranthene	ug/kg	1590	1480	93	57-104	
Benzo(g,h,i)perylene	ug/kg	1590	1390	88	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

LABORATORY CONTROL SAMPLE: 2627634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1590	1250	79	55-104	
Chrysene	ug/kg	1590	1250	79	59-105	
Dibenz(a,h)anthracene	ug/kg	1590	1430	90	54-103	
Fluoranthene	ug/kg	1590	1450	91	57-107	
Fluorene	ug/kg	1590	1370	86	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1590	1380	87	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1590	1430	90	43-94	
Naphthalene	ug/kg	1590	1220	77	51-90	
Pentachlorophenol	ug/kg	1590	<1400	78	24-118	
Phenanthrene	ug/kg	1590	1370	86	60-96	
Phenol	ug/kg	1590	1330	84	44-101	
Pyrene	ug/kg	1590	1340	84	59-108	
2,4,6-Tribromophenol (S)	%.			93	20-109	
2-Fluorobiphenyl (S)	%.			77	36-91	
2-Fluorophenol (S)	%.			83	24-95	
Nitrobenzene-d5 (S)	%.			83	26-96	
p-Terphenyl-d14 (S)	%.			110	27-117	
Phenol-d5 (S)	%.			87	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627635 2627636

Parameter	Units	50260268013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	<422	2120	1990	1340	1230	63	62	30-96	9	20	
2,4-Dinitrotoluene	ug/kg	<422	2120	1990	1210	1140	57	58	10-127	6	20	
2-Chlorophenol	ug/kg	<422	2120	1990	1470	1360	70	68	17-107	8	20	
2-Methylnaphthalene	ug/kg	<422	2120	1990	1230	1150	58	58	20-120	7	20	
4-Chloro-3-methylphenol	ug/kg	<358	2120	1990	1450	1450	68	73	22-117	1	20	
4-Nitrophenol	ug/kg	<2050	2120	1990	<2030	<1910	67	68	10-131		20	
Acenaphthene	ug/kg	<422	2120	1990	1160	1120	55	57	19-115	3	20	
Acenaphthylene	ug/kg	<422	2120	1990	1210	1140	57	58	11-122	6	20	
Anthracene	ug/kg	<422	2120	1990	1110	1120	52	56	10-133	1	20	
Benzo(a)anthracene	ug/kg	<422	2120	1990	1200	1110	57	56	10-137	8	20	
Benzo(a)pyrene	ug/kg	<422	2120	1990	1110	998	53	50	10-132	11	20	
Benzo(b)fluoranthene	ug/kg	<422	2120	1990	1180	958	55	48	10-134	20	20	
Benzo(g,h,i)perylene	ug/kg	<422	2120	1990	1070	951	51	48	10-138	12	20	
Benzo(k)fluoranthene	ug/kg	<422	2120	1990	1050	1070	49	54	10-140	2	20	
Chrysene	ug/kg	<422	2120	1990	1230	1080	58	54	10-150	13	20	
Dibenz(a,h)anthracene	ug/kg	<422	2120	1990	1150	994	54	50	10-126	15	20	
Fluoranthene	ug/kg	<422	2120	1990	1520	1390	54	52	10-128	9	20	
Fluorene	ug/kg	<422	2120	1990	1180	1160	56	58	12-127	2	20	
Indeno(1,2,3-cd)pyrene	ug/kg	<422	2120	1990	1010	920	48	46	10-125	10	20	
N-Nitroso-di-n-propylamine	ug/kg	<422	2120	1990	1590	1480	75	74	23-101	8	20	
Naphthalene	ug/kg	<422	2120	1990	1340	1220	63	61	12-120	10	20	
Pentachlorophenol	ug/kg	<1880	2120	1990	<1870	<1750	55	60	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2627635 2627636

Parameter	Units	50260268013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	<422	2120	1990	1340	1320	53	55	10-125	1	20	
Phenol	ug/kg	<422	2120	1990	1420	1380	67	70	22-105	2	20	
Pyrene	ug/kg	<422	2120	1990	1440	1330	54	52	10-146	8	20	
2,4,6-Tribromophenol (S)	%.						68	71	20-109			
2-Fluorobiphenyl (S)	%.						59	59	36-91			
2-Fluorophenol (S)	%.						69	73	24-95			
Nitrobenzene-d5 (S)	%.						68	67	26-96			
p-Terphenyl-d14 (S)	%.						67	69	27-117			
Phenol-d5 (S)	%.						70	73	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568683
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268001, 50260268002, 50260268003, 50260268004, 50260268005, 50260268006

SAMPLE DUPLICATE: 2623545

Parameter	Units	50260268001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.0	8.6	5	5	

SAMPLE DUPLICATE: 2623546

Parameter	Units	50260171001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.7	13.4	5	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 568712
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268007, 50260268008, 50260268009, 50260268010, 50260268011, 50260268012, 50260268013, 50260268014, 50260268015

SAMPLE DUPLICATE: 2623658

Parameter	Units	50260268007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.8	12.6	7	5	R1

SAMPLE DUPLICATE: 2623659

Parameter	Units	50260285007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	60.7	58.2	4	5	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

QC Batch: 570566
QC Batch Method: EPA 3060A
Analysis Method: EPA 7196A
Analysis Description: 7196 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260268005

METHOD BLANK: 2632291 Matrix: Solid
Associated Lab Samples: 50260268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	<2.0	2.0	2.0	07/07/20 16:14	

LABORATORY CONTROL SAMPLE: 2632292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	969	898	93	80-120	

MATRIX SPIKE SAMPLE: 2632294

Parameter	Units	50261280004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	1090	208	19	75-125	1d,M0

MATRIX SPIKE SAMPLE: 2632295

Parameter	Units	50261280004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	ND	42.3	<10.6	-1	75-125	1d,M0

SAMPLE DUPLICATE: 2632293

Parameter	Units	50260268005 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/kg	<2.1	<2.1		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	Redox (202 mV) and pH (7.85) values indicate a naturally reducing matrix. This accounts for the poor recovery values on the sample per method Eh/pH phase diagram.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L5	LCS recovery exceeded QC limits. Batch accepted based on matrix spike recovery within LCS limits.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
N	The reported TIC has an 85% or higher match on a mass spectral library search.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268001	**MW-122 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268002	**MW-123 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268003	**MW-124 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268004	**MW-125 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268005	**MW-126 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268006	**MW-126 (7.5-8.5')**	EPA 8015 Alcohol-Glycol	568440		
50260268007	**MW-127 (6-7')**	EPA 8015 Alcohol-Glycol	568440		
50260268008	**MW-127 (10-11')**	EPA 8015 Alcohol-Glycol	568440		
50260268009	**MW-128 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268010	**MW-128 (8-9')**	EPA 8015 Alcohol-Glycol	568440		
50260268011	**MW-129 (3-4')**	EPA 8015 Alcohol-Glycol	568440		
50260268012	**MW-130 (4-5')**	EPA 8015 Alcohol-Glycol	568440		
50260268013	**MW-131 (2-3')**	EPA 8015 Alcohol-Glycol	568440		
50260268014	**Dup. 1**	EPA 8015 Alcohol-Glycol	568440		
50260268015	**Dup. 2**	EPA 8015 Alcohol-Glycol	568440		
50260268002	**MW-123 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268004	**MW-125 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268008	**MW-127 (10-11')**	EPA 3546	569057	EPA 8082	569164
50260268009	**MW-128 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268012	**MW-130 (4-5')**	EPA 3546	569057	EPA 8082	569164
50260268001	**MW-122 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268002	**MW-123 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268003	**MW-124 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268004	**MW-125 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268005	**MW-126 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268006	**MW-126 (7.5-8.5')**	EPA 3050	568327	EPA 6010	569711
50260268007	**MW-127 (6-7')**	EPA 3050	568327	EPA 6010	569711
50260268008	**MW-127 (10-11')**	EPA 3050	568327	EPA 6010	569711
50260268009	**MW-128 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268010	**MW-128 (8-9')**	EPA 3050	568327	EPA 6010	569711
50260268011	**MW-129 (3-4')**	EPA 3050	568327	EPA 6010	569711
50260268012	**MW-130 (4-5')**	EPA 3050	568327	EPA 6010	569711
50260268013	**MW-131 (2-3')**	EPA 3050	568327	EPA 6010	569711
50260268014	**Dup. 1**	EPA 3050	568327	EPA 6010	569711
50260268015	**Dup. 2**	EPA 3050	568327	EPA 6010	569711
50260268001	**MW-122 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268002	**MW-123 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268003	**MW-124 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268004	**MW-125 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268005	**MW-126 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268006	**MW-126 (7.5-8.5')**	EPA 3050B	568592	EPA 6020	569073
50260268007	**MW-127 (6-7')**	EPA 3050B	568592	EPA 6020	569073
50260268008	**MW-127 (10-11')**	EPA 3050B	568592	EPA 6020	569073
50260268009	**MW-128 (4-5')**	EPA 3050B	568592	EPA 6020	569073
50260268010	**MW-128 (8-9')**	EPA 3050B	568592	EPA 6020	569073
50260268011	**MW-129 (3-4')**	EPA 3050B	568592	EPA 6020	569073
50260268012	**MW-130 (4-5')**	EPA 3050B	568592	EPA 6020	569073

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268013	MW-131 (2-3')	EPA 3050B	568592	EPA 6020	569073
50260268014	Dup. 1	EPA 3050B	568592	EPA 6020	569073
50260268015	Dup. 2	EPA 3050B	568592	EPA 6020	569073
50260268001	MW-122 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268002	MW-123 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268003	MW-124 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268004	MW-125 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268005	MW-126 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268006	MW-126 (7.5-8.5')	EPA 7471	569181	EPA 7471	569347
50260268007	MW-127 (6-7')	EPA 7471	569181	EPA 7471	569347
50260268008	MW-127 (10-11')	EPA 7471	569181	EPA 7471	569347
50260268009	MW-128 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268010	MW-128 (8-9')	EPA 7471	569181	EPA 7471	569347
50260268011	MW-129 (3-4')	EPA 7471	569181	EPA 7471	569347
50260268012	MW-130 (4-5')	EPA 7471	569181	EPA 7471	569347
50260268013	MW-131 (2-3')	EPA 7471	569181	EPA 7471	569347
50260268014	Dup. 1	EPA 7471	569181	EPA 7471	569347
50260268015	Dup. 2	EPA 7471	569181	EPA 7471	569347
50260268001	MW-122 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268002	MW-123 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268003	MW-124 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268004	MW-125 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268005	MW-126 (4-5')	EPA 3546	568613	EPA 8270	568826
50260268006	MW-126 (7.5-8.5')	EPA 3546	568613	EPA 8270	568826
50260268007	MW-127 (6-7')	EPA 3546	568613	EPA 8270	568826
50260268008	MW-127 (10-11')	EPA 3546	568613	EPA 8270	568826
50260268009	MW-128 (4-5')	EPA 3546	569491	EPA 8270	569827
50260268010	MW-128 (8-9')	EPA 3546	568613	EPA 8270	568826
50260268011	MW-129 (3-4')	EPA 3546	568613	EPA 8270	568826
50260268012	MW-130 (4-5')	EPA 3546	569058	EPA 8270	569235
50260268013	MW-131 (2-3')	EPA 3546	569491	EPA 8270	569827
50260268014	Dup. 1	EPA 3546	569058	EPA 8270	569235
50260268015	Dup. 2	EPA 3546	569058	EPA 8270	569235
50260268001	MW-122 (4-5')	EPA 8260	568681		
50260268002	MW-123 (4-5')	EPA 8260	568681		
50260268003	MW-124 (4-5')	EPA 8260	568681		
50260268004	MW-125 (4-5')	EPA 8260	568681		
50260268005	MW-126 (4-5')	EPA 8260	568681		
50260268006	MW-126 (7.5-8.5')	EPA 8260	568681		
50260268007	MW-127 (6-7')	EPA 8260	568681		
50260268008	MW-127 (10-11')	EPA 8260	568681		
50260268009	MW-128 (4-5')	EPA 8260	568681		
50260268010	MW-128 (8-9')	EPA 8260	568681		
50260268011	MW-129 (3-4')	EPA 8260	568681		
50260268012	MW-130 (4-5')	EPA 8260	568681		

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260268013	**MW-131 (2-3')**	EPA 8260	568681		
50260268014	**Dup. 1**	EPA 8260	568681		
50260268015	**Dup. 2**	EPA 8260	568681		
50260268016	**Trip Blank**	EPA 8260	568681		
50260268017	**Trip Blank**	EPA 8260	568681		
50260268018	**Field Blank**	EPA 8260	568677		
50260268001	**MW-122 (4-5')**	SM 2540G	568683		
50260268002	**MW-123 (4-5')**	SM 2540G	568683		
50260268003	**MW-124 (4-5')**	SM 2540G	568683		
50260268004	**MW-125 (4-5')**	SM 2540G	568683		
50260268005	**MW-126 (4-5')**	SM 2540G	568683		
50260268006	**MW-126 (7.5-8.5')**	SM 2540G	568683		
50260268007	**MW-127 (6-7')**	SM 2540G	568712		
50260268008	**MW-127 (10-11')**	SM 2540G	568712		
50260268009	**MW-128 (4-5')**	SM 2540G	568712		
50260268010	**MW-128 (8-9')**	SM 2540G	568712		
50260268011	**MW-129 (3-4')**	SM 2540G	568712		
50260268012	**MW-130 (4-5')**	SM 2540G	568712		
50260268013	**MW-131 (2-3')**	SM 2540G	568712		
50260268014	**Dup. 1**	SM 2540G	568712		
50260268015	**Dup. 2**	SM 2540G	568712		
50260268005	**MW-126 (4-5')**	EPA 3060A	570566	EPA 7196A	570880
50260268005	**MW-126 (4-5')**	Trivalent Chromium Calculation	571475		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO# : 50260268

50260268

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Detroit Axle	Report To:	Ryann.Scott@atcgs.com	Attention:	Ryann Scott
Address:	1600 W. 8 Mile Rd. Ferndale, MI 48220	Copy To:		Company Name:	ATC Group Services,
Email To:	Ryann.Scott@atcgs.com	Purchase Order No.		Address:	46555 Humboldt Drive, S
Phone:	248-669-5140 Fax 248-669-5147	Client Project ID:	NPDAX19001	Pace Quote Reference:	
Requested Due Date/TAT:	10 Day (Standard)	Container Order Number:		Pace Project Manager:	
				Pace Profile #:	

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM#	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs (+ MTBE & fuel oxygenates)	SVOCs	MI Part 201 Full Metals List	PCBs	Residual Chlorine (Y/N)
1	MW-122 (4-5')	SL	G			6/15/2020	1337		3	x						x			x	x	x		
2	MW-123 (4-5')	SL	G			6/15/2020	1315		3	x						x			x	x	x	x	
3	MW-124 (4-5')	SL	G			6/15/2020	1240		3	x						x			x	x	x		
4	MW-125 (4-5')	SL	G			6/16/2020	1100		3	x						x			x	x	x	x	
5	MW-126 (4-5')	SL	G			6/15/2020	1020		3	x						x			x	x	x		
6	MW-126 (7.5-8.5')	SL	G			6/15/2020	1030		3	x						x			-x	x	x		
7	MW-127 (6-7')	SL	G			6/15/2020	1130		3	x						x			x	x	x		
8	MW-127 (10-11')	SL	G			6/15/2020	1120		3	x						x			x	x	x	x	
9	MW-128 (4-5')	SL	G			6/15/2020	945		3	x						x			x	x	x	x	
10	MW-128 (8-9')	SL	G			6/15/2020	947		3	x						x			x	x	x		
11	MW-129 (3-4')	SL	G			6/15/2020	1156		3	x						x			x	x	x		
12	MW-130 (4-5')	SL	G			6/15/2020	1422		3	x						x			x	x	x	x	
13	MW-131 (2-3')	SL	G			6/15/2020	1355		3	x						x			x	x	x		
14	Dup.1	SL	G			6/15/2020	1200		3	x						x			x	x	x		
15	Dup.2	SL	G			6/16/2020	1200		3	x						x			x	x	x		
16	Trip Blank	SL	G			6/11/2020	1429		1	x						x			x				
17	Trip Blank	SL	G			6/11/2020	1430		1	x						x			x				
18	Field Blank	SL	G			6/15/2020	1200		2	x						x			x				
19																							

P 9157 L7

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ira Adolphues	6/17/2020	1030	[signature] /ATC	6/17/20	1600	
				[signature]	6-18-20	0925	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adolphues

SIGNATURE of SAMPLER: DATE Signed: 6/17/2020

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 6.18.20 1601	Evaluated by: AWS	**Affix Workorder/Login Label Here or List Pace Workorder Number**	
Client: DETROIT AXLE - ATC		5026 0268	
Project Manager: BJH	Profile ID:		
Rush TAT Requested: YES (NO)	Due Date:		
Lab Notified of Rush or Short Holds: YES (NO)		**Non Conformance Form Required:** YES (NO)	

Samples Received Via: (FedEx) UPS Client Pace Courier Other: _____				**Comments:**
Custody Seals Present and Intact:	YES	NO	(NA)	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	(NA)	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	(N/A)	
Short Holds Present (< 72 Hours):	YES	(NO)		
Samples Received in Hold:	(YES)	NO		
Custody Signatures Present:	(YES)	NO		
Collector Signature Present:	(YES)	NO		
Packing Material Used:	(YES)	NO		
Samples Collected Today and On Ice:	YES	NO	(N/A)	

IR Gun #: (280) 281	**Digital Thermometer #:** 282 283
Ice Type: WET Bagged / (WET Loose) BLUE NONE	**1.** Cooler Temp Upon Receipt: 2.5/3.0 °C
Ice Location: TOP BOTTOM MIDDLE (DISPERSED)	Temp should be 0-6°C (Initial/Corrected)

Temp Blank Received:	(YES)	NO		
Containers Intact:	(YES)	NO		
Correct Containers:	(YES)	NO		
Sufficient Volume:	(YES)	NO		
Sample pH Acceptable: All containers needing preservation are found to be in compliance with EPA recommendation Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	(N/A)	
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	(N/A)	
VOA Headspace Acceptable (<6mm):	YES	NO	(N/A)	
Trip Blank Received: HCl MeOH TSP OTHER	YES	(NO)		

Comments:

N/A

2. Cooler Temp Upon Receipt: _____ °C

3. Cooler Temp Upon Receipt: _____ °C

4. Cooler Temp Upon Receipt: _____ °C

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

September 11, 2020

Ryann Scott
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Dear Ryann Scott:

Enclosed are the analytical results for sample(s) received by the laboratory between August 14, 2020 and August 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis
- Pace Analytical Services - Melville

Revised Report. This report replaces the original dated 090220, it has been revised to include Mercury analysis for sample MW-133 (10-11).

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
Joshua Schuyler, ATC Group Services - Novi

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50264929001	**MW-133**	Water	08/13/20 13:14	08/14/20 13:50
50264929002	**MW-132**	Water	08/13/20 14:21	08/14/20 13:50
50264929003	**Dup**	Water	08/13/20 00:00	08/14/20 13:50
50264929004	**MW-132 (5.5-6.5)**	Solid	08/12/20 10:06	08/14/20 13:50
50264929005	**MW-133 (3-4)**	Solid	08/12/20 11:03	08/14/20 13:50
50264929006	**MW-133 (10-11)**	Solid	08/12/20 11:10	08/14/20 13:50
50264929007	**MW-133 Composite**	Solid	08/12/20 11:03	08/25/20 12:07

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50264929001	**MW-133**	EPA 6010	KJE	16	PASI-I
		EPA 6020	CAW	10	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50264929002	**MW-132**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	KJE	16	PASI-I
		EPA 6020	CAW	10	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50264929003	**Dup**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	KJE	16	PASI-I
		EPA 6020	CAW	10	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50264929004	**MW-132 (5.5-6.5)**	EPA 8082	RID	10	PASI-I
		EPA 6010	JPK	19	PASI-I
		EPA 6020	DMT	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	67	PASI-I
		EPA 8260	JPV	75	PASI-I
		SM 2540G	MMS	1	PASI-I
50264929005	**MW-133 (3-4)**	EPA 6010	JPK	19	PASI-I
		EPA 6020	DMT	7	PASI-I

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	67	PASI-I
		EPA 8260	JPV	75	PASI-I
		SM 2540G	MMS	1	PASI-I
50264929006	**MW-133 (10-11)**	EPA 6010	KJE	19	PASI-I
		EPA 6020	DMT	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	67	PASI-I
		EPA 8260	JPV	75	PASI-I
		SM 2540G	SKK	1	PASI-I
50264929007	**MW-133 Composite**	EPA 6010	KJE	7	PASI-I
		EPA 7470	ILP	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis
PASI-L = Pace Analytical Services - Melville

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 **Lab ID: 50264929001** Collected: 08/13/20 13:14 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	08/18/20 06:00	08/20/20 09:28	7440-38-2	
Barium	**<100**	ug/L	100	100	1	08/18/20 06:00	08/20/20 09:28	7440-39-3	
Boron	**1210**	ug/L	300	300	1	08/18/20 06:00	08/20/20 09:28	7440-42-8	
Calcium	**221000**	ug/L	5000	5000	5	08/18/20 06:00	08/20/20 09:55	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	08/18/20 06:00	08/20/20 09:28	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:28	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	08/18/20 06:00	08/20/20 09:28	7440-50-8	
Iron	**206**	ug/L	200	200	1	08/18/20 06:00	08/20/20 09:28	7439-89-6	
Magnesium	**30900**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:28	7439-95-4	
Manganese	**170**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:28	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:28	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:28	7440-02-0	
Potassium	**66600**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:28	7440-09-7	
Sodium	**42500**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:28	7440-23-5	
Strontium	**1180**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:28	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:28	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**<50.0**	ug/L	50.0	50.0	1	08/18/20 10:02	08/18/20 17:47	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 17:47	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 17:47	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 17:47	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	08/18/20 10:02	08/18/20 17:47	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	08/18/20 10:02	08/18/20 17:47	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	08/18/20 10:02	08/18/20 17:47	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 17:47	7440-28-0	
Titanium	**519**	ug/L	5.0	0.36	5	08/18/20 10:02	08/19/20 15:05	7440-32-6	N2
Vanadium	**5.8**	ug/L	4.0	4.0	1	08/18/20 10:02	08/18/20 17:47	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.080**	ug/L	0.20	0.080	1	08/18/20 02:11	08/18/20 11:45	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	08/16/20 16:36	08/17/20 15:40	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 **Lab ID: 50264929001** Collected: 08/13/20 13:14 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:40	53-70-3	
Fluoranthene	**1.3**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:40	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:40	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	91-57-6	
Naphthalene	**4.8**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	91-20-3	
Phenanthrene	**4.2**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:40	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%.	32-107		1	08/16/20 16:36	08/17/20 15:40	321-60-8	
p-Terphenyl-d14 (S)	72	%.	29-143		1	08/16/20 16:36	08/17/20 15:40	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	08/16/20 16:36	08/17/20 16:10	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	85-68-7	
Carbazole	**10.9**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:10	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	08/16/20 16:36	08/17/20 16:10	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	08/16/20 16:36	08/17/20 16:10	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	08/16/20 16:36	08/17/20 16:10	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:10	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	08/16/20 16:36	08/17/20 16:10	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	08/16/20 16:36	08/17/20 16:10	132-64-9	
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:10	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	08/16/20 16:36	08/17/20 16:10	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	08/16/20 16:36	08/17/20 16:10	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	08/16/20 16:36	08/17/20 16:10	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	08/16/20 16:36	08/17/20 16:10	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	08/16/20 16:36	08/17/20 16:10	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	08/16/20 16:36	08/17/20 16:10	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	08/16/20 16:36	08/17/20 16:10	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:10	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	08/16/20 16:36	08/17/20 16:10		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	08/16/20 16:36	08/17/20 16:10	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 **Lab ID: 50264929001** Collected: 08/13/20 13:14 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	08/16/20 16:36	08/17/20 16:10	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	08/16/20 16:36	08/17/20 16:10	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	08/16/20 16:36	08/17/20 16:10	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	08/16/20 16:36	08/17/20 16:10	100-02-7	L1
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	08/16/20 16:36	08/17/20 16:10	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	08/16/20 16:36	08/17/20 16:10	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	08/16/20 16:36	08/17/20 16:10	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:10	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	08/16/20 16:36	08/17/20 16:10	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	81	%.	37-125		1	08/16/20 16:36	08/17/20 16:10	4165-60-0	
Phenol-d5 (S)	48	%.	10-65		1	08/16/20 16:36	08/17/20 16:10	4165-62-2	
2-Fluorophenol (S)	59	%.	13-81		1	08/16/20 16:36	08/17/20 16:10	367-12-4	
2,4,6-Tribromophenol (S)	95	%.	43-135		1	08/16/20 16:36	08/17/20 16:10	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C								
	Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		08/25/20 21:50	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	80	%	60-140		1		08/25/20 21:50	2199-69-1	
4-Bromofluorobenzene (S)	114	%	79-124		1		08/25/20 21:50	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:23	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		08/22/20 00:23	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		08/22/20 00:23	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		08/22/20 00:23	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:23	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 **Lab ID: 50264929001** Collected: 08/13/20 13:14 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	67-66-3	
Chloromethane	**9.2**	ug/L	5.0	5.0	1		08/24/20 13:58	74-87-3	L1
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		08/22/20 00:23	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		08/22/20 00:23	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		08/22/20 00:23	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		08/22/20 00:23	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 00:23	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 00:23	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:23	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		08/22/20 00:23	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		08/22/20 00:23	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		08/22/20 00:23	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:23	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	1634-04-4	
Naphthalene	**8.9**	ug/L	5.0	5.0	1		08/22/20 00:23	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		08/22/20 00:23	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		08/22/20 00:23	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	87-61-6	L1
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 **Lab ID: 50264929001** Collected: 08/13/20 13:14 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		08/22/20 00:23	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:23	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		08/22/20 00:23	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		08/22/20 00:23	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:23	75-01-4	L1
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		08/22/20 00:23	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		08/22/20 00:23	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	85-116		1		08/22/20 00:23	460-00-4	
Dibromofluoromethane (S)	102	%.	75-120		1		08/22/20 00:23	1868-53-7	
Toluene-d8 (S)	94	%.	83-111		1		08/22/20 00:23	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012 Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	08/17/20 09:38	08/18/20 10:15	57-12-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 **Lab ID: 50264929002** Collected: 08/13/20 14:21 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		08/19/20 10:45	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		08/19/20 10:45	64-17-5	
Methanol	**8740**	ug/L	5000	400	1		08/19/20 10:45	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/26/20 23:58	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	70	%.	10-144		1	08/26/20 14:05	08/26/20 23:58	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	08/18/20 06:00	08/20/20 09:30	7440-38-2	
Barium	**238**	ug/L	100	100	1	08/18/20 06:00	08/20/20 09:30	7440-39-3	
Boron	**<300**	ug/L	300	300	1	08/18/20 06:00	08/20/20 09:30	7440-42-8	
Calcium	**275000**	ug/L	5000	5000	5	08/18/20 06:00	08/20/20 09:58	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	08/18/20 06:00	08/20/20 09:30	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:30	7440-48-4	
Copper	**34.1**	ug/L	4.0	4.0	1	08/18/20 06:00	08/20/20 09:30	7440-50-8	
Iron	**<200**	ug/L	200	200	1	08/18/20 06:00	08/20/20 09:30	7439-89-6	
Magnesium	**<1000**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:30	7439-95-4	
Manganese	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:30	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:30	7439-98-7	
Nickel	**36.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:30	7440-02-0	
Potassium	**181000**	ug/L	5000	5000	5	08/18/20 06:00	08/20/20 09:58	7440-09-7	
Sodium	**90600**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:30	7440-23-5	
Strontium	**2700**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:30	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:30	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**3350**	ug/L	250	250	5	08/18/20 10:02	08/19/20 15:09	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 17:56	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 17:56	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 17:56	7440-43-9	
Lead	**22.5**	ug/L	3.0	3.0	1	08/18/20 10:02	08/18/20 17:56	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	08/18/20 10:02	08/18/20 17:56	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 **Lab ID: 50264929002** Collected: 08/13/20 14:21 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	08/18/20 10:02	08/18/20 17:56	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 17:56	7440-28-0	
Titanium	**650**	ug/L	5.0	0.36	5	08/18/20 10:02	08/19/20 15:09	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	08/18/20 10:02	08/18/20 17:56	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.080**	ug/L	0.20	0.080	1	08/18/20 02:11	08/18/20 11:47	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	08/16/20 16:36	08/17/20 15:52	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:52	53-70-3	
Fluoranthene	**1.5**	ug/L	0.91	0.91	1	08/16/20 16:36	08/17/20 15:52	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:52	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	91-57-6	
Naphthalene	**16.2**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	91-20-3	
Phenanthrene	**5.6**	ug/L	1.8	1.8	1	08/16/20 16:36	08/17/20 15:52	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 15:52	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%.	32-107		1	08/16/20 16:36	08/17/20 15:52	321-60-8	
p-Terphenyl-d14 (S)	76	%.	29-143		1	08/16/20 16:36	08/17/20 15:52	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	08/16/20 16:36	08/17/20 16:27	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	85-68-7	
Carbazole	**11.5**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:27	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	08/16/20 16:36	08/17/20 16:27	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	08/16/20 16:36	08/17/20 16:27	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	08/16/20 16:36	08/17/20 16:27	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:27	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	08/16/20 16:36	08/17/20 16:27	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	08/16/20 16:36	08/17/20 16:27	132-64-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 **Lab ID: 50264929002** Collected: 08/13/20 14:21 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:27	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	08/16/20 16:36	08/17/20 16:27	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	08/16/20 16:36	08/17/20 16:27	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	08/16/20 16:36	08/17/20 16:27	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	08/16/20 16:36	08/17/20 16:27	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	08/16/20 16:36	08/17/20 16:27	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	08/16/20 16:36	08/17/20 16:27	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	08/16/20 16:36	08/17/20 16:27	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	08/16/20 16:36	08/17/20 16:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	08/16/20 16:36	08/17/20 16:27		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	08/16/20 16:36	08/17/20 16:27	88-74-4	
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	08/16/20 16:36	08/17/20 16:27	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	08/16/20 16:36	08/17/20 16:27	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	08/16/20 16:36	08/17/20 16:27	98-95-3	
2-Nitrophenol	**5.7**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	88-75-5	
4-Nitrophenol	**8.2J**	ug/L	45.5	5.5	1	08/16/20 16:36	08/17/20 16:27	100-02-7	L1
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	08/16/20 16:36	08/17/20 16:27	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	08/16/20 16:36	08/17/20 16:27	87-86-5	
Phenol	**34.9**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	08/16/20 16:36	08/17/20 16:27	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	08/16/20 16:36	08/17/20 16:27	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	08/16/20 16:36	08/17/20 16:27	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	80	%.	37-125		1	08/16/20 16:36	08/17/20 16:27	4165-60-0	
Phenol-d5 (S)	44	%.	10-65		1	08/16/20 16:36	08/17/20 16:27	4165-62-2	
2-Fluorophenol (S)	54	%.	13-81		1	08/16/20 16:36	08/17/20 16:27	367-12-4	
2,4,6-Tribromophenol (S)	87	%.	43-135		1	08/16/20 16:36	08/17/20 16:27	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**0.23**	ug/L	0.20	0.090	1		08/25/20 22:16	123-91-1	D6
Surrogates									
1,2-Dichlorobenzene-d4 (S)	85	%	60-140		1		08/25/20 22:16	2199-69-1	
4-Bromofluorobenzene (S)	119	%	79-124		1		08/25/20 22:16	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 **Lab ID: 50264929002** Collected: 08/13/20 14:21 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**162**	ug/L	50.0	50.0	1		08/22/20 00:56	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		08/22/20 00:56	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		08/22/20 00:56	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		08/22/20 00:56	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:56	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	67-66-3	
Chloromethane	**5.2**	ug/L	5.0	5.0	1		08/24/20 14:32	74-87-3	L1
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		08/22/20 00:56	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		08/22/20 00:56	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		08/22/20 00:56	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		08/22/20 00:56	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 00:56	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 00:56	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	108-20-3	N2
Ethylbenzene	**3.7**	ug/L	1.0	1.0	1		08/22/20 00:56	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:56	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		08/22/20 00:56	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 **Lab ID: 50264929002** Collected: 08/13/20 14:21 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		08/22/20 00:56	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		08/22/20 00:56	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		08/22/20 00:56	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	1634-04-4	
Naphthalene	**29.2**	ug/L	5.0	5.0	1		08/22/20 00:56	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		08/22/20 00:56	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		08/22/20 00:56	109-99-9	N2
Toluene	**1.5**	ug/L	1.0	1.0	1		08/22/20 00:56	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	87-61-6	L1
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		08/22/20 00:56	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 00:56	526-73-8	N2
1,2,4-Trimethylbenzene	**2.2J**	ug/L	5.0	1.0	1		08/22/20 00:56	95-63-6	
1,3,5-Trimethylbenzene	**1.1J**	ug/L	5.0	1.0	1		08/22/20 00:56	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 00:56	75-01-4	L1
m&p-Xylene	**13.9**	ug/L	2.0	0.24	1		08/22/20 00:56	179601-23-1	
o-Xylene	**7.0**	ug/L	1.0	0.16	1		08/22/20 00:56	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	85-116		1		08/22/20 00:56	460-00-4	
Dibromofluoromethane (S)	103	%.	75-120		1		08/22/20 00:56	1868-53-7	
Toluene-d8 (S)	94	%.	83-111		1		08/22/20 00:56	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012								
	Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	08/17/20 09:38	08/18/20 10:15	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: Dup **Lab ID: 50264929003** Collected: 08/13/20 00:00 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		08/19/20 10:55	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		08/19/20 10:55	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		08/19/20 10:55	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.19**	ug/L	0.19	0.19	1	08/26/20 14:05	08/27/20 00:12	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	56	%.	10-144		1	08/26/20 14:05	08/27/20 00:12	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	08/18/20 06:00	08/20/20 09:33	7440-38-2	
Barium	**<100**	ug/L	100	100	1	08/18/20 06:00	08/20/20 09:33	7440-39-3	
Boron	**1220**	ug/L	300	300	1	08/18/20 06:00	08/20/20 09:33	7440-42-8	
Calcium	**219000**	ug/L	5000	5000	5	08/18/20 06:00	08/20/20 10:00	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	08/18/20 06:00	08/20/20 09:33	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:33	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	08/18/20 06:00	08/20/20 09:33	7440-50-8	
Iron	**<200**	ug/L	200	200	1	08/18/20 06:00	08/20/20 09:33	7439-89-6	
Magnesium	**30900**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:33	7439-95-4	
Manganese	**172**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:33	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:33	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	08/18/20 06:00	08/20/20 09:33	7440-02-0	
Potassium	**66800**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:33	7440-09-7	
Sodium	**42700**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:33	7440-23-5	
Strontium	**1180**	ug/L	1000	1000	1	08/18/20 06:00	08/20/20 09:33	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	08/18/20 06:00	08/20/20 09:33	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**<50.0**	ug/L	50.0	50.0	1	08/18/20 10:02	08/18/20 18:00	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 18:00	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 18:00	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	08/18/20 10:02	08/18/20 18:00	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	08/18/20 10:02	08/18/20 18:00	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	08/18/20 10:02	08/18/20 18:00	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: Dup **Lab ID: 50264929003** Collected: 08/13/20 00:00 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	08/18/20 10:02	08/18/20 18:00	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	08/18/20 10:02	08/18/20 18:00	7440-28-0	
Titanium	**534**	ug/L	5.0	0.36	5	08/18/20 10:02	08/19/20 15:13	7440-32-6	N2
Vanadium	**5.2**	ug/L	4.0	4.0	1	08/18/20 10:02	08/18/20 18:00	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.080**	ug/L	0.20	0.080	1	08/18/20 02:11	08/18/20 11:50	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	08/16/20 16:36	08/17/20 16:03	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	08/16/20 16:36	08/17/20 16:03	53-70-3	
Fluoranthene	**1.3**	ug/L	1.0	1.0	1	08/16/20 16:36	08/17/20 16:03	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	08/16/20 16:36	08/17/20 16:03	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	91-57-6	
Naphthalene	**5.3**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	91-20-3	
Phenanthrene	**4.4**	ug/L	2.0	2.0	1	08/16/20 16:36	08/17/20 16:03	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%.	32-107		1	08/16/20 16:36	08/17/20 16:03	321-60-8	
p-Terphenyl-d14 (S)	70	%.	29-143		1	08/16/20 16:36	08/17/20 16:03	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.6**	ug/L	10.0	3.6	1	08/16/20 16:36	08/17/20 16:43	101-55-3	
Butylbenzylphthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	85-68-7	
Carbazole	**11.4**	ug/L	10.0	10.0	1	08/16/20 16:36	08/17/20 16:43	86-74-8	
4-Chloro-3-methylphenol	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	59-50-7	
bis(2-Chloroethoxy)methane	**<3.8**	ug/L	10.0	3.8	1	08/16/20 16:36	08/17/20 16:43	111-91-1	
bis(2-Chloroethyl) ether	**<2.2**	ug/L	5.0	2.2	1	08/16/20 16:36	08/17/20 16:43	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.9**	ug/L	10.0	3.9	1	08/16/20 16:36	08/17/20 16:43	108-60-1	
2-Chloronaphthalene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	10.0	1	08/16/20 16:36	08/17/20 16:43	95-57-8	
4-Chlorophenylphenyl ether	**<2.9**	ug/L	10.0	2.9	1	08/16/20 16:36	08/17/20 16:43	7005-72-3	
Dibenzofuran	**<4.0**	ug/L	5.0	4.0	1	08/16/20 16:36	08/17/20 16:43	132-64-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: Dup **Lab ID: 50264929003** Collected: 08/13/20 00:00 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	10.0	1	08/16/20 16:36	08/17/20 16:43	120-83-2	
Diethylphthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	84-66-2	
2,4-Dimethylphenol	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	105-67-9	
Dimethylphthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	131-11-3	
Di-n-butylphthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	20.0	1	08/16/20 16:36	08/17/20 16:43	534-52-1	
2,4-Dinitrophenol	**<3.9**	ug/L	50.0	3.9	1	08/16/20 16:36	08/17/20 16:43	51-28-5	
2,4-Dinitrotoluene	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	121-14-2	
2,6-Dinitrotoluene	**<3.4**	ug/L	5.0	3.4	1	08/16/20 16:36	08/17/20 16:43	606-20-2	
Di-n-octylphthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	117-84-0	
1,2-Diphenylhydrazine	**<3.7**	ug/L	10.0	3.7	1	08/16/20 16:36	08/17/20 16:43	122-66-7	
bis(2-Ethylhexyl)phthalate	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	117-81-7	
Hexachloro-1,3-butadiene	**<3.0**	ug/L	5.0	3.0	1	08/16/20 16:36	08/17/20 16:43	87-68-3	
Hexachlorobenzene	**<2.7**	ug/L	5.0	2.7	1	08/16/20 16:36	08/17/20 16:43	118-74-1	
Hexachlorocyclopentadiene	**<25.0**	ug/L	25.0	25.0	1	08/16/20 16:36	08/17/20 16:43	77-47-4	
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	67-72-1	
Isophorone	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	78-59-1	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	10.0	1	08/16/20 16:36	08/17/20 16:43	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<20.0**	ug/L	20.0	20.0	1	08/16/20 16:36	08/17/20 16:43		
2-Nitroaniline	**<5.8**	ug/L	10.0	5.8	1	08/16/20 16:36	08/17/20 16:43	88-74-4	
3-Nitroaniline	**<5.0**	ug/L	10.0	5.0	1	08/16/20 16:36	08/17/20 16:43	99-09-2	
4-Nitroaniline	**<4.9**	ug/L	10.0	4.9	1	08/16/20 16:36	08/17/20 16:43	100-01-6	
Nitrobenzene	**<3.0**	ug/L	5.0	3.0	1	08/16/20 16:36	08/17/20 16:43	98-95-3	
2-Nitrophenol	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	88-75-5	
4-Nitrophenol	**<6.0**	ug/L	50.0	6.0	1	08/16/20 16:36	08/17/20 16:43	100-02-7	L1
N-Nitrosodimethylamine	**<2.9**	ug/L	10.0	2.9	1	08/16/20 16:36	08/17/20 16:43	62-75-9	
N-Nitroso-di-n-propylamine	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	621-64-7	
N-Nitrosodiphenylamine	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	86-30-6	
Pentachlorophenol	**<1.9**	ug/L	20.0	1.9	1	08/16/20 16:36	08/17/20 16:43	87-86-5	
Phenol	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	108-95-2	
1,2,4-Trichlorobenzene	**<1.1**	ug/L	10.0	1.1	1	08/16/20 16:36	08/17/20 16:43	120-82-1	
2,4,5-Trichlorophenol	**<5.0**	ug/L	5.0	5.0	1	08/16/20 16:36	08/17/20 16:43	95-95-4	
2,4,6-Trichlorophenol	**<4.0**	ug/L	5.0	4.0	1	08/16/20 16:36	08/17/20 16:43	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	71	%.	37-125		1	08/16/20 16:36	08/17/20 16:43	4165-60-0	
Phenol-d5 (S)	40	%.	10-65		1	08/16/20 16:36	08/17/20 16:43	4165-62-2	
2-Fluorophenol (S)	51	%.	13-81		1	08/16/20 16:36	08/17/20 16:43	367-12-4	
2,4,6-Tribromophenol (S)	83	%.	43-135		1	08/16/20 16:36	08/17/20 16:43	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		08/25/20 22:43	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	84	%	60-140		1		08/25/20 22:43	2199-69-1	
4-Bromofluorobenzene (S)	114	%	79-124		1		08/25/20 22:43	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: Dup **Lab ID: 50264929003** Collected: 08/13/20 00:00 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		08/22/20 01:29	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		08/22/20 01:29	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		08/22/20 01:29	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		08/22/20 01:29	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		08/22/20 01:29	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	67-66-3	
Chloromethane	**23.6**	ug/L	5.0	5.0	1		08/24/20 14:15	74-87-3	L1
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		08/22/20 01:29	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		08/22/20 01:29	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		08/22/20 01:29	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		08/22/20 01:29	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 01:29	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		08/22/20 01:29	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		08/22/20 01:29	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		08/22/20 01:29	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: Dup **Lab ID: 50264929003** Collected: 08/13/20 00:00 Received: 08/14/20 13:50 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		08/22/20 01:29	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		08/22/20 01:29	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		08/22/20 01:29	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	1634-04-4	
Naphthalene	**10.1**	ug/L	5.0	5.0	1		08/22/20 01:29	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		08/22/20 01:29	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		08/22/20 01:29	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	87-61-6	L1
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		08/22/20 01:29	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		08/22/20 01:29	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		08/22/20 01:29	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		08/22/20 01:29	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		08/22/20 01:29	75-01-4	L1
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		08/22/20 01:29	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		08/22/20 01:29	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	85-116		1		08/22/20 01:29	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		08/22/20 01:29	1868-53-7	
Toluene-d8 (S)	96	%.	83-111		1		08/22/20 01:29	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012								
	Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	08/17/20 09:38	08/18/20 10:17	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 (5.5-6.5) **Lab ID: 50264929004** Collected: 08/12/20 10:06 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB Solids	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	12674-11-2	
PCB-1221 (Aroclor 1221)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	11104-28-2	
PCB-1232 (Aroclor 1232)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	11141-16-5	
PCB-1242 (Aroclor 1242)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	53469-21-9	
PCB-1248 (Aroclor 1248)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	12672-29-6	
PCB-1254 (Aroclor 1254)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	11097-69-1	
PCB-1260 (Aroclor 1260)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	11096-82-5	
PCB-1262 (Aroclor 1262)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<359**	ug/kg	359	359	1	08/19/20 12:15	08/20/20 14:27	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	59	%.	25-123		1	08/19/20 12:15	08/20/20 14:27	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1000**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-36-0	
Arsenic	**5010**	ug/kg	2010	2010	1	08/20/20 06:11	08/20/20 23:10	7440-38-2	
Barium	**75400**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-39-3	
Beryllium	**<502**	ug/kg	502	502	1	08/20/20 06:11	08/20/20 23:10	7440-41-7	
Boron	**11500**	ug/kg	8020	8020	1	08/20/20 06:11	08/20/20 23:10	7440-42-8	
Calcium	**61200000**	ug/kg	2510000	328000	50	08/20/20 06:11	08/21/20 00:11	7440-70-2	
Chromium	**14200**	ug/kg	2010	2010	1	08/20/20 06:11	08/20/20 23:10	7440-47-3	
Copper	**25000**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-50-8	
Iron	**10100000**	ug/kg	25100	7620	1	08/20/20 06:11	08/20/20 23:10	7439-89-6	
Lead	**29800**	ug/kg	10000	10000	1	08/20/20 06:11	08/20/20 23:10	7439-92-1	
Magnesium	**8760000**	ug/kg	25100	4010	1	08/20/20 06:11	08/20/20 23:10	7439-95-4	
Manganese	**179000**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7439-96-5	
Molybdenum	**2220**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7439-98-7	
Nickel	**10400**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-02-0	
Potassium	**786000**	ug/kg	50200	5860	1	08/20/20 06:11	08/20/20 23:10	7440-09-7	
Sodium	**376000**	ug/kg	25100	13600	1	08/20/20 06:11	08/20/20 23:10	7440-23-5	
Strontium	**75600**	ug/kg	5020	5020	1	08/20/20 06:11	08/20/20 23:10	7440-24-6	
Vanadium	**14900**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-62-2	
Zinc	**116000**	ug/kg	1000	1000	1	08/20/20 06:11	08/20/20 23:10	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**5780000**	ug/kg	111000	111000	100	08/17/20 11:13	08/18/20 02:29	7429-90-5	
Cadmium	**412**	ug/kg	222	222	1	08/17/20 11:13	08/18/20 03:07	7440-43-9	
Cobalt	**<2780**	ug/kg	2780	2780	5	08/17/20 11:13	08/18/20 04:35	7440-48-4	D3
Selenium	**<1110**	ug/kg	1110	1110	5	08/17/20 11:13	08/18/20 04:35	7782-49-2	D3
Silver	**<111**	ug/kg	111	111	1	08/17/20 11:13	08/18/20 03:07	7440-22-4	
Thallium	**<555**	ug/kg	555	555	1	08/17/20 11:13	08/18/20 03:07	7440-28-0	
Titanium	**394000**	ug/kg	11100	2950	100	08/17/20 11:13	08/18/20 02:29	7440-32-6	N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 (5.5-6.5) **Lab ID: 50264929004** Collected: 08/12/20 10:06 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**1090**	ug/kg	121	95.7	1	08/20/20 01:01	08/20/20 10:12	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	83-32-9	
Acenaphthylene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	208-96-8	
Anthracene	**485**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	120-12-7	
Benzo(a)anthracene	**1490**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	56-55-3	
Benzo(a)pyrene	**1370**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	50-32-8	
Benzo(b)fluoranthene	**1750**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	205-99-2	
Benzo(g,h,i)perylene	**851**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	191-24-2	
Benzo(k)fluoranthene	**791**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	207-08-9	
4-Bromophenylphenyl ether	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	101-55-3	
Butylbenzylphthalate	**42200**	ug/kg	3690	3690	10	08/21/20 09:30	08/24/20 23:01	85-68-7	
Carbazole	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	86-74-8	
4-Chloro-3-methylphenol	**<313**	ug/kg	369	313	1	08/21/20 09:30	08/24/20 15:37	59-50-7	
bis(2-Chloroethoxy)methane	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	111-91-1	
bis(2-Chloroethyl) ether	**<179**	ug/kg	369	179	1	08/21/20 09:30	08/24/20 15:37	111-44-4	
bis(2-Chloroisopropyl) ether	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	108-60-1	
2-Chloronaphthalene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	91-58-7	
2-Chlorophenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	95-57-8	
4-Chlorophenylphenyl ether	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	7005-72-3	
Chrysene	**1480**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	218-01-9	
Dibenz(a,h)anthracene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	53-70-3	
Dibenzofuran	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	132-64-9	
2,4-Dichlorophenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	120-83-2	
Diethylphthalate	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	84-66-2	
2,4-Dimethylphenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	105-67-9	
Dimethylphthalate	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	131-11-3	
Di-n-butylphthalate	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	84-74-2	
4,6-Dinitro-2-methylphenol	**<929**	ug/kg	929	929	1	08/21/20 09:30	08/24/20 15:37	534-52-1	
2,4-Dinitrophenol	**<1790**	ug/kg	1790	1790	1	08/21/20 09:30	08/24/20 15:37	51-28-5	
2,4-Dinitrotoluene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	121-14-2	
2,6-Dinitrotoluene	**<99.1**	ug/kg	369	99.1	1	08/21/20 09:30	08/24/20 15:37	606-20-2	
Di-n-octylphthalate	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	117-84-0	
1,2-Diphenylhydrazine	**<1790**	ug/kg	1790	1790	1	08/21/20 09:30	08/24/20 15:37	122-66-7	
bis(2-Ethylhexyl)phthalate	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	117-81-7	
Fluoranthene	**3230**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	206-44-0	
Fluorene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	86-73-7	
Hexachloro-1,3-butadiene	**<107**	ug/kg	369	107	1	08/21/20 09:30	08/24/20 15:37	87-68-3	
Hexachlorobenzene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	118-74-1	
Hexachlorocyclopentadiene	**<1120**	ug/kg	1120	1120	1	08/21/20 09:30	08/24/20 15:37	77-47-4	
Hexachloroethane	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	67-72-1	
Indeno(1,2,3-cd)pyrene	**718**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	193-39-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 (5.5-6.5) **Lab ID: 50264929004** Collected: 08/12/20 10:06 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Isophorone	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	78-59-1	
2-Methylnaphthalene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	91-57-6	
2-Methylphenol(o-Cresol)	**<1120**	ug/kg	1120	1120	1	08/21/20 09:30	08/24/20 15:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<1120**	ug/kg	1120	1120	1	08/21/20 09:30	08/24/20 15:37		
Naphthalene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	91-20-3	
2-Nitroaniline	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	88-74-4	
3-Nitroaniline	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	99-09-2	
4-Nitroaniline	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	100-01-6	
Nitrobenzene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	98-95-3	
2-Nitrophenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	88-75-5	
4-Nitrophenol	**<1790**	ug/kg	1790	1790	1	08/21/20 09:30	08/24/20 15:37	100-02-7	
N-Nitrosodimethylamine	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	62-75-9	
N-Nitroso-di-n-propylamine	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	621-64-7	
N-Nitrosodiphenylamine	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	86-30-6	
Pentachlorophenol	**<1650**	ug/kg	1790	1650	1	08/21/20 09:30	08/24/20 15:37	87-86-5	
Phenanthrene	**2130**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	85-01-8	
Phenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	108-95-2	
Pyrene	**3040**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	129-00-0	
1,2,4-Trichlorobenzene	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	120-82-1	
2,4,5-Trichlorophenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	95-95-4	
2,4,6-Trichlorophenol	**<369**	ug/kg	369	369	1	08/21/20 09:30	08/24/20 15:37	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	44	%.	26-96		1	08/21/20 09:30	08/24/20 15:37	4165-60-0	
Phenol-d5 (S)	47	%.	32-93		1	08/21/20 09:30	08/24/20 15:37	4165-62-2	
2-Fluorophenol (S)	25	%.	24-95		1	08/21/20 09:30	08/24/20 15:37	367-12-4	
2,4,6-Tribromophenol (S)	5	%.	20-109		1	08/21/20 09:30	08/24/20 15:37	118-79-6	S0
2-Fluorobiphenyl (S)	47	%.	36-91		1	08/21/20 09:30	08/24/20 15:37	321-60-8	
p-Terphenyl-d14 (S)	61	%.	27-117		1	08/21/20 09:30	08/24/20 15:37	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<902**	ug/kg	902	902	1		08/22/20 02:02	67-64-1	
Acrylonitrile	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	107-13-1	
tert-Amylmethyl ether	**<225**	ug/kg	225	225	1		08/22/20 02:02	994-05-8	N2
Benzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	71-43-2	
Bromobenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	108-86-1	
Bromochloromethane	**<22.5**	ug/kg	45.1	22.5	1		08/22/20 02:02	74-97-5	
Bromodichloromethane	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	75-27-4	
Bromoform	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	75-25-2	
Bromomethane	**<180**	ug/kg	180	180	1		08/22/20 02:02	74-83-9	
2-Butanone (MEK)	**<676**	ug/kg	676	676	1		08/22/20 02:02	78-93-3	
tert-Butyl Alcohol	**<2250**	ug/kg	2250	2250	1		08/22/20 02:02	75-65-0	
n-Butylbenzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	104-51-8	
sec-Butylbenzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	135-98-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 (5.5-6.5) **Lab ID: 50264929004** Collected: 08/12/20 10:06 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
tert-Butylbenzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	98-06-6	
Carbon disulfide	**<225**	ug/kg	225	225	1		08/22/20 02:02	75-15-0	
Carbon tetrachloride	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	56-23-5	
Chlorobenzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	108-90-7	
Chloroethane	**<225**	ug/kg	225	225	1		08/22/20 02:02	75-00-3	
Chloroform	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	67-66-3	
Chloromethane	**<225**	ug/kg	225	225	1		08/22/20 02:02	74-87-3	
Cyclohexane	**<451**	ug/kg	451	451	1		08/22/20 02:02	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	96-12-8	
Dibromochloromethane	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	124-48-1	
1,2-Dibromoethane (EDB)	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	106-93-4	
Dibromomethane	**<225**	ug/kg	225	225	1		08/22/20 02:02	74-95-3	
1,2-Dichlorobenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	95-50-1	
1,3-Dichlorobenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	541-73-1	
1,4-Dichlorobenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	106-46-7	
trans-1,4-Dichloro-2-butene	**<90.2**	ug/kg	902	90.2	1		08/22/20 02:02	110-57-6	
Dichlorodifluoromethane	**<225**	ug/kg	225	225	1		08/22/20 02:02	75-71-8	
1,1-Dichloroethane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	75-34-3	
1,2-Dichloroethane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	107-06-2	
1,1-Dichloroethene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	75-35-4	
cis-1,2-Dichloroethene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	156-59-2	
trans-1,2-Dichloroethene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	156-60-5	
1,2-Dichloropropane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	78-87-5	
cis-1,3-Dichloropropene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	10061-01-5	
trans-1,3-Dichloropropene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	10061-02-6	
Diethyl ether (Ethyl ether)	**<180**	ug/kg	180	180	1		08/22/20 02:02	60-29-7	
Diisopropyl ether	**<225**	ug/kg	225	225	1		08/22/20 02:02	108-20-3	N2
Ethylbenzene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	100-41-4	
Ethyl-tert-butyl ether	**<225**	ug/kg	225	225	1		08/22/20 02:02	637-92-3	N2
Hexachloroethane	**<270**	ug/kg	270	270	1		08/22/20 02:02	67-72-1	N2
2-Hexanone	**<2250**	ug/kg	2250	2250	1		08/22/20 02:02	591-78-6	
Iodomethane	**<90.2**	ug/kg	902	90.2	1		08/22/20 02:02	74-88-4	L1
Isopropylbenzene (Cumene)	**<225**	ug/kg	225	225	1		08/22/20 02:02	98-82-8	
p-Isopropyltoluene	**<22.5**	ug/kg	45.1	22.5	1		08/22/20 02:02	99-87-6	
Methylene Chloride	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	75-09-2	
2-Methylnaphthalene	**<298**	ug/kg	298	298	1		08/22/20 02:02	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2250**	ug/kg	2250	2250	1		08/22/20 02:02	108-10-1	
Methyl-tert-butyl ether	**<225**	ug/kg	225	225	1		08/22/20 02:02	1634-04-4	
Naphthalene	**<298**	ug/kg	298	298	1		08/22/20 02:02	91-20-3	
n-Propylbenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	103-65-1	
Styrene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	100-42-5	
1,1,1,2-Tetrachloroethane	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	630-20-6	
1,1,2,2-Tetrachloroethane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	79-34-5	
Tetrachloroethene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-132 (5.5-6.5) **Lab ID: 50264929004** Collected: 08/12/20 10:06 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Tetrahydrofuran	**<902**	ug/kg	902	902	1		08/22/20 02:02	109-99-9	N2
Toluene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	108-88-3	
1,2,3-Trichlorobenzene	**<225**	ug/kg	225	225	1		08/22/20 02:02	87-61-6	L1
1,2,4-Trichlorobenzene	**<225**	ug/kg	225	225	1		08/22/20 02:02	120-82-1	
1,1,1-Trichloroethane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	71-55-6	
1,1,2-Trichloroethane	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	79-00-5	
Trichloroethene	**<45.1**	ug/kg	45.1	45.1	1		08/22/20 02:02	79-01-6	
Trichlorofluoromethane	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	75-69-4	
1,2,3-Trichloropropane	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	96-18-4	
1,2,3-Trimethylbenzene	**<225**	ug/kg	225	225	1		08/22/20 02:02	526-73-8	N2
1,2,4-Trimethylbenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	95-63-6	
1,3,5-Trimethylbenzene	**<90.2**	ug/kg	90.2	90.2	1		08/22/20 02:02	108-67-8	
Vinyl chloride	**<36.1**	ug/kg	36.1	36.1	1		08/22/20 02:02	75-01-4	
m&p-Xylene	**<22.5**	ug/kg	45.1	22.5	1		08/22/20 02:02	179601-23-1	
o-Xylene	**<22.5**	ug/kg	45.1	22.5	1		08/22/20 02:02	95-47-6	
Surrogates									
Dibromofluoromethane (S)	119	%.	62-137		1		08/22/20 02:02	1868-53-7	
Toluene-d8 (S)	110	%.	64-139		1		08/22/20 02:02	2037-26-5	
4-Bromofluorobenzene (S)	115	%.	60-142		1		08/22/20 02:02	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**11.8**	%	0.10	0.10	1		08/19/20 14:23		N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (3-4) **Lab ID: 50264929005** Collected: 08/12/20 11:03 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<985**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-36-0	
Arsenic	**4800**	ug/kg	1970	1970	1	08/20/20 06:11	08/20/20 23:12	7440-38-2	
Barium	**104000**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-39-3	
Beryllium	**574**	ug/kg	492	492	1	08/20/20 06:11	08/20/20 23:12	7440-41-7	
Boron	**12100**	ug/kg	7880	7880	1	08/20/20 06:11	08/20/20 23:12	7440-42-8	
Calcium	**56200000**	ug/kg	2460000	322000	50	08/20/20 06:11	08/21/20 00:14	7440-70-2	
Chromium	**17400**	ug/kg	1970	1970	1	08/20/20 06:11	08/20/20 23:12	7440-47-3	
Copper	**16000**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-50-8	
Iron	**7850000**	ug/kg	24600	7480	1	08/20/20 06:11	08/20/20 23:12	7439-89-6	
Lead	**48100**	ug/kg	9850	9850	1	08/20/20 06:11	08/20/20 23:12	7439-92-1	
Magnesium	**10400000**	ug/kg	24600	3940	1	08/20/20 06:11	08/20/20 23:12	7439-95-4	
Manganese	**218000**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7439-96-5	
Molybdenum	**1040**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7439-98-7	
Nickel	**10200**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-02-0	
Potassium	**980000**	ug/kg	49200	5750	1	08/20/20 06:11	08/20/20 23:12	7440-09-7	
Sodium	**482000**	ug/kg	24600	13400	1	08/20/20 06:11	08/20/20 23:12	7440-23-5	
Strontium	**71500**	ug/kg	4920	4920	1	08/20/20 06:11	08/20/20 23:12	7440-24-6	
Vanadium	**21300**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-62-2	
Zinc	**79600**	ug/kg	985	985	1	08/20/20 06:11	08/20/20 23:12	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**6450000**	ug/kg	109000	109000	100	08/17/20 11:13	08/18/20 02:24	7429-90-5	
Cadmium	**467**	ug/kg	217	217	1	08/17/20 11:13	08/18/20 03:03	7440-43-9	
Cobalt	**<2710**	ug/kg	2710	2710	5	08/17/20 11:13	08/18/20 04:30	7440-48-4	D3
Selenium	**<1090**	ug/kg	1090	1090	5	08/17/20 11:13	08/18/20 04:30	7782-49-2	D3
Silver	**789**	ug/kg	109	109	1	08/17/20 11:13	08/18/20 03:03	7440-22-4	
Thallium	**<543**	ug/kg	543	543	1	08/17/20 11:13	08/18/20 03:03	7440-28-0	
Titanium	**359000**	ug/kg	10900	2890	100	08/17/20 11:13	08/18/20 02:24	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**798**	ug/kg	108	85.0	1	08/20/20 01:01	08/20/20 10:14	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**5470**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	83-32-9	
Acenaphthylene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	208-96-8	
Anthracene	**7580**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	120-12-7	
Benzo(a)anthracene	**21100**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	56-55-3	
Benzo(a)pyrene	**20400**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	50-32-8	
Benzo(b)fluoranthene	**27200**	ug/kg	8960	8960	25	08/21/20 09:30	08/24/20 23:18	205-99-2	
Benzo(g,h,i)perylene	**13300**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	191-24-2	
Benzo(k)fluoranthene	**10600**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	207-08-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (3-4) **Lab ID: 50264929005** Collected: 08/12/20 11:03 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	101-55-3	
Butylbenzylphthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	85-68-7	
Carbazole	**5010**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	86-74-8	
4-Chloro-3-methylphenol	**<1520**	ug/kg	1790	1520	5	08/21/20 09:30	08/24/20 15:54	59-50-7	
bis(2-Chloroethoxy)methane	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	111-91-1	
bis(2-Chloroethyl) ether	**<869**	ug/kg	1790	869	5	08/21/20 09:30	08/24/20 15:54	111-44-4	
bis(2-Chloroisopropyl) ether	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	108-60-1	
2-Chloronaphthalene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	91-58-7	
2-Chlorophenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	95-57-8	
4-Chlorophenylphenyl ether	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	7005-72-3	
Chrysene	**21800**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	218-01-9	
Dibenz(a,h)anthracene	**3620**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	53-70-3	
Dibenzofuran	**2430**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	132-64-9	
2,4-Dichlorophenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	120-83-2	
Diethylphthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	84-66-2	
2,4-Dimethylphenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	105-67-9	
Dimethylphthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	131-11-3	
Di-n-butylphthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	84-74-2	
4,6-Dinitro-2-methylphenol	**<4510**	ug/kg	4510	4510	5	08/21/20 09:30	08/24/20 15:54	534-52-1	
2,4-Dinitrophenol	**<8690**	ug/kg	8690	8690	5	08/21/20 09:30	08/24/20 15:54	51-28-5	
2,4-Dinitrotoluene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	121-14-2	
2,6-Dinitrotoluene	**<481**	ug/kg	1790	481	5	08/21/20 09:30	08/24/20 15:54	606-20-2	
Di-n-octylphthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	117-84-0	
1,2-Diphenylhydrazine	**<8690**	ug/kg	8690	8690	5	08/21/20 09:30	08/24/20 15:54	122-66-7	
bis(2-Ethylhexyl)phthalate	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	117-81-7	
Fluoranthene	**53000**	ug/kg	8960	8960	25	08/21/20 09:30	08/24/20 23:18	206-44-0	
Fluorene	**4150**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	86-73-7	
Hexachloro-1,3-butadiene	**<521**	ug/kg	1790	521	5	08/21/20 09:30	08/24/20 15:54	87-68-3	
Hexachlorobenzene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	118-74-1	
Hexachlorocyclopentadiene	**<5430**	ug/kg	5430	5430	5	08/21/20 09:30	08/24/20 15:54	77-47-4	
Hexachloroethane	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	67-72-1	
Indeno(1,2,3-cd)pyrene	**11400**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	193-39-5	
Isophorone	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	78-59-1	
2-Methylnaphthalene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	91-57-6	
2-Methylphenol(o-Cresol)	**<5430**	ug/kg	5430	5430	5	08/21/20 09:30	08/24/20 15:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<5430**	ug/kg	5430	5430	5	08/21/20 09:30	08/24/20 15:54		
Naphthalene	**1960**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	91-20-3	
2-Nitroaniline	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	88-74-4	
3-Nitroaniline	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	99-09-2	
4-Nitroaniline	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	100-01-6	
Nitrobenzene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	98-95-3	
2-Nitrophenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	88-75-5	
4-Nitrophenol	**<8690**	ug/kg	8690	8690	5	08/21/20 09:30	08/24/20 15:54	100-02-7	
N-Nitrosodimethylamine	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	62-75-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (3-4) **Lab ID: 50264929005** Collected: 08/12/20 11:03 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
N-Nitroso-di-n-propylamine	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	621-64-7	
N-Nitrosodiphenylamine	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	86-30-6	
Pentachlorophenol	**<7980**	ug/kg	8690	7980	5	08/21/20 09:30	08/24/20 15:54	87-86-5	
Phenanthrene	**38300**	ug/kg	8960	8960	25	08/21/20 09:30	08/24/20 23:18	85-01-8	
Phenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	108-95-2	
Pyrene	**46900**	ug/kg	8960	8960	25	08/21/20 09:30	08/24/20 23:18	129-00-0	
1,2,4-Trichlorobenzene	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	120-82-1	
2,4,5-Trichlorophenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	95-95-4	
2,4,6-Trichlorophenol	**<1790**	ug/kg	1790	1790	5	08/21/20 09:30	08/24/20 15:54	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	44	%.	26-96		5	08/21/20 09:30	08/24/20 15:54	4165-60-0	
Phenol-d5 (S)	54	%.	32-93		5	08/21/20 09:30	08/24/20 15:54	4165-62-2	
2-Fluorophenol (S)	51	%.	24-95		5	08/21/20 09:30	08/24/20 15:54	367-12-4	
2,4,6-Tribromophenol (S)	33	%.	20-109		5	08/21/20 09:30	08/24/20 15:54	118-79-6	
2-Fluorobiphenyl (S)	52	%.	36-91		5	08/21/20 09:30	08/24/20 15:54	321-60-8	
p-Terphenyl-d14 (S)	66	%.	27-117		5	08/21/20 09:30	08/24/20 15:54	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<802**	ug/kg	802	802	1		08/22/20 02:35	67-64-1	
Acrylonitrile	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	107-13-1	
tert-Amylmethyl ether	**<201**	ug/kg	201	201	1		08/22/20 02:35	994-05-8	N2
Benzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	71-43-2	
Bromobenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	108-86-1	
Bromochloromethane	**<20.1**	ug/kg	40.1	20.1	1		08/22/20 02:35	74-97-5	
Bromodichloromethane	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	75-27-4	
Bromoform	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	75-25-2	
Bromomethane	**<160**	ug/kg	160	160	1		08/22/20 02:35	74-83-9	
2-Butanone (MEK)	**<602**	ug/kg	602	602	1		08/22/20 02:35	78-93-3	
tert-Butyl Alcohol	**<2010**	ug/kg	2010	2010	1		08/22/20 02:35	75-65-0	
n-Butylbenzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	104-51-8	
sec-Butylbenzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	135-98-8	
tert-Butylbenzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	98-06-6	
Carbon disulfide	**<201**	ug/kg	201	201	1		08/22/20 02:35	75-15-0	
Carbon tetrachloride	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	56-23-5	
Chlorobenzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	108-90-7	
Chloroethane	**<201**	ug/kg	201	201	1		08/22/20 02:35	75-00-3	
Chloroform	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	67-66-3	
Chloromethane	**<201**	ug/kg	201	201	1		08/22/20 02:35	74-87-3	
Cyclohexane	**<401**	ug/kg	401	401	1		08/22/20 02:35	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	96-12-8	
Dibromochloromethane	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	124-48-1	
1,2-Dibromoethane (EDB)	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	106-93-4	
Dibromomethane	**<201**	ug/kg	201	201	1		08/22/20 02:35	74-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (3-4) **Lab ID: 50264929005** Collected: 08/12/20 11:03 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
1,2-Dichlorobenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	95-50-1	
1,3-Dichlorobenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	541-73-1	
1,4-Dichlorobenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	106-46-7	
trans-1,4-Dichloro-2-butene	**<80.2**	ug/kg	802	80.2	1		08/22/20 02:35	110-57-6	
Dichlorodifluoromethane	**<201**	ug/kg	201	201	1		08/22/20 02:35	75-71-8	
1,1-Dichloroethane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	75-34-3	
1,2-Dichloroethane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	107-06-2	
1,1-Dichloroethene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	75-35-4	
cis-1,2-Dichloroethene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	156-59-2	
trans-1,2-Dichloroethene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	156-60-5	
1,2-Dichloropropane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	78-87-5	
cis-1,3-Dichloropropene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	10061-01-5	
trans-1,3-Dichloropropene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	10061-02-6	
Diethyl ether (Ethyl ether)	**<160**	ug/kg	160	160	1		08/22/20 02:35	60-29-7	
Diisopropyl ether	**<201**	ug/kg	201	201	1		08/22/20 02:35	108-20-3	N2
Ethylbenzene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	100-41-4	
Ethyl-tert-butyl ether	**<201**	ug/kg	201	201	1		08/22/20 02:35	637-92-3	N2
Hexachloroethane	**<241**	ug/kg	241	241	1		08/22/20 02:35	67-72-1	N2
2-Hexanone	**<2010**	ug/kg	2010	2010	1		08/22/20 02:35	591-78-6	
Iodomethane	**<80.2**	ug/kg	802	80.2	1		08/22/20 02:35	74-88-4	L1
Isopropylbenzene (Cumene)	**<201**	ug/kg	201	201	1		08/22/20 02:35	98-82-8	
p-Isopropyltoluene	**<20.1**	ug/kg	40.1	20.1	1		08/22/20 02:35	99-87-6	
Methylene Chloride	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	75-09-2	
2-Methylnaphthalene	**<265**	ug/kg	265	265	1		08/22/20 02:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2010**	ug/kg	2010	2010	1		08/22/20 02:35	108-10-1	
Methyl-tert-butyl ether	**<201**	ug/kg	201	201	1		08/22/20 02:35	1634-04-4	
Naphthalene	**<265**	ug/kg	265	265	1		08/22/20 02:35	91-20-3	
n-Propylbenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	103-65-1	
Styrene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	100-42-5	
1,1,1,2-Tetrachloroethane	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	630-20-6	
1,1,2,2-Tetrachloroethane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	79-34-5	
Tetrachloroethene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	127-18-4	
Tetrahydrofuran	**<802**	ug/kg	802	802	1		08/22/20 02:35	109-99-9	N2
Toluene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	108-88-3	
1,2,3-Trichlorobenzene	**<201**	ug/kg	201	201	1		08/22/20 02:35	87-61-6	L1
1,2,4-Trichlorobenzene	**<201**	ug/kg	201	201	1		08/22/20 02:35	120-82-1	
1,1,1-Trichloroethane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	71-55-6	
1,1,2-Trichloroethane	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	79-00-5	
Trichloroethene	**<40.1**	ug/kg	40.1	40.1	1		08/22/20 02:35	79-01-6	
Trichlorofluoromethane	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	75-69-4	
1,2,3-Trichloropropane	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	96-18-4	
1,2,3-Trimethylbenzene	**<201**	ug/kg	201	201	1		08/22/20 02:35	526-73-8	N2
1,2,4-Trimethylbenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	95-63-6	
1,3,5-Trimethylbenzene	**<80.2**	ug/kg	80.2	80.2	1		08/22/20 02:35	108-67-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (3-4) **Lab ID: 50264929005** Collected: 08/12/20 11:03 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260								
	Pace Analytical Services - Indianapolis								
Vinyl chloride	**<32.1**	ug/kg	32.1	32.1	1		08/22/20 02:35	75-01-4	
m&p-Xylene	**<20.1**	ug/kg	40.1	20.1	1		08/22/20 02:35	179601-23-1	
o-Xylene	**<20.1**	ug/kg	40.1	20.1	1		08/22/20 02:35	95-47-6	
Surrogates									
Dibromofluoromethane (S)	100	%.	62-137		1		08/22/20 02:35	1868-53-7	
Toluene-d8 (S)	91	%.	64-139		1		08/22/20 02:35	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	60-142		1		08/22/20 02:35	460-00-4	
Percent Moisture	Analytical Method: SM 2540G								
	Pace Analytical Services - Indianapolis								
Percent Moisture	**9.2**	%	0.10	0.10	1		08/19/20 14:23		N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (10-11) **Lab ID: 50264929006** Collected: 08/12/20 11:10 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Indianapolis								
Antimony	**<1100**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-36-0	
Arsenic	**2410**	ug/kg	2200	2200	1	08/31/20 14:14	09/02/20 12:37	7440-38-2	
Barium	**38400**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-39-3	
Beryllium	**<551**	ug/kg	551	551	1	08/31/20 14:14	09/02/20 12:37	7440-41-7	
Boron	**<8820**	ug/kg	8820	8820	1	08/31/20 14:14	09/02/20 12:37	7440-42-8	
Calcium	**29700000**	ug/kg	276000	36100	5	08/31/20 14:14	09/02/20 12:57	7440-70-2	
Chromium	**7160**	ug/kg	2200	2200	1	08/31/20 14:14	09/02/20 12:37	7440-47-3	
Copper	**14500**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-50-8	
Iron	**4830000**	ug/kg	27600	8380	1	08/31/20 14:14	09/02/20 12:37	7439-89-6	
Lead	**35800**	ug/kg	11000	11000	1	08/31/20 14:14	09/02/20 12:37	7439-92-1	
Magnesium	**5650000**	ug/kg	27600	4410	1	08/31/20 14:14	09/02/20 12:37	7439-95-4	
Manganese	**126000**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7439-96-5	
Molybdenum	**<1100**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7439-98-7	
Nickel	**4850**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-02-0	
Potassium	**489000**	ug/kg	55100	6440	1	08/31/20 14:14	09/02/20 12:37	7440-09-7	
Sodium	**106000**	ug/kg	27600	15000	1	08/31/20 14:14	09/02/20 12:37	7440-23-5	
Strontium	**35000**	ug/kg	5510	5510	1	08/31/20 14:14	09/02/20 12:37	7440-24-6	
Vanadium	**10600**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-62-2	
Zinc	**71400**	ug/kg	1100	1100	1	08/31/20 14:14	09/02/20 12:37	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B Pace Analytical Services - Indianapolis								
Aluminum	**3720000**	ug/kg	113000	113000	100	08/26/20 07:54	08/27/20 06:45	7429-90-5	
Cadmium	**372**	ug/kg	227	227	1	08/26/20 07:54	08/27/20 09:11	7440-43-9	
Cobalt	**1490**	ug/kg	567	567	1	08/26/20 07:54	08/27/20 09:11	7440-48-4	
Selenium	**<1130**	ug/kg	1130	1130	5	08/26/20 07:54	08/27/20 08:26	7782-49-2	D3
Silver	**<113**	ug/kg	113	113	1	08/26/20 07:54	08/27/20 09:11	7440-22-4	
Thallium	**<567**	ug/kg	567	567	1	08/26/20 07:54	08/27/20 09:11	7440-28-0	
Titanium	**274000**	ug/kg	11300	3020	100	08/26/20 07:54	08/27/20 06:45	7440-32-6	N2
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Indianapolis								
Mercury	**249**	ug/kg	121	95.8	1	09/10/20 11:23	09/11/20 10:41	7439-97-6	H3
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
Acenaphthene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	83-32-9	
Acenaphthylene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	208-96-8	
Anthracene	**5700**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	120-12-7	
Benzo(a)anthracene	**16100**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	56-55-3	
Benzo(a)pyrene	**14500**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	50-32-8	
Benzo(b)fluoranthene	**20500**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	205-99-2	
Benzo(g,h,i)perylene	**8410**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	191-24-2	
Benzo(k)fluoranthene	**6710**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	207-08-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (10-11) **Lab ID: 50264929006** Collected: 08/12/20 11:10 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	101-55-3	
Butylbenzylphthalate	**43500**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	85-68-7	
Carbazole	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	86-74-8	
4-Chloro-3-methylphenol	**<3340**	ug/kg	3940	3340	10	08/25/20 22:50	08/27/20 15:14	59-50-7	
bis(2-Chloroethoxy)methane	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	111-91-1	
bis(2-Chloroethyl) ether	**<1910**	ug/kg	3940	1910	10	08/25/20 22:50	08/27/20 15:14	111-44-4	
bis(2-Chloroisopropyl) ether	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	108-60-1	
2-Chloronaphthalene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	91-58-7	
2-Chlorophenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	95-57-8	
4-Chlorophenylphenyl ether	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	7005-72-3	
Chrysene	**15500**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	218-01-9	
Dibenz(a,h)anthracene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	53-70-3	
Dibenzofuran	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	132-64-9	
2,4-Dichlorophenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	120-83-2	
Diethylphthalate	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	84-66-2	
2,4-Dimethylphenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	105-67-9	
Dimethylphthalate	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	131-11-3	
Di-n-butylphthalate	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	84-74-2	
4,6-Dinitro-2-methylphenol	**<9900**	ug/kg	9900	9900	10	08/25/20 22:50	08/27/20 15:14	534-52-1	
2,4-Dinitrophenol	**<19100**	ug/kg	19100	19100	10	08/25/20 22:50	08/27/20 15:14	51-28-5	
2,4-Dinitrotoluene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	121-14-2	
2,6-Dinitrotoluene	**<1060**	ug/kg	3940	1060	10	08/25/20 22:50	08/27/20 15:14	606-20-2	
Di-n-octylphthalate	**5080**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	117-84-0	
1,2-Diphenylhydrazine	**<19100**	ug/kg	19100	19100	10	08/25/20 22:50	08/27/20 15:14	122-66-7	
bis(2-Ethylhexyl)phthalate	**5170**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	117-81-7	
Fluoranthene	**38500**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	206-44-0	
Fluorene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	86-73-7	
Hexachloro-1,3-butadiene	**<1140**	ug/kg	3940	1140	10	08/25/20 22:50	08/27/20 15:14	87-68-3	
Hexachlorobenzene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	118-74-1	
Hexachlorocyclopentadiene	**<11900**	ug/kg	11900	11900	10	08/25/20 22:50	08/27/20 15:14	77-47-4	
Hexachloroethane	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	67-72-1	
Indeno(1,2,3-cd)pyrene	**7940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	193-39-5	
Isophorone	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	78-59-1	
2-Methylnaphthalene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	91-57-6	
2-Methylphenol(o-Cresol)	**<11900**	ug/kg	11900	11900	10	08/25/20 22:50	08/27/20 15:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<11900**	ug/kg	11900	11900	10	08/25/20 22:50	08/27/20 15:14		
Naphthalene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	91-20-3	
2-Nitroaniline	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	88-74-4	
3-Nitroaniline	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	99-09-2	
4-Nitroaniline	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	100-01-6	
Nitrobenzene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	98-95-3	
2-Nitrophenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	88-75-5	
4-Nitrophenol	**<19100**	ug/kg	19100	19100	10	08/25/20 22:50	08/27/20 15:14	100-02-7	
N-Nitrosodimethylamine	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	62-75-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (10-11) **Lab ID: 50264929006** Collected: 08/12/20 11:10 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546 Pace Analytical Services - Indianapolis								
N-Nitroso-di-n-propylamine	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	621-64-7	
N-Nitrosodiphenylamine	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	86-30-6	
Pentachlorophenol	**<17500**	ug/kg	19100	17500	10	08/25/20 22:50	08/27/20 15:14	87-86-5	
Phenanthrene	**22100**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	85-01-8	
Phenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	108-95-2	ED
Pyrene	**25600**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	129-00-0	
1,2,4-Trichlorobenzene	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	120-82-1	
2,4,5-Trichlorophenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	95-95-4	
2,4,6-Trichlorophenol	**<3940**	ug/kg	3940	3940	10	08/25/20 22:50	08/27/20 15:14	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	26-96		10	08/25/20 22:50	08/27/20 15:14	4165-60-0	
Phenol-d5 (S)	65	%.	32-93		10	08/25/20 22:50	08/27/20 15:14	4165-62-2	
2-Fluorophenol (S)	46	%.	24-95		10	08/25/20 22:50	08/27/20 15:14	367-12-4	
2,4,6-Tribromophenol (S)	19	%.	20-109		10	08/25/20 22:50	08/27/20 15:14	118-79-6	S4
2-Fluorobiphenyl (S)	63	%.	36-91		10	08/25/20 22:50	08/27/20 15:14	321-60-8	
p-Terphenyl-d14 (S)	82	%.	27-117		10	08/25/20 22:50	08/27/20 15:14	1718-51-0	
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Acetone	**<921**	ug/kg	921	921	1		08/25/20 21:46	67-64-1	
Acrylonitrile	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	107-13-1	
tert-Amylmethyl ether	**<230**	ug/kg	230	230	1		08/25/20 21:46	994-05-8	N2
Benzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	71-43-2	
Bromobenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	108-86-1	
Bromochloromethane	**<23.0**	ug/kg	46.0	23.0	1		08/25/20 21:46	74-97-5	
Bromodichloromethane	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	75-27-4	
Bromoform	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	75-25-2	
Bromomethane	**<184**	ug/kg	184	184	1		08/25/20 21:46	74-83-9	
2-Butanone (MEK)	**<690**	ug/kg	690	690	1		08/25/20 21:46	78-93-3	
tert-Butyl Alcohol	**<2300**	ug/kg	2300	2300	1		08/25/20 21:46	75-65-0	
n-Butylbenzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	104-51-8	
sec-Butylbenzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	135-98-8	
tert-Butylbenzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	98-06-6	
Carbon disulfide	**<230**	ug/kg	230	230	1		08/25/20 21:46	75-15-0	
Carbon tetrachloride	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	56-23-5	
Chlorobenzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	108-90-7	
Chloroethane	**<230**	ug/kg	230	230	1		08/25/20 21:46	75-00-3	
Chloroform	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	67-66-3	
Chloromethane	**<230**	ug/kg	230	230	1		08/25/20 21:46	74-87-3	L1
Cyclohexane	**<460**	ug/kg	460	460	1		08/25/20 21:46	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	96-12-8	
Dibromochloromethane	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	124-48-1	
1,2-Dibromoethane (EDB)	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	106-93-4	
Dibromomethane	**<230**	ug/kg	230	230	1		08/25/20 21:46	74-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (10-11) **Lab ID: 50264929006** Collected: 08/12/20 11:10 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
1,2-Dichlorobenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	95-50-1	
1,3-Dichlorobenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	541-73-1	
1,4-Dichlorobenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	106-46-7	
trans-1,4-Dichloro-2-butene	**<92.1**	ug/kg	921	92.1	1		08/25/20 21:46	110-57-6	
Dichlorodifluoromethane	**<230**	ug/kg	230	230	1		08/25/20 21:46	75-71-8	
1,1-Dichloroethane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	75-34-3	
1,2-Dichloroethane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	107-06-2	
1,1-Dichloroethene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	75-35-4	
cis-1,2-Dichloroethene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	156-59-2	
trans-1,2-Dichloroethene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	156-60-5	
1,2-Dichloropropane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	78-87-5	
cis-1,3-Dichloropropene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	10061-01-5	
trans-1,3-Dichloropropene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	10061-02-6	
Diethyl ether (Ethyl ether)	**<184**	ug/kg	184	184	1		08/25/20 21:46	60-29-7	
Diisopropyl ether	**<230**	ug/kg	230	230	1		08/25/20 21:46	108-20-3	N2
Ethylbenzene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	100-41-4	
Ethyl-tert-butyl ether	**<230**	ug/kg	230	230	1		08/25/20 21:46	637-92-3	N2
Hexachloroethane	**<276**	ug/kg	276	276	1		08/25/20 21:46	67-72-1	N2
2-Hexanone	**<2300**	ug/kg	2300	2300	1		08/25/20 21:46	591-78-6	
Iodomethane	**<92.1**	ug/kg	921	92.1	1		08/25/20 21:46	74-88-4	L1
Isopropylbenzene (Cumene)	**<230**	ug/kg	230	230	1		08/25/20 21:46	98-82-8	
p-Isopropyltoluene	**<23.0**	ug/kg	46.0	23.0	1		08/25/20 21:46	99-87-6	
Methylene Chloride	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	75-09-2	
2-Methylnaphthalene	**<304**	ug/kg	304	304	1		08/25/20 21:46	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<2300**	ug/kg	2300	2300	1		08/25/20 21:46	108-10-1	
Methyl-tert-butyl ether	**<230**	ug/kg	230	230	1		08/25/20 21:46	1634-04-4	
Naphthalene	**<304**	ug/kg	304	304	1		08/25/20 21:46	91-20-3	
n-Propylbenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	103-65-1	
Styrene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	630-20-6	
1,1,2,2-Tetrachloroethane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	79-34-5	
Tetrachloroethene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	127-18-4	
Tetrahydrofuran	**<921**	ug/kg	921	921	1		08/25/20 21:46	109-99-9	N2
Toluene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	108-88-3	
1,2,3-Trichlorobenzene	**<230**	ug/kg	230	230	1		08/25/20 21:46	87-61-6	L1
1,2,4-Trichlorobenzene	**<230**	ug/kg	230	230	1		08/25/20 21:46	120-82-1	
1,1,1-Trichloroethane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	71-55-6	
1,1,2-Trichloroethane	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	79-00-5	
Trichloroethene	**<46.0**	ug/kg	46.0	46.0	1		08/25/20 21:46	79-01-6	
Trichlorofluoromethane	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	75-69-4	
1,2,3-Trichloropropane	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	96-18-4	
1,2,3-Trimethylbenzene	**<230**	ug/kg	230	230	1		08/25/20 21:46	526-73-8	N2
1,2,4-Trimethylbenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	95-63-6	
1,3,5-Trimethylbenzene	**<92.1**	ug/kg	92.1	92.1	1		08/25/20 21:46	108-67-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 (10-11) **Lab ID: 50264929006** Collected: 08/12/20 11:10 Received: 08/14/20 13:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260MSV 5035S Med Level	Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis								
Vinyl chloride	**<36.8**	ug/kg	36.8	36.8	1		08/25/20 21:46	75-01-4	
m&p-Xylene	**<23.0**	ug/kg	46.0	23.0	1		08/25/20 21:46	179601-23-1	
o-Xylene	**<23.0**	ug/kg	46.0	23.0	1		08/25/20 21:46	95-47-6	
Surrogates									
Dibromofluoromethane (S)	126	%.	62-137		1		08/25/20 21:46	1868-53-7	
Toluene-d8 (S)	119	%.	64-139		1		08/25/20 21:46	2037-26-5	
4-Bromofluorobenzene (S)	128	%.	60-142		1		08/25/20 21:46	460-00-4	
Percent Moisture	Analytical Method: SM 2540G Pace Analytical Services - Indianapolis								
Percent Moisture	**16.2**	%	0.10	0.10	1		08/24/20 15:47		N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Sample: MW-133 Composite **Lab ID: 50264929007** Collected: 08/12/20 11:03 Received: 08/25/20 12:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 08/26/20 14:40 Initial pH: 9.99; Final pH: 6.45								
	Pace Analytical Services - Indianapolis								
Arsenic	**<0.10**	mg/L	0.10	0.050	1	08/30/20 15:19	08/31/20 10:45	7440-38-2	
Barium	**<5.0**	mg/L	5.0	0.25	1	08/30/20 15:19	08/31/20 10:45	7440-39-3	
Cadmium	**<0.050**	mg/L	0.050	0.025	1	08/30/20 15:19	08/31/20 10:45	7440-43-9	
Chromium	**<0.10**	mg/L	0.10	0.052	1	08/30/20 15:19	08/31/20 10:45	7440-47-3	
Lead	**<0.10**	mg/L	0.10	0.050	1	08/30/20 15:19	08/31/20 10:45	7439-92-1	
Selenium	**<0.10**	mg/L	0.10	0.050	1	08/30/20 15:19	08/31/20 10:45	7782-49-2	
Silver	**<0.10**	mg/L	0.10	0.050	1	08/30/20 15:19	08/31/20 10:45	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Leachate Method/Date: EPA 1311; 08/26/20 14:40 Initial pH: 9.99; Final pH: 6.45								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.0020**	mg/L	0.0020	0.0010	1	08/28/20 11:12	08/31/20 09:45	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577485
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929002, 50264929003

METHOD BLANK: 2662762 Matrix: Water
Associated Lab Samples: 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/L	<1000	5000	1000	08/19/20 10:36	
Methanol	ug/L	<400	5000	400	08/19/20 10:36	
n-Butanol	ug/L	<800	5000	800	08/19/20 10:36	

LABORATORY CONTROL SAMPLE: 2662763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/L	50000	49900	100	69-128	
Methanol	ug/L	50000	41000	82	73-118	
n-Butanol	ug/L	50000	48500	97	77-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2662866 2662867

Parameter	Units	50264942002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/L	ND	50000	50000	53600	47500	107	95	64-132	12	20	
Methanol	ug/L	ND	50000	50000	46300	40300	93	81	66-123	14	20	
n-Butanol	ug/L	ND	50000	50000	51700	45500	103	91	66-130	13	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 579037
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929007

METHOD BLANK: 2669761 Matrix: Water
Associated Lab Samples: 50264929007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	<0.00067	0.00067	0.00033	08/31/20 08:33	

LABORATORY CONTROL SAMPLE: 2669762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.005	0.0047	94	80-120	

MATRIX SPIKE SAMPLE: 2669763

Parameter	Units	50265049001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.015	98	75-125	

MATRIX SPIKE SAMPLE: 2669764

Parameter	Units	50265101001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.014	96	75-125	

MATRIX SPIKE SAMPLE: 2669765

Parameter	Units	50265433001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.014	94	75-125	

MATRIX SPIKE SAMPLE: 2669766

Parameter	Units	50265435001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.011	70	75-125	M0

MATRIX SPIKE SAMPLE: 2669767

Parameter	Units	50265579001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.014	93	75-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669768 2669769

Parameter	Units	50265654001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.015	0.015	0.015	0.014	99	92	75-125	7	20	

MATRIX SPIKE SAMPLE: 2669770

Parameter	Units	50265531001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.14	0.015	0.16	180	75-125	P6

MATRIX SPIKE SAMPLE: 2669771

Parameter	Units	50265533001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.015	99	75-125	

MATRIX SPIKE SAMPLE: 2669772

Parameter	Units	50264929007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.0020	0.015	0.015	99	75-125	

MATRIX SPIKE SAMPLE: 2669773

Parameter	Units	50265582001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	0.015	0.014	95	75-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577205
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2661532 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.080	0.20	0.080	08/18/20 10:51	

LABORATORY CONTROL SAMPLE: 2661533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.5	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2661534 2661535

Parameter	Units	50264703001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.8	4.9	97	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577532
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004, 50264929005

METHOD BLANK: 2663008 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<77.2	97.7	77.2	08/20/20 09:56	

LABORATORY CONTROL SAMPLE: 2663009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	493	490	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2663010 2663011

Parameter	Units	50264824002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	ND	500	501	538	543	107	108	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 580478
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929006

METHOD BLANK: 2676641 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/kg	<79.8	101	79.8	09/11/20 10:36	

LABORATORY CONTROL SAMPLE: 2676642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/kg	510	490	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2676703 2676704

Parameter	Units	50266527009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/kg	<0.062 mg/kg	640	597	677	639	103	104	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577040
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004, 50264929005

METHOD BLANK: 2660968 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/kg	<1000	1000	1000	08/20/20 23:05	
Arsenic	ug/kg	<2000	2000	2000	08/20/20 23:05	
Barium	ug/kg	<1000	1000	1000	08/20/20 23:05	
Beryllium	ug/kg	<500	500	500	08/20/20 23:05	
Boron	ug/kg	<8000	8000	8000	08/20/20 23:05	
Calcium	ug/kg	<6550	50000	6550	08/20/20 23:05	
Chromium	ug/kg	<2000	2000	2000	08/20/20 23:05	
Copper	ug/kg	<1000	1000	1000	08/20/20 23:05	
Iron	ug/kg	<7600	25000	7600	08/20/20 23:05	
Lead	ug/kg	<10000	10000	10000	08/20/20 23:05	
Magnesium	ug/kg	<4000	25000	4000	08/20/20 23:05	
Manganese	ug/kg	<1000	1000	1000	08/20/20 23:05	
Molybdenum	ug/kg	<1000	1000	1000	08/20/20 23:05	
Nickel	ug/kg	<1000	1000	1000	08/20/20 23:05	
Potassium	ug/kg	<5840	50000	5840	08/20/20 23:05	
Sodium	ug/kg	<13600	25000	13600	08/20/20 23:05	
Strontium	ug/kg	<5000	5000	5000	08/20/20 23:05	
Vanadium	ug/kg	<1000	1000	1000	08/20/20 23:05	
Zinc	ug/kg	<1000	1000	1000	08/20/20 23:05	

LABORATORY CONTROL SAMPLE: 2660969

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/kg	50000	49800	100	80-120	
Arsenic	ug/kg	50000	51200	102	80-120	
Barium	ug/kg	50000	50700	101	80-120	
Beryllium	ug/kg	50000	50600	101	80-120	
Boron	ug/kg	50000	49200	98	80-120	
Calcium	ug/kg	500000	516000	103	80-120	
Chromium	ug/kg	50000	48600	97	80-120	
Copper	ug/kg	50000	50000	100	80-120	
Iron	ug/kg	500000	509000	102	80-120	
Lead	ug/kg	50000	49200	98	80-120	
Magnesium	ug/kg	500000	491000	98	80-120	
Manganese	ug/kg	50000	49700	99	80-120	
Molybdenum	ug/kg	50000	54100	108	80-120	
Nickel	ug/kg	50000	50000	100	80-120	
Potassium	ug/kg	500000	495000	99	80-120	
Sodium	ug/kg	500000	499000	100	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2660969

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Strontium	ug/kg	50000	50300	101	80-120	
Vanadium	ug/kg	50000	50500	101	80-120	
Zinc	ug/kg	50000	49300	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2660970 2660971

Parameter	Units	50264812003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/kg	ND	52200	48200	14400	13100	28	27	75-125	9	20	M3
Arsenic	ug/kg	6.4 mg/kg	52200	48200	56200	52700	96	96	75-125	6	20	
Barium	ug/kg	65.1 mg/kg	52200	48200	97500	95500	62	63	75-125	2	20	M3
Beryllium	ug/kg	0.41J mg/kg	52200	48200	46900	43500	89	89	75-125	8	20	
Boron	ug/kg	14.0 mg/kg	52200	48200	68500	63000	104	102	75-125	8	20	
Calcium	ug/kg	113000 mg/kg	522000	482000	110000000	106000000	-659	-1640	75-125	4	20	P6
Chromium	ug/kg	12.3 mg/kg	52200	48200	58000	54500	88	88	75-125	6	20	
Copper	ug/kg	17.4 mg/kg	52200	48200	69700	66600	100	102	75-125	5	20	
Iron	ug/kg	13900 mg/kg	522000	482000	15300000	15100000	274	247	75-125	2	20	P6
Lead	ug/kg	6.9 mg/kg	52200	48200	51900	48100	86	85	75-125	8	20	
Magnesium	ug/kg	34900 mg/kg	522000	482000	36000000	33900000	204	-219	75-125	6	20	P6
Manganese	ug/kg	312 mg/kg	52200	48200	304000	297000	-14	-30	75-125	2	20	P6
Molybdenum	ug/kg	5.2 mg/kg	52200	48200	55100	51100	96	95	75-125	7	20	
Nickel	ug/kg	19.4 mg/kg	52200	48200	63800	60600	85	85	75-125	5	20	
Potassium	ug/kg	1920 mg/kg	522000	482000	3350000	3220000	276	271	75-125	4	20	M3
Sodium	ug/kg	244 mg/kg	522000	482000	757000	714000	98	98	75-125	6	20	
Strontium	ug/kg	85.8 mg/kg	52200	48200	132000	132000	89	95	75-125	1	20	
Vanadium	ug/kg	23.4 mg/kg	52200	48200	79700	75200	108	107	75-125	6	20	
Zinc	ug/kg	45.6 mg/kg	52200	48200	90300	98600	86	110	75-125	9	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578633
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50264929006

METHOD BLANK: 2667899 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/kg	<1000	1000	1000	09/02/20 12:33	
Arsenic	ug/kg	<2000	2000	2000	09/02/20 12:33	
Barium	ug/kg	<1000	1000	1000	09/02/20 12:33	
Beryllium	ug/kg	<500	500	500	09/02/20 12:33	
Boron	ug/kg	<8000	8000	8000	09/02/20 12:33	
Calcium	ug/kg	27800J	50000	6550	09/02/20 12:33	
Chromium	ug/kg	<2000	2000	2000	09/02/20 12:33	
Copper	ug/kg	<1000	1000	1000	09/02/20 12:33	
Iron	ug/kg	7670J	25000	7600	09/02/20 12:33	
Lead	ug/kg	<10000	10000	10000	09/02/20 12:33	
Magnesium	ug/kg	8880J	25000	4000	09/02/20 12:33	
Manganese	ug/kg	<1000	1000	1000	09/02/20 12:33	
Molybdenum	ug/kg	<1000	1000	1000	09/02/20 12:33	
Nickel	ug/kg	<1000	1000	1000	09/02/20 12:33	
Potassium	ug/kg	<5840	50000	5840	09/02/20 12:33	
Sodium	ug/kg	<13600	25000	13600	09/02/20 12:33	
Strontium	ug/kg	<5000	5000	5000	09/02/20 12:33	
Vanadium	ug/kg	<1000	1000	1000	09/02/20 12:33	
Zinc	ug/kg	<1000	1000	1000	09/02/20 12:33	

LABORATORY CONTROL SAMPLE: 2667900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/kg	50000	48500	97	80-120	
Arsenic	ug/kg	50000	49700	99	80-120	
Barium	ug/kg	50000	48800	98	80-120	
Beryllium	ug/kg	50000	47000	94	80-120	
Boron	ug/kg	50000	47600	95	80-120	
Calcium	ug/kg	500000	517000	103	80-120	
Chromium	ug/kg	50000	48400	97	80-120	
Copper	ug/kg	50000	49600	99	80-120	
Iron	ug/kg	500000	472000	94	80-120	
Lead	ug/kg	50000	48200	96	80-120	
Magnesium	ug/kg	500000	479000	96	80-120	
Manganese	ug/kg	50000	47900	96	80-120	
Molybdenum	ug/kg	50000	49900	100	80-120	
Nickel	ug/kg	50000	47100	94	80-120	
Potassium	ug/kg	500000	478000	96	80-120	
Sodium	ug/kg	500000	478000	96	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2667900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Strontium	ug/kg	50000	48700	97	80-120	
Vanadium	ug/kg	50000	48300	97	80-120	
Zinc	ug/kg	50000	47200	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2667901 2667902

Parameter	Units	50265267003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/kg	ND	52300	53600	15400	16300	29	29	75-125	5	20	M3
Arsenic	ug/kg	9.0 mg/kg	52300	53600	51600	55100	82	86	75-125	6	20	
Barium	ug/kg	85.6 mg/kg	52300	53600	162000	167000	146	152	75-125	3	20	M3
Beryllium	ug/kg	ND	52300	53600	40800	42300	77	78	75-125	4	20	
Boron	ug/kg	ND	52300	53600	44300	46600	75	77	75-125	5	20	
Calcium	ug/kg	19600 mg/kg	523000	536000	17700000	13000000	-364	-1230	75-125	31	20	1d,E,P6
Chromium	ug/kg	15.3 mg/kg	52300	53600	61700	63600	89	90	75-125	3	20	
Copper	ug/kg	30.6 mg/kg	52300	53600	71000	74500	77	82	75-125	5	20	
Iron	ug/kg	16200 mg/kg	523000	536000	17000000	19000000	145	522	75-125	11	20	P6
Lead	ug/kg	12.5 mg/kg	52300	53600	50800	53400	73	76	75-125	5	20	M0
Magnesium	ug/kg	13900 mg/kg	523000	536000	13300000	10100000	-113	-712	75-125	28	20	1d,P6
Manganese	ug/kg	202 mg/kg	52300	53600	216000	298000	27	180	75-125	32	20	1d,M0
Molybdenum	ug/kg	1.9 mg/kg	52300	53600	41300	43400	75	77	75-125	5	20	
Nickel	ug/kg	18.4 mg/kg	52300	53600	57400	61400	75	80	75-125	7	20	
Potassium	ug/kg	875 mg/kg	523000	536000	1890000	2040000	193	217	75-125	8	20	M3
Sodium	ug/kg	340 mg/kg	523000	536000	900000	909000	107	106	75-125	1	20	
Strontium	ug/kg	15.4 mg/kg	52300	53600	60200	60100	86	83	75-125	0	20	
Vanadium	ug/kg	30.9 mg/kg	52300	53600	78600	84900	91	101	75-125	8	20	
Zinc	ug/kg	51.2 mg/kg	52300	53600	93400	97800	81	87	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 579029
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929007

METHOD BLANK: 2669723 Matrix: Water
Associated Lab Samples: 50264929007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	<0.010	0.010	0.0050	08/31/20 09:44	
Barium	mg/L	<0.50	0.50	0.025	08/31/20 09:44	
Cadmium	mg/L	<0.0050	0.0050	0.0025	08/31/20 09:44	
Chromium	mg/L	<0.010	0.010	0.0052	08/31/20 09:44	
Lead	mg/L	<0.010	0.010	0.0050	08/31/20 09:44	
Selenium	mg/L	<0.010	0.010	0.0050	08/31/20 09:44	
Silver	mg/L	<0.010	0.010	0.0050	08/31/20 09:44	

LABORATORY CONTROL SAMPLE: 2669724

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.96	96	80-120	
Barium	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	1	0.92	92	80-120	
Chromium	mg/L	1	0.95	95	80-120	
Lead	mg/L	1	0.92	92	80-120	
Selenium	mg/L	1	0.94	94	80-120	
Silver	mg/L	0.5	0.48	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2669725 2669726

Parameter	Units	50265142001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	10	10	9.9	9.8	99	98	50-150	1	20	
Barium	mg/L	ND	10	10	10.2	10.0	97	95	50-150	2	20	
Cadmium	mg/L	ND	10	10	9.5	9.3	95	93	50-150	1	20	
Chromium	mg/L	ND	10	10	9.6	9.5	96	95	50-150	1	20	
Lead	mg/L	ND	10	10	9.2	9.1	92	91	50-150	2	20	
Selenium	mg/L	ND	10	10	9.7	9.6	97	96	50-150	1	20	
Silver	mg/L	ND	5	5	4.9	4.8	98	96	50-150	2	20	

MATRIX SPIKE SAMPLE: 2669727

Parameter	Units	50265049001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10	100	50-150	
Barium	mg/L	ND	10	10.2	98	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE SAMPLE: 2669727

Parameter	Units	50265049001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/L	ND	10	9.5	95	50-150	
Chromium	mg/L	ND	10	9.6	96	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

MATRIX SPIKE SAMPLE: 2669728

Parameter	Units	50265101001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	ND	10	9.9	97	50-150	
Cadmium	mg/L	ND	10	9.5	94	50-150	
Chromium	mg/L	ND	10	9.6	96	50-150	
Lead	mg/L	0.16	10	9.4	92	50-150	
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	4.8	97	50-150	

MATRIX SPIKE SAMPLE: 2669729

Parameter	Units	50265433001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.7	97	50-150	
Barium	mg/L	ND	10	9.8	96	50-150	
Cadmium	mg/L	ND	10	9.3	93	50-150	
Chromium	mg/L	ND	10	9.6	95	50-150	
Lead	mg/L	1.2	10	10.3	91	50-150	
Selenium	mg/L	ND	10	9.5	95	50-150	
Silver	mg/L	ND	5	4.8	96	50-150	

MATRIX SPIKE SAMPLE: 2669730

Parameter	Units	50265435001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	ND	10	9.8	98	50-150	
Cadmium	mg/L	ND	10	9.5	95	50-150	
Chromium	mg/L	ND	10	9.7	96	50-150	
Lead	mg/L	ND	10	9.3	92	50-150	
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	4.9	98	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE SAMPLE: 2669731

Parameter	Units	50265579001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10	100	50-150	
Barium	mg/L	ND	10	10.4	97	50-150	
Cadmium	mg/L	ND	10	9.5	94	50-150	
Chromium	mg/L	ND	10	9.6	96	50-150	
Lead	mg/L	ND	10	9.2	92	50-150	
Selenium	mg/L	ND	10	9.7	97	50-150	
Silver	mg/L	ND	5	4.9	97	50-150	

MATRIX SPIKE SAMPLE: 2669732

Parameter	Units	50265296001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	10.0	98	50-150	
Cadmium	mg/L	ND	10	9.6	96	50-150	
Chromium	mg/L	ND	10	9.7	96	50-150	
Lead	mg/L	ND	10	9.2	92	50-150	
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	5.0	100	50-150	

MATRIX SPIKE SAMPLE: 2669733

Parameter	Units	50265654002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.8	98	50-150	
Barium	mg/L	ND	10	10.0	95	50-150	
Cadmium	mg/L	ND	10	9.3	93	50-150	
Chromium	mg/L	ND	10	9.4	94	50-150	
Lead	mg/L	ND	10	9.0	90	50-150	
Selenium	mg/L	ND	10	9.6	96	50-150	
Silver	mg/L	ND	5	4.8	96	50-150	

MATRIX SPIKE SAMPLE: 2669734

Parameter	Units	50265533001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	100	50-150	
Barium	mg/L	ND	10	10.8	99	50-150	
Cadmium	mg/L	ND	10	9.6	96	50-150	
Chromium	mg/L	0.12	10	9.8	97	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	
Selenium	mg/L	ND	10	9.6	96	50-150	
Silver	mg/L	ND	5	4.9	99	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE SAMPLE: 2669735

Parameter	Units	50264929007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.10	10	10.1	101	50-150	
Barium	mg/L	<5.0	10	10.2	98	50-150	
Cadmium	mg/L	<0.050	10	9.6	96	50-150	
Chromium	mg/L	<0.10	10	9.6	96	50-150	
Lead	mg/L	<0.10	10	9.4	93	50-150	
Selenium	mg/L	<0.10	10	9.8	98	50-150	
Silver	mg/L	<0.10	5	4.9	99	50-150	

MATRIX SPIKE SAMPLE: 2669736

Parameter	Units	50265582001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	9.9	98	50-150	
Cadmium	mg/L	ND	10	9.5	95	50-150	
Chromium	mg/L	110	10	120	95	50-150	
Lead	mg/L	ND	10	9.2	92	50-150	
Selenium	mg/L	ND	10	9.8	98	50-150	
Silver	mg/L	ND	5	4.9	99	50-150	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577044
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2660987 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	<5.0	5.0	5.0	08/20/20 08:28	
Barium	ug/L	<100	100	100	08/20/20 08:28	
Boron	ug/L	<300	300	300	08/20/20 08:28	
Calcium	ug/L	<1000	1000	1000	08/20/20 08:28	
Chromium	ug/L	<10.0	10.0	10.0	08/20/20 08:28	
Cobalt	ug/L	<20.0	20.0	20.0	08/20/20 08:28	
Copper	ug/L	<4.0	4.0	4.0	08/20/20 08:28	
Iron	ug/L	<200	200	200	08/20/20 08:28	
Magnesium	ug/L	<1000	1000	1000	08/20/20 08:28	
Manganese	ug/L	<50.0	50.0	50.0	08/20/20 08:28	
Molybdenum	ug/L	<50.0	50.0	50.0	08/20/20 08:28	
Nickel	ug/L	<20.0	20.0	20.0	08/20/20 08:28	
Potassium	ug/L	<1000	1000	1000	08/20/20 08:28	
Sodium	ug/L	<1000	1000	1000	08/20/20 08:28	
Strontium	ug/L	<1000	1000	1000	08/20/20 08:28	
Zinc	ug/L	<50.0	50.0	50.0	08/20/20 08:28	

LABORATORY CONTROL SAMPLE: 2660988

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	996	100	80-120	
Barium	ug/L	1000	951	95	80-120	
Boron	ug/L	1000	971	97	80-120	
Calcium	ug/L	10000	9250	93	80-120	
Chromium	ug/L	1000	946	95	80-120	
Cobalt	ug/L	1000	956	96	80-120	
Copper	ug/L	1000	947	95	80-120	
Iron	ug/L	10000	9550	96	80-120	
Magnesium	ug/L	10000	9460	95	80-120	
Manganese	ug/L	1000	948	95	80-120	
Molybdenum	ug/L	1000	1020	102	80-120	
Nickel	ug/L	1000	965	97	80-120	
Potassium	ug/L	10000	9310	93	80-120	
Sodium	ug/L	10000	9550	95	80-120	
Strontium	ug/L	1000	<1000	94	80-120	
Zinc	ug/L	1000	968	97	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2660989 2660990

Parameter	Units	50264638001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	34.4	1000	1000	1050	1020	101	99	75-125	2	20	
Barium	ug/L	1960	1000	1000	2920	2820	95	86	75-125	3	20	
Boron	ug/L	ND	1000	1000	1070	1050	100	99	75-125	1	20	
Calcium	ug/L	124000	10000	10000	133000	128000	92	48	75-125	3	20	P6
Chromium	ug/L	17.9	1000	1000	951	931	93	91	75-125	2	20	
Cobalt	ug/L	ND	1000	1000	926	908	92	90	75-125	2	20	
Copper	ug/L	20.9	1000	1000	963	941	94	92	75-125	2	20	
Iron	ug/L	18200	10000	10000	27900	27000	97	88	75-125	3	20	
Magnesium	ug/L	38400	10000	10000	48200	46600	98	82	75-125	3	20	
Manganese	ug/L	429	1000	1000	1350	1320	93	89	75-125	3	20	
Molybdenum	ug/L	98.9	1000	1000	1100	1080	101	98	75-125	2	20	
Nickel	ug/L	21.6	1000	1000	939	919	92	90	75-125	2	20	
Potassium	ug/L	8870	10000	10000	20100	19600	113	108	75-125	3	20	
Sodium	ug/L	215000	10000	10000	225000	217000	97	17	75-125	4	20	E,P6
Strontium	ug/L	270	1000	1000	1200	1170	93	90	75-125	3	20	
Zinc	ug/L	69.8	1000	1000	1010	990	94	92	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 576950
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004, 50264929005

METHOD BLANK: 2660461 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/kg	<985	985	985	08/18/20 02:15	
Cadmium	ug/kg	<197	197	197	08/18/20 02:15	
Cobalt	ug/kg	<493	493	493	08/18/20 02:15	
Selenium	ug/kg	<197	197	197	08/18/20 02:15	
Silver	ug/kg	<98.5	98.5	98.5	08/18/20 02:15	
Thallium	ug/kg	<493	493	493	08/18/20 02:15	
Titanium	ug/kg	<26.2	98.5	26.2	08/18/20 02:15	N2

LABORATORY CONTROL SAMPLE: 2660462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/kg	38600	38300	99	80-120	
Cadmium	ug/kg	3860	3810	99	80-120	
Cobalt	ug/kg	3860	4040	105	80-120	
Selenium	ug/kg	3860	3500	91	80-120	
Silver	ug/kg	3860	3960	103	80-120	
Thallium	ug/kg	3860	4130	107	80-120	
Titanium	ug/kg	3860	3900	101	80-120	N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2660463 2660464

Parameter	Units	50264929004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/kg	5780000	45000	43100	6210000	5870000	969	212	75-125	6	20	P6
Cadmium	ug/kg	412	4500	4310	4540	4420	92	93	75-125	3	20	
Cobalt	ug/kg	<2780	4500	4310	6920	6710	95	95	75-125	3	20	
Selenium	ug/kg	<1110	4500	4310	4290	4070	86	84	75-125	5	20	
Silver	ug/kg	<111	4500	4310	4280	4160	93	94	75-125	3	20	
Thallium	ug/kg	<555	4500	4310	4710	4360	103	99	75-125	8	20	
Titanium	ug/kg	394000	4500	4310	401000	395000	172	36	75-125	2	20	N2,P6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578417
QC Batch Method: EPA 3050B
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929006

METHOD BLANK: 2666855 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/kg	<954	954	954	08/27/20 06:27	
Cadmium	ug/kg	<191	191	191	08/27/20 06:27	
Cobalt	ug/kg	<477	477	477	08/27/20 06:27	
Selenium	ug/kg	<191	191	191	08/27/20 06:27	
Silver	ug/kg	<95.4	95.4	95.4	08/27/20 06:27	
Thallium	ug/kg	<477	477	477	08/27/20 06:27	
Titanium	ug/kg	<25.4	95.4	25.4	08/27/20 06:27	N2

LABORATORY CONTROL SAMPLE: 2666856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/kg	39800	41400	104	80-120	
Cadmium	ug/kg	3980	3760	95	80-120	
Cobalt	ug/kg	3980	4050	102	80-120	
Selenium	ug/kg	3980	3740	94	80-120	
Silver	ug/kg	3980	3980	100	80-120	
Thallium	ug/kg	3980	4110	103	80-120	
Titanium	ug/kg	3980	4010	101	80-120	N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2666857 2666858

Parameter	Units	50264929006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/kg	3720000	46400	45100	5330000	5010000	3460	2850	75-125	6	20	P6
Cadmium	ug/kg	372	4640	4510	4620	4550	92	93	75-125	2	20	
Cobalt	ug/kg	1490	4640	4510	6110	5560	100	90	75-125	9	20	
Selenium	ug/kg	<1130	4640	4510	4560	4400	93	92	75-125	3	20	
Silver	ug/kg	<113	4640	4510	4350	4260	93	94	75-125	2	20	
Thallium	ug/kg	<567	4640	4510	4740	4690	101	103	75-125	1	20	
Titanium	ug/kg	274000	4640	4510	429000	342000	3350	1530	75-125	22	20	N2,P6, R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577126
QC Batch Method: EPA 200.2
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2661235 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/L	<50.0	50.0	50.0	08/18/20 17:39	
Antimony	ug/L	<2.0	2.0	2.0	08/18/20 17:39	
Beryllium	ug/L	<1.0	1.0	1.0	08/18/20 17:39	
Cadmium	ug/L	<1.0	1.0	1.0	08/18/20 17:39	
Lead	ug/L	<3.0	3.0	3.0	08/18/20 17:39	
Selenium	ug/L	<5.0	5.0	5.0	08/18/20 17:39	
Silver	ug/L	<0.20	0.25	0.20	08/18/20 17:39	
Thallium	ug/L	<2.0	2.0	2.0	08/18/20 17:39	
Titanium	ug/L	<0.072	1.0	0.072	08/18/20 17:39	N2
Vanadium	ug/L	<4.0	4.0	4.0	08/18/20 17:39	

LABORATORY CONTROL SAMPLE: 2661236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	400	393	98	80-120	
Antimony	ug/L	40	40.8	102	80-120	
Beryllium	ug/L	40	42.2	106	80-120	
Cadmium	ug/L	40	39.9	100	80-120	
Lead	ug/L	40	41.1	103	80-120	
Selenium	ug/L	40	39.3	98	80-120	
Silver	ug/L	40	40.4	101	80-120	
Thallium	ug/L	40	42.6	107	80-120	
Titanium	ug/L	40	41.6	104	80-120	N2
Vanadium	ug/L	40	41.3	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2661237 2661238

Parameter	Units	50264846001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	315	400	400	699	712	96	99	75-125	2	20	
Antimony	ug/L	ND	40	40	40.4	40.8	101	102	75-125	1	20	
Beryllium	ug/L	ND	40	40	38.9	38.6	97	96	75-125	1	20	
Cadmium	ug/L	ND	40	40	37.4	38.1	93	95	75-125	2	20	
Lead	ug/L	ND	40	40	41.2	41.5	102	103	75-125	1	20	
Selenium	ug/L	ND	40	40	39.0	39.0	96	95	75-125	0	20	
Silver	ug/L	ND	40	40	37.7	38.0	94	95	75-125	1	20	
Thallium	ug/L	ND	40	40	42.3	42.4	106	106	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2661237 2661238

Parameter	Units	50264846001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Titanium	ug/L	712	40	40	730	738	44	64	75-125	1	20	N2,P6
Vanadium	ug/L	ND	40	40	43.0	43.0	104	103	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 174482
QC Batch Method: EPA 8260C SIM/5030C
Analysis Method: EPA 8260C SIM/5030C
Analysis Description: 8260C SIM 5030C
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 845980 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.090	0.20	0.090	08/25/20 18:42	
1,2-Dichlorobenzene-d4 (S)	%	93	60-140		08/25/20 18:42	
4-Bromofluorobenzene (S)	%	122	79-124		08/25/20 18:42	

LABORATORY CONTROL SAMPLE: 845981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	2.5	2.7	107	60-140	
1,2-Dichlorobenzene-d4 (S)	%			94	60-140	
4-Bromofluorobenzene (S)	%			122	79-124	

MATRIX SPIKE SAMPLE: 846763

Parameter	Units	50264929003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.090	2.5	2.2	86	60-140	
1,2-Dichlorobenzene-d4 (S)	%				80	60-140	
4-Bromofluorobenzene (S)	%				115	79-124	

SAMPLE DUPLICATE: 846805

Parameter	Units	50264929002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.23	0.29	23	20	D6
1,2-Dichlorobenzene-d4 (S)	%	85	123		20	
4-Bromofluorobenzene (S)	%	119	157		20	S0

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578050
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2665442 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	08/21/20 18:52	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	08/21/20 18:52	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	08/21/20 18:52	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	08/21/20 18:52	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	08/21/20 18:52	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	08/21/20 18:52	
2-Hexanone	ug/L	<50.0	50.0	50.0	08/21/20 18:52	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	08/21/20 18:52	
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	08/21/20 18:52	
Acetone	ug/L	<50.0	50.0	50.0	08/21/20 18:52	
Acrylonitrile	ug/L	<2.0	2.0	2.0	08/21/20 18:52	
Benzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Bromobenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Bromochloromethane	ug/L	<0.22	1.0	0.22	08/21/20 18:52	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Bromoform	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Bromomethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Carbon disulfide	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Chlorobenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Chloroethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Chloroform	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Chloromethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
cis-1,3-Dichloropropene	ug/L	<100	100	100	08/21/20 18:52	
Cyclohexane	ug/L	<10.0	10.0	10.0	08/21/20 18:52	N2

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Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2665442 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Dibromomethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	08/21/20 18:52	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	08/21/20 18:52	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Hexachloroethane	ug/L	<5.0	5.0	5.0	08/21/20 18:52	N2
Iodomethane	ug/L	<0.51	5.0	0.51	08/21/20 18:52	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
m&p-Xylene	ug/L	<0.24	2.0	0.24	08/21/20 18:52	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
Methylene Chloride	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
n-Propylbenzene	ug/L	<100	100	100	08/21/20 18:52	
Naphthalene	ug/L	<5.0	5.0	5.0	08/21/20 18:52	
o-Xylene	ug/L	<0.16	1.0	0.16	08/21/20 18:52	
p-Isopropyltoluene	ug/L	<0.11	1.0	0.11	08/21/20 18:52	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Styrene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	08/21/20 18:52	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	08/21/20 18:52	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	08/21/20 18:52	N2
Toluene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
trans-1,3-Dichloropropene	ug/L	<100	100	100	08/21/20 18:52	
trans-1,4-Dichloro-2-butene	ug/L	<0.40	100	0.40	08/21/20 18:52	
Trichloroethene	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	08/21/20 18:52	
Vinyl chloride	ug/L	<1.0	1.0	1.0	08/21/20 18:52	
4-Bromofluorobenzene (S)	%.	99	85-116		08/21/20 18:52	
Dibromofluoromethane (S)	%.	101	75-120		08/21/20 18:52	
Toluene-d8 (S)	%.	94	83-111		08/21/20 18:52	

LABORATORY CONTROL SAMPLE: 2665443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.2	100	78-120	
1,1,1-Trichloroethane	ug/L	50	53.6	107	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	42.4	85	64-126	
1,1,2-Trichloroethane	ug/L	50	43.8	88	73-125	
1,1-Dichloroethane	ug/L	50	48.6	97	77-123	

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REPORT OF LABORATORY ANALYSIS

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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2665443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	53.9	108	79-128	
1,2,3-Trichlorobenzene	ug/L	50	72.1	144	75-126	L1
1,2,3-Trichloropropane	ug/L	50	46.8	94	71-131	
1,2,3-Trimethylbenzene	ug/L		<5.0			N2
1,2,4-Trichlorobenzene	ug/L	50	60.0	120	76-130	
1,2,4-Trimethylbenzene	ug/L	50	48.7	97	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	50.3	101	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	45.3	91	76-122	
1,2-Dichlorobenzene	ug/L	50	47.1	94	79-113	
1,2-Dichloroethane	ug/L	50	42.9	86	66-127	
1,2-Dichloropropane	ug/L	50	46.2	92	75-127	
1,3,5-Trimethylbenzene	ug/L	50	47.4	95	78-116	
1,3-Dichlorobenzene	ug/L	50	48.7	97	79-120	
1,4-Dichlorobenzene	ug/L	50	43.8	88	77-117	
2-Butanone (MEK)	ug/L	250	242	97	61-138	
2-Hexanone	ug/L	250	222	89	58-138	
2-Methylnaphthalene	ug/L	50	55.4	111	60-136	
4-Methyl-2-pentanone (MIBK)	ug/L	250	217	87	60-131	
Acetone	ug/L	250	264	106	57-126	
Acrylonitrile	ug/L	200	178	89	65-127	
Benzene	ug/L	50	46.7	93	75-118	
Bromobenzene	ug/L	50	49.7	99	68-127	
Bromochloromethane	ug/L	50	40.5	81	66-126	
Bromodichloromethane	ug/L	50	48.2	96	75-120	
Bromoform	ug/L	50	46.3	93	61-119	
Bromomethane	ug/L	50	54.8	110	12-184	
Carbon disulfide	ug/L	50	50.0	100	71-123	
Carbon tetrachloride	ug/L	50	53.2	106	73-125	
Chlorobenzene	ug/L	50	47.5	95	80-115	
Chloroethane	ug/L	50	50.5	101	46-133	
Chloroform	ug/L	50	47.8	96	75-117	
Chloromethane	ug/L	50	63.2	126	33-124	L1
cis-1,2-Dichloroethene	ug/L	50	47.6	95	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	95	73-130	
Cyclohexane	ug/L	50	53.8	108	58-122	N2
Dibromochloromethane	ug/L	50	48.3	97	69-124	
Dibromomethane	ug/L	50	45.3	91	76-124	
Dichlorodifluoromethane	ug/L	50	64.1	128	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	52.1	104	70-130	
Diisopropyl ether	ug/L		<5.0			N2
Ethyl-tert-butyl ether	ug/L		<5.0			N2
Ethylbenzene	ug/L	50	48.7	97	78-120	
Hexachloroethane	ug/L		<5.0			N2
Iodomethane	ug/L	100	141	141	10-184	
Isopropylbenzene (Cumene)	ug/L	50	53.2	106	82-122	
m&p-Xylene	ug/L	100	93.3	93	79-118	
Methyl-tert-butyl ether	ug/L	50	46.4	93	79-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2665443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	50	51.7	103	68-126	
n-Butylbenzene	ug/L	50	50.1	100	73-123	
n-Propylbenzene	ug/L	50	<100	91	75-119	
Naphthalene	ug/L	50	60.8	122	70-130	
o-Xylene	ug/L	50	48.9	98	78-121	
p-Isopropyltoluene	ug/L	50	50.8	102	82-119	
sec-Butylbenzene	ug/L	50	49.2	98	79-119	
Styrene	ug/L	50	49.7	99	80-121	
tert-Amylmethyl ether	ug/L		<5.0			N2
tert-Butyl Alcohol	ug/L	100	132	132	10-200	
tert-Butylbenzene	ug/L	50	38.4	77	58-106	
Tetrachloroethene	ug/L	50	49.0	98	70-123	
Tetrahydrofuran	ug/L	50	<90.0	108	50-150	N2
Toluene	ug/L	50	45.0	90	72-114	
trans-1,2-Dichloroethene	ug/L	50	51.8	104	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	92	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	209	105	34-130	
Trichloroethene	ug/L	50	48.1	96	78-120	
Trichlorofluoromethane	ug/L	50	50.4	101	57-156	
Vinyl chloride	ug/L	50	61.7	123	55-122	L1
4-Bromofluorobenzene (S)	%.			105	85-116	
Dibromofluoromethane (S)	%.			99	75-120	
Toluene-d8 (S)	%.			93	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578070
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004, 50264929005

METHOD BLANK: 2665591 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	08/21/20 18:52	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	08/21/20 18:52	
1,2,3-Trichloropropane	ug/kg	<100	100	100	08/21/20 18:52	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	08/21/20 18:52	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	08/21/20 18:52	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	08/21/20 18:52	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,2-Dichlorobenzene	ug/kg	<100	100	100	08/21/20 18:52	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	08/21/20 18:52	
1,3-Dichlorobenzene	ug/kg	<100	100	100	08/21/20 18:52	
1,4-Dichlorobenzene	ug/kg	<100	100	100	08/21/20 18:52	
2-Butanone (MEK)	ug/kg	<750	750	750	08/21/20 18:52	
2-Hexanone	ug/kg	<2500	2500	2500	08/21/20 18:52	
2-Methylnaphthalene	ug/kg	<330	330	330	08/21/20 18:52	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	08/21/20 18:52	
Acetone	ug/kg	<1000	1000	1000	08/21/20 18:52	
Acrylonitrile	ug/kg	<100	100	100	08/21/20 18:52	
Benzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Bromobenzene	ug/kg	<100	100	100	08/21/20 18:52	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	08/21/20 18:52	
Bromodichloromethane	ug/kg	<100	100	100	08/21/20 18:52	
Bromoform	ug/kg	<100	100	100	08/21/20 18:52	
Bromomethane	ug/kg	<200	200	200	08/21/20 18:52	
Carbon disulfide	ug/kg	<250	250	250	08/21/20 18:52	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Chloroethane	ug/kg	<250	250	250	08/21/20 18:52	
Chloroform	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Chloromethane	ug/kg	<250	250	250	08/21/20 18:52	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	08/21/20 18:52	
Cyclohexane	ug/kg	<500	500	500	08/21/20 18:52	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2665591 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	08/21/20 18:52	
Dibromomethane	ug/kg	<250	250	250	08/21/20 18:52	
Dichlorodifluoromethane	ug/kg	<250	250	250	08/21/20 18:52	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	08/21/20 18:52	
Diisopropyl ether	ug/kg	<250	250	250	08/21/20 18:52	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	08/21/20 18:52	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Hexachloroethane	ug/kg	<300	300	300	08/21/20 18:52	N2
Iodomethane	ug/kg	<100	1000	100	08/21/20 18:52	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	08/21/20 18:52	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	08/21/20 18:52	
Methyl-tert-butyl ether	ug/kg	<250	250	250	08/21/20 18:52	
Methylene Chloride	ug/kg	<100	100	100	08/21/20 18:52	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
n-Propylbenzene	ug/kg	<100	100	100	08/21/20 18:52	
Naphthalene	ug/kg	<330	330	330	08/21/20 18:52	
o-Xylene	ug/kg	<25.0	50.0	25.0	08/21/20 18:52	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	08/21/20 18:52	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Styrene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
tert-Amylmethyl ether	ug/kg	<250	250	250	08/21/20 18:52	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	08/21/20 18:52	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Tetrahydrofuran	ug/kg	<1000	1000	1000	08/21/20 18:52	N2
Toluene	ug/kg	<100	100	100	08/21/20 18:52	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	08/21/20 18:52	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	08/21/20 18:52	
Trichloroethene	ug/kg	<50.0	50.0	50.0	08/21/20 18:52	
Trichlorofluoromethane	ug/kg	<100	100	100	08/21/20 18:52	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	08/21/20 18:52	
4-Bromofluorobenzene (S)	%.	99	60-142		08/21/20 18:52	
Dibromofluoromethane (S)	%.	101	62-137		08/21/20 18:52	
Toluene-d8 (S)	%.	94	64-139		08/21/20 18:52	

LABORATORY CONTROL SAMPLE: 2665592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	94	82-119	
1,1,1-Trichloroethane	ug/kg	100	101	101	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	74.6	75	54-137	
1,1,2-Trichloroethane	ug/kg	100	83.9	84	77-122	
1,1-Dichloroethane	ug/kg	100	95.1	95	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2665592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	102	102	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	139	72-126	L1
1,2,3-Trichloropropane	ug/kg	100	<100	82	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	112	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	87	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	92.6	93	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	85.1	85	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	87	79-117	
1,2-Dichloroethane	ug/kg	100	87.7	88	74-116	
1,2-Dichloropropane	ug/kg	100	87.6	88	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	85	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	91	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	80	76-115	
2-Butanone (MEK)	ug/kg	500	<750	87	65-126	
2-Hexanone	ug/kg	500	<2500	81	54-141	
2-Methylnaphthalene	ug/kg	100	<330	99	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	78	60-133	
Acetone	ug/kg	500	<1000	94	49-139	
Acrylonitrile	ug/kg	400	339	85	66-133	
Benzene	ug/kg	100	89.7	90	71-126	
Bromobenzene	ug/kg	100	<100	90	77-119	
Bromochloromethane	ug/kg	100	76.7	77	60-117	
Bromodichloromethane	ug/kg	100	<100	91	79-122	
Bromoform	ug/kg	100	<100	88	64-121	
Bromomethane	ug/kg	100	<200	92	10-200	
Carbon disulfide	ug/kg	100	<250	95	54-129	
Carbon tetrachloride	ug/kg	100	101	101	78-120	
Chlorobenzene	ug/kg	100	89.6	90	81-117	
Chloroethane	ug/kg	100	<250	102	54-134	
Chloroform	ug/kg	100	92.6	93	80-119	
Chloromethane	ug/kg	100	<250	113	31-118	
cis-1,2-Dichloroethene	ug/kg	100	91.0	91	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	86	74-133	
Cyclohexane	ug/kg	100	<500	101	49-128	N2
Dibromochloromethane	ug/kg	100	<100	92	78-124	
Dibromomethane	ug/kg	100	<250	87	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	122	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	103	50-150	
Ethylbenzene	ug/kg	100	93.0	93	74-127	
Iodomethane	ug/kg	200	410J	205	10-200	L1
Isopropylbenzene (Cumene)	ug/kg	100	<250	99	85-121	
m&p-Xylene	ug/kg	200	174	87	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	91	78-135	
Methylene Chloride	ug/kg	100	101	101	73-119	
n-Butylbenzene	ug/kg	100	92.3	92	69-126	
n-Propylbenzene	ug/kg	100	<100	82	73-124	
Naphthalene	ug/kg	100	<330	110	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2665592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	91.6	92	74-128	
p-Isopropyltoluene	ug/kg	100	92.7	93	74-124	
sec-Butylbenzene	ug/kg	100	89.8	90	72-124	
Styrene	ug/kg	100	92.7	93	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	90	50-150	
tert-Butylbenzene	ug/kg	100	70.4	70	54-104	
Tetrachloroethene	ug/kg	100	92.7	93	74-120	
Tetrahydrofuran	ug/kg	100	<1000	97	53-135	N2
Toluene	ug/kg	100	<100	85	71-124	
trans-1,2-Dichloroethene	ug/kg	100	100	100	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	89	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	382J	96	22-132	
Trichloroethene	ug/kg	100	92.3	92	75-121	
Trichlorofluoromethane	ug/kg	100	<100	97	64-135	
Vinyl chloride	ug/kg	100	112	112	51-137	
4-Bromofluorobenzene (S)	%.			103	60-142	
Dibromofluoromethane (S)	%.			103	62-137	
Toluene-d8 (S)	%.			93	64-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578538
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Volatile Organics
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50264929006

METHOD BLANK: 2667359 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<100	100	100	08/25/20 15:42	
1,1,1-Trichloroethane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,1,2,2-Tetrachloroethane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,1,2-Trichloroethane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,1-Dichloroethane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,1-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,2,3-Trichlorobenzene	ug/kg	<250	250	250	08/25/20 15:42	
1,2,3-Trichloropropane	ug/kg	<100	100	100	08/25/20 15:42	
1,2,3-Trimethylbenzene	ug/kg	<250	250	250	08/25/20 15:42	N2
1,2,4-Trichlorobenzene	ug/kg	<250	250	250	08/25/20 15:42	
1,2,4-Trimethylbenzene	ug/kg	<100	100	100	08/25/20 15:42	
1,2-Dibromo-3-chloropropane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,2-Dibromoethane (EDB)	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,2-Dichlorobenzene	ug/kg	<100	100	100	08/25/20 15:42	
1,2-Dichloroethane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,2-Dichloropropane	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
1,3,5-Trimethylbenzene	ug/kg	<100	100	100	08/25/20 15:42	
1,3-Dichlorobenzene	ug/kg	<100	100	100	08/25/20 15:42	
1,4-Dichlorobenzene	ug/kg	<100	100	100	08/25/20 15:42	
2-Butanone (MEK)	ug/kg	<750	750	750	08/25/20 15:42	
2-Hexanone	ug/kg	<2500	2500	2500	08/25/20 15:42	
2-Methylnaphthalene	ug/kg	<330	330	330	08/25/20 15:42	
4-Methyl-2-pentanone (MIBK)	ug/kg	<2500	2500	2500	08/25/20 15:42	
Acetone	ug/kg	<1000	1000	1000	08/25/20 15:42	
Acrylonitrile	ug/kg	<100	100	100	08/25/20 15:42	
Benzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Bromobenzene	ug/kg	<100	100	100	08/25/20 15:42	
Bromochloromethane	ug/kg	<25.0	50.0	25.0	08/25/20 15:42	
Bromodichloromethane	ug/kg	<100	100	100	08/25/20 15:42	
Bromoform	ug/kg	<100	100	100	08/25/20 15:42	
Bromomethane	ug/kg	<200	200	200	08/25/20 15:42	
Carbon disulfide	ug/kg	<250	250	250	08/25/20 15:42	
Carbon tetrachloride	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Chlorobenzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Chloroethane	ug/kg	<250	250	250	08/25/20 15:42	
Chloroform	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Chloromethane	ug/kg	<250	250	250	08/25/20 15:42	
cis-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
cis-1,3-Dichloropropene	ug/kg	<100	100	100	08/25/20 15:42	
Cyclohexane	ug/kg	<500	500	500	08/25/20 15:42	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2667359 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	<100	100	100	08/25/20 15:42	
Dibromomethane	ug/kg	<250	250	250	08/25/20 15:42	
Dichlorodifluoromethane	ug/kg	<250	250	250	08/25/20 15:42	
Diethyl ether (Ethyl ether)	ug/kg	<200	200	200	08/25/20 15:42	
Diisopropyl ether	ug/kg	<250	250	250	08/25/20 15:42	N2
Ethyl-tert-butyl ether	ug/kg	<250	250	250	08/25/20 15:42	N2
Ethylbenzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Hexachloroethane	ug/kg	<300	300	300	08/25/20 15:42	N2
Iodomethane	ug/kg	<100	1000	100	08/25/20 15:42	
Isopropylbenzene (Cumene)	ug/kg	<250	250	250	08/25/20 15:42	
m&p-Xylene	ug/kg	<25.0	50.0	25.0	08/25/20 15:42	
Methyl-tert-butyl ether	ug/kg	<250	250	250	08/25/20 15:42	
Methylene Chloride	ug/kg	<100	100	100	08/25/20 15:42	
n-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
n-Propylbenzene	ug/kg	<100	100	100	08/25/20 15:42	
Naphthalene	ug/kg	<330	330	330	08/25/20 15:42	
o-Xylene	ug/kg	<25.0	50.0	25.0	08/25/20 15:42	
p-Isopropyltoluene	ug/kg	<25.0	50.0	25.0	08/25/20 15:42	
sec-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Styrene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
tert-Amylmethyl ether	ug/kg	<250	250	250	08/25/20 15:42	N2
tert-Butyl Alcohol	ug/kg	<2500	2500	2500	08/25/20 15:42	
tert-Butylbenzene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Tetrachloroethene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Tetrahydrofuran	ug/kg	<1000	1000	1000	08/25/20 15:42	N2
Toluene	ug/kg	<100	100	100	08/25/20 15:42	
trans-1,2-Dichloroethene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
trans-1,3-Dichloropropene	ug/kg	<100	100	100	08/25/20 15:42	
trans-1,4-Dichloro-2-butene	ug/kg	<100	1000	100	08/25/20 15:42	
Trichloroethene	ug/kg	<50.0	50.0	50.0	08/25/20 15:42	
Trichlorofluoromethane	ug/kg	<100	100	100	08/25/20 15:42	
Vinyl chloride	ug/kg	<40.0	40.0	40.0	08/25/20 15:42	
4-Bromofluorobenzene (S)	%.	100	60-142		08/25/20 15:42	
Dibromofluoromethane (S)	%.	100	62-137		08/25/20 15:42	
Toluene-d8 (S)	%.	93	64-139		08/25/20 15:42	

LABORATORY CONTROL SAMPLE: 2667360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	100	<100	97	82-119	
1,1,1-Trichloroethane	ug/kg	100	109	109	82-125	
1,1,2,2-Tetrachloroethane	ug/kg	100	79.4	79	54-137	
1,1,2-Trichloroethane	ug/kg	100	87.4	87	77-122	
1,1-Dichloroethane	ug/kg	100	103	103	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2667360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	100	109	109	77-126	
1,2,3-Trichlorobenzene	ug/kg	100	<250	150	72-126	L1
1,2,3-Trichloropropane	ug/kg	100	<100	88	66-125	
1,2,4-Trichlorobenzene	ug/kg	100	<250	121	79-124	
1,2,4-Trimethylbenzene	ug/kg	100	<100	93	78-125	
1,2-Dibromo-3-chloropropane	ug/kg	100	97.6	98	64-133	
1,2-Dibromoethane (EDB)	ug/kg	100	88.9	89	78-124	
1,2-Dichlorobenzene	ug/kg	100	<100	90	79-117	
1,2-Dichloroethane	ug/kg	100	87.3	87	74-116	
1,2-Dichloropropane	ug/kg	100	93.3	93	70-142	
1,3,5-Trimethylbenzene	ug/kg	100	<100	91	76-122	
1,3-Dichlorobenzene	ug/kg	100	<100	94	80-118	
1,4-Dichlorobenzene	ug/kg	100	<100	84	76-115	
2-Butanone (MEK)	ug/kg	500	<750	95	65-126	
2-Hexanone	ug/kg	500	<2500	85	54-141	
2-Methylnaphthalene	ug/kg	100	<330	106	47-148	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	<2500	83	60-133	
Acetone	ug/kg	500	<1000	103	49-139	
Acrylonitrile	ug/kg	400	370	92	66-133	
Benzene	ug/kg	100	94.6	95	71-126	
Bromobenzene	ug/kg	100	<100	93	77-119	
Bromochloromethane	ug/kg	100	81.7	82	60-117	
Bromodichloromethane	ug/kg	100	<100	96	79-122	
Bromoform	ug/kg	100	<100	92	64-121	
Bromomethane	ug/kg	100	<200	111	10-200	
Carbon disulfide	ug/kg	100	<250	101	54-129	
Carbon tetrachloride	ug/kg	100	107	107	78-120	
Chlorobenzene	ug/kg	100	92.5	93	81-117	
Chloroethane	ug/kg	100	<250	110	54-134	
Chloroform	ug/kg	100	97.4	97	80-119	
Chloromethane	ug/kg	100	<250	130	31-118	L1
cis-1,2-Dichloroethene	ug/kg	100	97.0	97	77-125	
cis-1,3-Dichloropropene	ug/kg	100	<100	91	74-133	
Cyclohexane	ug/kg	100	<500	105	49-128	N2
Dibromochloromethane	ug/kg	100	<100	94	78-124	
Dibromomethane	ug/kg	100	<250	93	73-129	
Dichlorodifluoromethane	ug/kg	100	<250	121	32-173	
Diethyl ether (Ethyl ether)	ug/kg	100	<200	112	50-150	
Ethylbenzene	ug/kg	100	94.6	95	74-127	
Iodomethane	ug/kg	200	467J	234	10-200	L1
Isopropylbenzene (Cumene)	ug/kg	100	<250	102	85-121	
m&p-Xylene	ug/kg	200	181	90	72-130	
Methyl-tert-butyl ether	ug/kg	100	<250	95	78-135	
Methylene Chloride	ug/kg	100	107	107	73-119	
n-Butylbenzene	ug/kg	100	97.5	97	69-126	
n-Propylbenzene	ug/kg	100	<100	87	73-124	
Naphthalene	ug/kg	100	<330	115	71-128	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2667360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/kg	100	94.8	95	74-128	
p-Isopropyltoluene	ug/kg	100	98.0	98	74-124	
sec-Butylbenzene	ug/kg	100	95.5	95	72-124	
Styrene	ug/kg	100	96.3	96	83-121	
tert-Butyl Alcohol	ug/kg	200	<2500	96	50-150	
tert-Butylbenzene	ug/kg	100	74.3	74	54-104	
Tetrachloroethene	ug/kg	100	95.5	95	74-120	
Tetrahydrofuran	ug/kg	100	<1000	105	53-135	N2
Toluene	ug/kg	100	<100	89	71-124	
trans-1,2-Dichloroethene	ug/kg	100	104	104	73-131	
trans-1,3-Dichloropropene	ug/kg	100	<100	92	68-128	
trans-1,4-Dichloro-2-butene	ug/kg	400	381J	95	22-132	
Trichloroethene	ug/kg	100	93.5	93	75-121	
Trichlorofluoromethane	ug/kg	100	101	101	64-135	
Vinyl chloride	ug/kg	100	123	123	51-137	
4-Bromofluorobenzene (S)	%.			103	60-142	
Dibromofluoromethane (S)	%.			103	62-137	
Toluene-d8 (S)	%.			94	64-139	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577464
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004

METHOD BLANK: 2662698 Matrix: Solid
Associated Lab Samples: 50264929004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1221 (Aroclor 1221)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1232 (Aroclor 1232)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1242 (Aroclor 1242)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1248 (Aroclor 1248)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1254 (Aroclor 1254)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1260 (Aroclor 1260)	ug/kg	<328	328	328	08/20/20 11:57	
PCB-1262 (Aroclor 1262)	ug/kg	<328	328	328	08/20/20 11:57	N2
PCB-1268 (Aroclor 1268)	ug/kg	<328	328	328	08/20/20 11:57	N2
Tetrachloro-m-xylene (S)	%.	72	25-123		08/20/20 11:57	

LABORATORY CONTROL SAMPLE: 2662699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	166	<328	84	54-128	
PCB-1260 (Aroclor 1260)	ug/kg	166	<328	84	36-118	
Tetrachloro-m-xylene (S)	%.			75	25-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2662700 2662701

Parameter	Units	50264929004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<359	186	188	<369	<373	28	42	10-145		20	
PCB-1260 (Aroclor 1260)	ug/kg	<359	186	188	<369	<373	0	56	11-124		20	M0
Tetrachloro-m-xylene (S)	%.						35	52	25-123			

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Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578700
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB Mod
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929002, 50264929003

METHOD BLANK: 2668148 Matrix: Water
Associated Lab Samples: 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1221 (Aroclor 1221)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1232 (Aroclor 1232)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1242 (Aroclor 1242)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1248 (Aroclor 1248)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1254 (Aroclor 1254)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1260 (Aroclor 1260)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	
PCB-1262 (Aroclor 1262)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	N2
PCB-1268 (Aroclor 1268)	ug/L	<0.20	0.20	0.20	08/26/20 23:29	N2
Tetrachloro-m-xylene (S)	%.	65	10-144		08/26/20 23:29	

LABORATORY CONTROL SAMPLE: 2668149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	4.9	99	45-148	
PCB-1260 (Aroclor 1260)	ug/L	5	5.3	106	48-142	
Tetrachloro-m-xylene (S)	%.			83	10-144	

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QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577938
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929004, 50264929005

METHOD BLANK: 2664887 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<327	327	327	08/24/20 13:52	
1,2-Diphenylhydrazine	ug/kg	<1580	1580	1580	08/24/20 13:52	
2,4,5-Trichlorophenol	ug/kg	<327	327	327	08/24/20 13:52	
2,4,6-Trichlorophenol	ug/kg	<327	327	327	08/24/20 13:52	
2,4-Dichlorophenol	ug/kg	<327	327	327	08/24/20 13:52	
2,4-Dimethylphenol	ug/kg	<327	327	327	08/24/20 13:52	
2,4-Dinitrophenol	ug/kg	<1580	1580	1580	08/24/20 13:52	
2,4-Dinitrotoluene	ug/kg	<327	327	327	08/24/20 13:52	
2,6-Dinitrotoluene	ug/kg	<87.6	327	87.6	08/24/20 13:52	
2-Chloronaphthalene	ug/kg	<327	327	327	08/24/20 13:52	
2-Chlorophenol	ug/kg	<327	327	327	08/24/20 13:52	
2-Methylnaphthalene	ug/kg	<327	327	327	08/24/20 13:52	
2-Methylphenol(o-Cresol)	ug/kg	<990	990	990	08/24/20 13:52	
2-Nitroaniline	ug/kg	<327	327	327	08/24/20 13:52	
2-Nitrophenol	ug/kg	<327	327	327	08/24/20 13:52	
3&4-Methylphenol(m&p Cresol)	ug/kg	<990	990	990	08/24/20 13:52	
3-Nitroaniline	ug/kg	<327	327	327	08/24/20 13:52	
4,6-Dinitro-2-methylphenol	ug/kg	<822	822	822	08/24/20 13:52	
4-Bromophenylphenyl ether	ug/kg	<327	327	327	08/24/20 13:52	
4-Chloro-3-methylphenol	ug/kg	<277	327	277	08/24/20 13:52	
4-Chlorophenylphenyl ether	ug/kg	<327	327	327	08/24/20 13:52	
4-Nitroaniline	ug/kg	<327	327	327	08/24/20 13:52	
4-Nitrophenol	ug/kg	<1580	1580	1580	08/24/20 13:52	
Acenaphthene	ug/kg	<327	327	327	08/24/20 13:52	
Acenaphthylene	ug/kg	<327	327	327	08/24/20 13:52	
Anthracene	ug/kg	<327	327	327	08/24/20 13:52	
Benzo(a)anthracene	ug/kg	<327	327	327	08/24/20 13:52	
Benzo(a)pyrene	ug/kg	<327	327	327	08/24/20 13:52	
Benzo(b)fluoranthene	ug/kg	<327	327	327	08/24/20 13:52	
Benzo(g,h,i)perylene	ug/kg	<327	327	327	08/24/20 13:52	
Benzo(k)fluoranthene	ug/kg	<327	327	327	08/24/20 13:52	
bis(2-Chloroethoxy)methane	ug/kg	<327	327	327	08/24/20 13:52	
bis(2-Chloroethyl) ether	ug/kg	<158	327	158	08/24/20 13:52	
bis(2-Chloroisopropyl) ether	ug/kg	<327	327	327	08/24/20 13:52	
bis(2-Ethylhexyl)phthalate	ug/kg	<327	327	327	08/24/20 13:52	
Butylbenzylphthalate	ug/kg	<327	327	327	08/24/20 13:52	
Carbazole	ug/kg	<327	327	327	08/24/20 13:52	
Chrysene	ug/kg	<327	327	327	08/24/20 13:52	
Di-n-butylphthalate	ug/kg	<327	327	327	08/24/20 13:52	
Di-n-octylphthalate	ug/kg	<327	327	327	08/24/20 13:52	

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5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2664887 Matrix: Solid
Associated Lab Samples: 50264929004, 50264929005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<327	327	327	08/24/20 13:52	
Dibenzofuran	ug/kg	<327	327	327	08/24/20 13:52	
Diethylphthalate	ug/kg	<327	327	327	08/24/20 13:52	
Dimethylphthalate	ug/kg	<327	327	327	08/24/20 13:52	
Fluoranthene	ug/kg	<327	327	327	08/24/20 13:52	
Fluorene	ug/kg	<327	327	327	08/24/20 13:52	
Hexachloro-1,3-butadiene	ug/kg	<95.0	327	95.0	08/24/20 13:52	
Hexachlorobenzene	ug/kg	<327	327	327	08/24/20 13:52	
Hexachlorocyclopentadiene	ug/kg	<990	990	990	08/24/20 13:52	
Hexachloroethane	ug/kg	<327	327	327	08/24/20 13:52	
Indeno(1,2,3-cd)pyrene	ug/kg	<327	327	327	08/24/20 13:52	
Isophorone	ug/kg	<327	327	327	08/24/20 13:52	
N-Nitroso-di-n-propylamine	ug/kg	<327	327	327	08/24/20 13:52	
N-Nitrosodimethylamine	ug/kg	<327	327	327	08/24/20 13:52	
N-Nitrosodiphenylamine	ug/kg	<327	327	327	08/24/20 13:52	
Naphthalene	ug/kg	<327	327	327	08/24/20 13:52	
Nitrobenzene	ug/kg	<327	327	327	08/24/20 13:52	
Pentachlorophenol	ug/kg	<1460	1580	1460	08/24/20 13:52	
Phenanthrene	ug/kg	<327	327	327	08/24/20 13:52	
Phenol	ug/kg	<327	327	327	08/24/20 13:52	
Pyrene	ug/kg	<327	327	327	08/24/20 13:52	
2,4,6-Tribromophenol (S)	%.	89	20-109		08/24/20 13:52	
2-Fluorobiphenyl (S)	%.	77	36-91		08/24/20 13:52	
2-Fluorophenol (S)	%.	83	24-95		08/24/20 13:52	
Nitrobenzene-d5 (S)	%.	76	26-96		08/24/20 13:52	
p-Terphenyl-d14 (S)	%.	106	27-117		08/24/20 13:52	
Phenol-d5 (S)	%.	79	32-93		08/24/20 13:52	

LABORATORY CONTROL SAMPLE: 2664888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1610	1260	78	52-89	
2,4-Dinitrotoluene	ug/kg	1610	1510	94	41-116	
2-Chlorophenol	ug/kg	1610	1280	80	48-97	
2-Methylnaphthalene	ug/kg	1610	1030	64	51-98	
4-Chloro-3-methylphenol	ug/kg	1610	1450	90	51-108	
4-Nitrophenol	ug/kg	1610	<1550	76	42-118	
Acenaphthene	ug/kg	1610	1260	78	58-94	
Acenaphthylene	ug/kg	1610	1280	79	56-94	
Anthracene	ug/kg	1610	1330	82	59-98	
Benzo(a)anthracene	ug/kg	1610	1370	85	60-103	
Benzo(a)pyrene	ug/kg	1610	1440	90	57-96	
Benzo(b)fluoranthene	ug/kg	1610	1460	91	57-104	
Benzo(g,h,i)perylene	ug/kg	1610	1380	85	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2664888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1610	1520	94	55-104	
Chrysene	ug/kg	1610	1400	87	59-105	
Dibenz(a,h)anthracene	ug/kg	1610	1400	87	54-103	
Fluoranthene	ug/kg	1610	1470	91	57-107	
Fluorene	ug/kg	1610	1320	82	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1610	1350	84	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1610	1300	81	43-94	
Naphthalene	ug/kg	1610	1210	75	51-90	
Pentachlorophenol	ug/kg	1610	<1420	77	24-118	
Phenanthrene	ug/kg	1610	1340	83	60-96	
Phenol	ug/kg	1610	1320	82	44-101	
Pyrene	ug/kg	1610	1370	85	59-108	
2,4,6-Tribromophenol (S)	%.			85	20-109	
2-Fluorobiphenyl (S)	%.			73	36-91	
2-Fluorophenol (S)	%.			79	24-95	
Nitrobenzene-d5 (S)	%.			71	26-96	
p-Terphenyl-d14 (S)	%.			106	27-117	
Phenol-d5 (S)	%.			77	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664889 2664890

Parameter	Units	50264933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1690	1650	1150	938	68	57	30-96	20	20	
2,4-Dinitrotoluene	ug/kg	ND	1690	1650	1060	845	63	51	10-127	23	20	R1
2-Chlorophenol	ug/kg	ND	1690	1650	1250	1030	74	62	17-107	19	20	
2-Methylnaphthalene	ug/kg	ND	1690	1650	975	802	58	49	20-120	19	20	
4-Chloro-3-methylphenol	ug/kg	ND	1690	1650	1350	1140	80	69	22-117	16	20	
4-Nitrophenol	ug/kg	ND	1690	1650	<1620	<1580	70	52	10-131		20	
Acenaphthene	ug/kg	ND	1690	1650	1220	987	72	60	19-115	21	20	R1
Acenaphthylene	ug/kg	ND	1690	1650	1240	1010	74	61	11-122	21	20	R1
Anthracene	ug/kg	ND	1690	1650	1200	996	71	60	10-133	19	20	
Benzo(a)anthracene	ug/kg	ND	1690	1650	1310	1050	77	64	10-137	22	20	R1
Benzo(a)pyrene	ug/kg	ND	1690	1650	1340	1090	79	66	10-132	20	20	
Benzo(b)fluoranthene	ug/kg	ND	1690	1650	1450	1220	86	74	10-134	17	20	
Benzo(g,h,i)perylene	ug/kg	ND	1690	1650	1250	1010	74	61	10-138	21	20	R1
Benzo(k)fluoranthene	ug/kg	ND	1690	1650	1320	1060	78	64	10-140	22	20	R1
Chrysene	ug/kg	ND	1690	1650	1270	1110	75	67	10-150	14	20	
Dibenz(a,h)anthracene	ug/kg	ND	1690	1650	1300	1030	77	62	10-126	23	20	R1
Fluoranthene	ug/kg	ND	1690	1650	1230	1030	73	62	10-128	18	20	
Fluorene	ug/kg	ND	1690	1650	1250	990	74	60	12-127	23	20	R1
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1690	1650	1240	1010	73	61	10-125	21	20	R1
N-Nitroso-di-n-propylamine	ug/kg	ND	1690	1650	1240	1020	73	62	23-101	20	20	
Naphthalene	ug/kg	ND	1690	1650	1150	937	68	57	12-120	20	20	
Pentachlorophenol	ug/kg	ND	1690	1650	<1490	<1450	66	56	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2664889 2664890

Parameter	Units	50264933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	ND	1690	1650	1230	1020	73	62	10-125	19	20	
Phenol	ug/kg	ND	1690	1650	1270	1030	75	63	22-105	21	20	R1
Pyrene	ug/kg	ND	1690	1650	1410	1180	83	72	10-146	17	20	
2,4,6-Tribromophenol (S)	%.						78	65	20-109			
2-Fluorobiphenyl (S)	%.						67	56	36-91			
2-Fluorophenol (S)	%.						72	60	24-95			
Nitrobenzene-d5 (S)	%.						62	51	26-96			
p-Terphenyl-d14 (S)	%.						84	71	27-117			
Phenol-d5 (S)	%.						72	60	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578574
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50264929006

METHOD BLANK: 2667644 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	<326	326	326	08/26/20 16:02	
1,2-Diphenylhydrazine	ug/kg	<1580	1580	1580	08/26/20 16:02	
2,4,5-Trichlorophenol	ug/kg	<326	326	326	08/26/20 16:02	
2,4,6-Trichlorophenol	ug/kg	<326	326	326	08/26/20 16:02	
2,4-Dichlorophenol	ug/kg	<326	326	326	08/26/20 16:02	
2,4-Dimethylphenol	ug/kg	<326	326	326	08/26/20 16:02	
2,4-Dinitrophenol	ug/kg	<1580	1580	1580	08/26/20 16:02	
2,4-Dinitrotoluene	ug/kg	<326	326	326	08/26/20 16:02	
2,6-Dinitrotoluene	ug/kg	<87.3	326	87.3	08/26/20 16:02	
2-Chloronaphthalene	ug/kg	<326	326	326	08/26/20 16:02	
2-Chlorophenol	ug/kg	<326	326	326	08/26/20 16:02	
2-Methylnaphthalene	ug/kg	<326	326	326	08/26/20 16:02	
2-Methylphenol(o-Cresol)	ug/kg	<987	987	987	08/26/20 16:02	
2-Nitroaniline	ug/kg	<326	326	326	08/26/20 16:02	
2-Nitrophenol	ug/kg	<326	326	326	08/26/20 16:02	
3&4-Methylphenol(m&p Cresol)	ug/kg	<987	987	987	08/26/20 16:02	
3-Nitroaniline	ug/kg	<326	326	326	08/26/20 16:02	
4,6-Dinitro-2-methylphenol	ug/kg	<819	819	819	08/26/20 16:02	
4-Bromophenylphenyl ether	ug/kg	<326	326	326	08/26/20 16:02	
4-Chloro-3-methylphenol	ug/kg	<276	326	276	08/26/20 16:02	
4-Chlorophenylphenyl ether	ug/kg	<326	326	326	08/26/20 16:02	
4-Nitroaniline	ug/kg	<326	326	326	08/26/20 16:02	
4-Nitrophenol	ug/kg	<1580	1580	1580	08/26/20 16:02	
Acenaphthene	ug/kg	<326	326	326	08/26/20 16:02	
Acenaphthylene	ug/kg	<326	326	326	08/26/20 16:02	
Anthracene	ug/kg	<326	326	326	08/26/20 16:02	
Benzo(a)anthracene	ug/kg	<326	326	326	08/26/20 16:02	
Benzo(a)pyrene	ug/kg	<326	326	326	08/26/20 16:02	
Benzo(b)fluoranthene	ug/kg	<326	326	326	08/26/20 16:02	
Benzo(g,h,i)perylene	ug/kg	<326	326	326	08/26/20 16:02	
Benzo(k)fluoranthene	ug/kg	<326	326	326	08/26/20 16:02	
bis(2-Chloroethoxy)methane	ug/kg	<326	326	326	08/26/20 16:02	
bis(2-Chloroethyl) ether	ug/kg	<158	326	158	08/26/20 16:02	
bis(2-Chloroisopropyl) ether	ug/kg	<326	326	326	08/26/20 16:02	
bis(2-Ethylhexyl)phthalate	ug/kg	<326	326	326	08/26/20 16:02	
Butylbenzylphthalate	ug/kg	<326	326	326	08/26/20 16:02	
Carbazole	ug/kg	<326	326	326	08/26/20 16:02	
Chrysene	ug/kg	<326	326	326	08/26/20 16:02	
Di-n-butylphthalate	ug/kg	<326	326	326	08/26/20 16:02	
Di-n-octylphthalate	ug/kg	<326	326	326	08/26/20 16:02	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2667644 Matrix: Solid
Associated Lab Samples: 50264929006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibenz(a,h)anthracene	ug/kg	<326	326	326	08/26/20 16:02	
Dibenzofuran	ug/kg	<326	326	326	08/26/20 16:02	
Diethylphthalate	ug/kg	<326	326	326	08/26/20 16:02	
Dimethylphthalate	ug/kg	<326	326	326	08/26/20 16:02	
Fluoranthene	ug/kg	<326	326	326	08/26/20 16:02	
Fluorene	ug/kg	<326	326	326	08/26/20 16:02	
Hexachloro-1,3-butadiene	ug/kg	<94.7	326	94.7	08/26/20 16:02	
Hexachlorobenzene	ug/kg	<326	326	326	08/26/20 16:02	
Hexachlorocyclopentadiene	ug/kg	<987	987	987	08/26/20 16:02	
Hexachloroethane	ug/kg	<326	326	326	08/26/20 16:02	
Indeno(1,2,3-cd)pyrene	ug/kg	<326	326	326	08/26/20 16:02	
Isophorone	ug/kg	<326	326	326	08/26/20 16:02	
N-Nitroso-di-n-propylamine	ug/kg	<326	326	326	08/26/20 16:02	
N-Nitrosodimethylamine	ug/kg	<326	326	326	08/26/20 16:02	
N-Nitrosodiphenylamine	ug/kg	<326	326	326	08/26/20 16:02	
Naphthalene	ug/kg	<326	326	326	08/26/20 16:02	
Nitrobenzene	ug/kg	<326	326	326	08/26/20 16:02	
Pentachlorophenol	ug/kg	<1450	1580	1450	08/26/20 16:02	
Phenanthrene	ug/kg	<326	326	326	08/26/20 16:02	
Phenol	ug/kg	<326	326	326	08/26/20 16:02	
Pyrene	ug/kg	<326	326	326	08/26/20 16:02	
2,4,6-Tribromophenol (S)	%.	84	20-109		08/26/20 16:02	
2-Fluorobiphenyl (S)	%.	74	36-91		08/26/20 16:02	
2-Fluorophenol (S)	%.	80	24-95		08/26/20 16:02	
Nitrobenzene-d5 (S)	%.	68	26-96		08/26/20 16:02	
p-Terphenyl-d14 (S)	%.	106	27-117		08/26/20 16:02	
Phenol-d5 (S)	%.	78	32-93		08/26/20 16:02	

LABORATORY CONTROL SAMPLE: 2667645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1660	1070	65	52-89	
2,4-Dinitrotoluene	ug/kg	1660	1470	89	41-116	
2-Chlorophenol	ug/kg	1660	1130	68	48-97	
2-Methylnaphthalene	ug/kg	1660	937	57	51-98	
4-Chloro-3-methylphenol	ug/kg	1660	1370	83	51-108	
4-Nitrophenol	ug/kg	1660	<1590	65	42-118	
Acenaphthene	ug/kg	1660	1170	71	58-94	
Acenaphthylene	ug/kg	1660	1180	71	56-94	
Anthracene	ug/kg	1660	1260	76	59-98	
Benzo(a)anthracene	ug/kg	1660	1310	79	60-103	
Benzo(a)pyrene	ug/kg	1660	1420	86	57-96	
Benzo(b)fluoranthene	ug/kg	1660	1470	89	57-104	
Benzo(g,h,i)perylene	ug/kg	1660	1320	80	56-103	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2667645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(k)fluoranthene	ug/kg	1660	1410	85	55-104	
Chrysene	ug/kg	1660	1350	82	59-105	
Dibenz(a,h)anthracene	ug/kg	1660	1370	83	54-103	
Fluoranthene	ug/kg	1660	1340	81	57-107	
Fluorene	ug/kg	1660	1240	75	58-101	
Indeno(1,2,3-cd)pyrene	ug/kg	1660	1350	81	54-104	
N-Nitroso-di-n-propylamine	ug/kg	1660	1170	71	43-94	
Naphthalene	ug/kg	1660	1050	64	51-90	
Pentachlorophenol	ug/kg	1660	<1460	74	24-118	
Phenanthrene	ug/kg	1660	1260	76	60-96	
Phenol	ug/kg	1660	1190	72	44-101	
Pyrene	ug/kg	1660	1390	84	59-108	
2,4,6-Tribromophenol (S)	%.			78	20-109	
2-Fluorobiphenyl (S)	%.			65	36-91	
2-Fluorophenol (S)	%.			70	24-95	
Nitrobenzene-d5 (S)	%.			61	26-96	
p-Terphenyl-d14 (S)	%.			99	27-117	
Phenol-d5 (S)	%.			70	32-93	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2667646 2667647

Parameter	Units	50265267001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	1780	1800	1360	1410	76	78	30-96	3	20	
2,4-Dinitrotoluene	ug/kg	ND	1780	1800	1690	1710	95	95	10-127	1	20	
2-Chlorophenol	ug/kg	ND	1780	1800	1500	1570	84	88	17-107	5	20	
2-Methylnaphthalene	ug/kg	ND	1780	1800	1170	1170	66	65	20-120	0	20	
4-Chloro-3-methylphenol	ug/kg	ND	1780	1800	1800	1770	101	98	22-117	2	20	
4-Nitrophenol	ug/kg	ND	1780	1800	<1710	<1720	80	77	10-131		20	
Acenaphthene	ug/kg	ND	1780	1800	1440	1450	81	81	19-115	1	20	
Acenaphthylene	ug/kg	ND	1780	1800	1430	1460	81	81	11-122	2	20	
Anthracene	ug/kg	ND	1780	1800	1420	1480	80	82	10-133	4	20	
Benzo(a)anthracene	ug/kg	ND	1780	1800	1530	1600	86	89	10-137	5	20	
Benzo(a)pyrene	ug/kg	ND	1780	1800	1570	1650	88	92	10-132	5	20	
Benzo(b)fluoranthene	ug/kg	ND	1780	1800	1590	1670	89	93	10-134	5	20	
Benzo(g,h,i)perylene	ug/kg	ND	1780	1800	1440	1520	81	85	10-138	5	20	
Benzo(k)fluoranthene	ug/kg	ND	1780	1800	1660	1730	93	96	10-140	4	20	
Chrysene	ug/kg	ND	1780	1800	1500	1600	84	89	10-150	7	20	
Dibenz(a,h)anthracene	ug/kg	ND	1780	1800	1490	1580	84	88	10-126	6	20	
Fluoranthene	ug/kg	ND	1780	1800	1550	1620	87	90	10-128	4	20	
Fluorene	ug/kg	ND	1780	1800	1510	1520	85	84	12-127	1	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1780	1800	1440	1540	81	86	10-125	6	20	
N-Nitroso-di-n-propylamine	ug/kg	ND	1780	1800	1540	1600	86	89	23-101	4	20	
Naphthalene	ug/kg	ND	1780	1800	1350	1360	76	76	12-120	1	20	
Pentachlorophenol	ug/kg	ND	1780	1800	<1570	<1580	72	80	10-112		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2667646 2667647

Parameter	Units	50265267001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phenanthrene	ug/kg	ND	1780	1800	1480	1520	83	85	10-125	3	20	
Phenol	ug/kg	ND	1780	1800	1570	1640	89	91	22-105	4	20	
Pyrene	ug/kg	ND	1780	1800	1650	1760	93	98	10-146	6	20	
2,4,6-Tribromophenol (S)	%.						89	91	20-109			
2-Fluorobiphenyl (S)	%.						73	74	36-91			
2-Fluorophenol (S)	%.						84	85	24-95			
Nitrobenzene-d5 (S)	%.						70	71	26-96			
p-Terphenyl-d14 (S)	%.						100	104	27-117			
Phenol-d5 (S)	%.						84	86	32-93			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577021
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water PAH Low Volume
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2660910 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Acenaphthene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Acenaphthylene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Anthracene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Benzo(a)anthracene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Benzo(a)pyrene	ug/L	<0.20	0.20	0.20	08/17/20 15:06	
Benzo(b)fluoranthene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Benzo(g,h,i)perylene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Benzo(k)fluoranthene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Chrysene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Dibenz(a,h)anthracene	ug/L	<2.0	2.0	2.0	08/17/20 15:06	
Fluoranthene	ug/L	<1.0	1.0	1.0	08/17/20 15:06	
Fluorene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Indeno(1,2,3-cd)pyrene	ug/L	<2.0	2.0	2.0	08/17/20 15:06	
Naphthalene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
Phenanthrene	ug/L	<2.0	2.0	2.0	08/17/20 15:06	
Pyrene	ug/L	<5.0	5.0	5.0	08/17/20 15:06	
2-Fluorobiphenyl (S)	%.	68	32-107		08/17/20 15:06	
p-Terphenyl-d14 (S)	%.	76	29-143		08/17/20 15:06	

LABORATORY CONTROL SAMPLE: 2660911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	10	7.1	71	44-105	
Acenaphthene	ug/L	10	7.6	76	53-102	
Acenaphthylene	ug/L	10	7.5	75	56-105	
Anthracene	ug/L	10	8.4	84	56-125	
Benzo(a)anthracene	ug/L	10	8.4	84	55-134	
Benzo(a)pyrene	ug/L	10	8.2	82	38-123	
Benzo(b)fluoranthene	ug/L	10	8.1	81	46-139	
Benzo(g,h,i)perylene	ug/L	10	7.6	76	27-113	
Benzo(k)fluoranthene	ug/L	10	9.7	97	39-126	
Chrysene	ug/L	10	7.3	73	65-120	
Dibenz(a,h)anthracene	ug/L	10	8.2	82	23-119	
Fluoranthene	ug/L	10	9.3	93	61-133	
Fluorene	ug/L	10	7.9	79	53-126	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.1	81	30-118	
Naphthalene	ug/L	10	6.7	67	45-96	
Phenanthrene	ug/L	10	8.3	83	59-131	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

LABORATORY CONTROL SAMPLE: 2660911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/L	10	8.2	82	60-142	
2-Fluorobiphenyl (S)	%.			65	32-107	
p-Terphenyl-d14 (S)	%.			74	29-143	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577020
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water Scan LV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2660908 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<1.1	10.0	1.1	08/17/20 15:04	
1,2-Diphenylhydrazine	ug/L	<3.7	10.0	3.7	08/17/20 15:04	
2,4,5-Trichlorophenol	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
2,4,6-Trichlorophenol	ug/L	<4.0	5.0	4.0	08/17/20 15:04	
2,4-Dichlorophenol	ug/L	<10.0	10.0	10.0	08/17/20 15:04	
2,4-Dimethylphenol	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
2,4-Dinitrophenol	ug/L	<3.9	50.0	3.9	08/17/20 15:04	
2,4-Dinitrotoluene	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
2,6-Dinitrotoluene	ug/L	<3.4	5.0	3.4	08/17/20 15:04	
2-Chloronaphthalene	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
2-Chlorophenol	ug/L	<10.0	10.0	10.0	08/17/20 15:04	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	10.0	08/17/20 15:04	
2-Nitroaniline	ug/L	<5.8	10.0	5.8	08/17/20 15:04	
2-Nitrophenol	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
3&4-Methylphenol(m&p Cresol)	ug/L	<20.0	20.0	20.0	08/17/20 15:04	
3-Nitroaniline	ug/L	<5.0	10.0	5.0	08/17/20 15:04	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	20.0	08/17/20 15:04	
4-Bromophenylphenyl ether	ug/L	<3.6	10.0	3.6	08/17/20 15:04	
4-Chloro-3-methylphenol	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
4-Chlorophenylphenyl ether	ug/L	<2.9	10.0	2.9	08/17/20 15:04	
4-Nitroaniline	ug/L	<4.9	10.0	4.9	08/17/20 15:04	
4-Nitrophenol	ug/L	<6.0	50.0	6.0	08/17/20 15:04	
bis(2-Chloroethoxy)methane	ug/L	<3.8	10.0	3.8	08/17/20 15:04	
bis(2-Chloroethyl) ether	ug/L	<2.2	5.0	2.2	08/17/20 15:04	
bis(2-Chloroisopropyl) ether	ug/L	<3.9	10.0	3.9	08/17/20 15:04	
bis(2-Ethylhexyl)phthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Butylbenzylphthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Carbazole	ug/L	<10.0	10.0	10.0	08/17/20 15:04	
Di-n-butylphthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Di-n-octylphthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Dibenzofuran	ug/L	<4.0	5.0	4.0	08/17/20 15:04	
Diethylphthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Dimethylphthalate	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Hexachloro-1,3-butadiene	ug/L	<3.0	5.0	3.0	08/17/20 15:04	
Hexachlorobenzene	ug/L	<2.7	5.0	2.7	08/17/20 15:04	
Hexachlorocyclopentadiene	ug/L	<25.0	25.0	25.0	08/17/20 15:04	
Hexachloroethane	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Isophorone	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
N-Nitroso-di-n-propylamine	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
N-Nitrosodimethylamine	ug/L	<2.9	10.0	2.9	08/17/20 15:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

METHOD BLANK: 2660908 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
N-Nitrosodiphenylamine	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
Nitrobenzene	ug/L	<3.0	5.0	3.0	08/17/20 15:04	
Pentachlorophenol	ug/L	<1.9	20.0	1.9	08/17/20 15:04	
Phenol	ug/L	<5.0	5.0	5.0	08/17/20 15:04	
2,4,6-Tribromophenol (S)	%.	96	43-135		08/17/20 15:04	
2-Fluorophenol (S)	%.	68	13-81		08/17/20 15:04	
Nitrobenzene-d5 (S)	%.	92	37-125		08/17/20 15:04	
Phenol-d5 (S)	%.	54	10-65		08/17/20 15:04	

LABORATORY CONTROL SAMPLE: 2660909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	100	70.0	70	10-105	
2,4-Dimethylphenol	ug/L	100	102	102	24-129	
2,4-Dinitrotoluene	ug/L	100	103	103	46-144	
2-Chlorophenol	ug/L	100	81.1	81	24-110	
4-Chloro-3-methylphenol	ug/L	100	113	113	33-137	
4-Nitrophenol	ug/L	100	94.3	94	10-88	L1
bis(2-Ethylhexyl)phthalate	ug/L	100	134	134	75-147	
Dibenzofuran	ug/L	100	94.4	94	34-125	
N-Nitroso-di-n-propylamine	ug/L	100	86.3	86	41-127	
Pentachlorophenol	ug/L	100	111	111	30-147	
Phenol	ug/L	100	57.7	58	10-71	
2,4,6-Tribromophenol (S)	%.			90	43-135	
2-Fluorophenol (S)	%.			64	13-81	
Nitrobenzene-d5 (S)	%.			83	37-125	
Phenol-d5 (S)	%.			53	10-65	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577514
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50264929004, 50264929005

SAMPLE DUPLICATE: 2662911

Parameter	Units	50264929004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.8	11.6	2	5	N2

SAMPLE DUPLICATE: 2662912

Parameter	Units	50265005007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.4	14.2	14	5	N2,R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 578336
QC Batch Method: SM 2540G
Analysis Method: SM 2540G
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50264929006

SAMPLE DUPLICATE: 2666655

Parameter	Units	50264929006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.2	16.4	1	5	N2

SAMPLE DUPLICATE: 2666656

Parameter	Units	50265527009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.6	12.3	2	5	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

QC Batch: 577046
QC Batch Method: EPA 9012
Analysis Method: EPA 9012
Analysis Description: 9012 Cyanide, Total
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50264929001, 50264929002, 50264929003

METHOD BLANK: 2660996 Matrix: Water
Associated Lab Samples: 50264929001, 50264929002, 50264929003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	ug/L	<5.0	5.0	5.0	08/18/20 10:12	

LABORATORY CONTROL SAMPLE: 2660997

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	100	99.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2660998 2660999

Parameter	Units	50264832001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	ug/L	ND	100	100	94.2	99.0	94	99	90-110	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1d	RPD is outside control limits due to sample non-homogeneity KJE 9/3/20
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50264929002	**MW-132**	EPA 8015 Alcohol-Glycol	577485		
50264929003	**Dup**	EPA 8015 Alcohol-Glycol	577485		
50264929004	**MW-132 (5.5-6.5)**	EPA 3546	577464	EPA 8082	577596
50264929002	**MW-132**	EPA 3510	578700	EPA 8082	578761
50264929003	**Dup**	EPA 3510	578700	EPA 8082	578761
50264929004	**MW-132 (5.5-6.5)**	EPA 3050	577040	EPA 6010	577924
50264929005	**MW-133 (3-4)**	EPA 3050	577040	EPA 6010	577924
50264929006	**MW-133 (10-11)**	EPA 3050	578633	EPA 6010	579808
50264929007	**MW-133 Composite**	EPA 3010	579029	EPA 6010	579317
50264929001	**MW-133**	EPA 3010	577044	EPA 6010	577706
50264929002	**MW-132**	EPA 3010	577044	EPA 6010	577706
50264929003	**Dup**	EPA 3010	577044	EPA 6010	577706
50264929004	**MW-132 (5.5-6.5)**	EPA 3050B	576950	EPA 6020	577157
50264929005	**MW-133 (3-4)**	EPA 3050B	576950	EPA 6020	577157
50264929006	**MW-133 (10-11)**	EPA 3050B	578417	EPA 6020	578803
50264929001	**MW-133**	EPA 200.2	577126	EPA 6020	577386
50264929002	**MW-132**	EPA 200.2	577126	EPA 6020	577386
50264929003	**Dup**	EPA 200.2	577126	EPA 6020	577386
50264929007	**MW-133 Composite**	EPA 7470	579037	EPA 7470	579293
50264929001	**MW-133**	EPA 7470	577205	EPA 7470	577258
50264929002	**MW-132**	EPA 7470	577205	EPA 7470	577258
50264929003	**Dup**	EPA 7470	577205	EPA 7470	577258
50264929004	**MW-132 (5.5-6.5)**	EPA 7471	577532	EPA 7471	577730
50264929005	**MW-133 (3-4)**	EPA 7471	577532	EPA 7471	577730
50264929006	**MW-133 (10-11)**	EPA 7471	580478	EPA 7471	581099
50264929004	**MW-132 (5.5-6.5)**	EPA 3546	577938	EPA 8270	578263
50264929005	**MW-133 (3-4)**	EPA 3546	577938	EPA 8270	578263
50264929006	**MW-133 (10-11)**	EPA 3546	578574	EPA 8270	578657
50264929001	**MW-133**	EPA 3510	577021	EPA 8270 by SIM	577149
50264929002	**MW-132**	EPA 3510	577021	EPA 8270 by SIM	577149
50264929003	**Dup**	EPA 3510	577021	EPA 8270 by SIM	577149
50264929001	**MW-133**	EPA 3510	577020	EPA 8270	577148
50264929002	**MW-132**	EPA 3510	577020	EPA 8270	577148
50264929003	**Dup**	EPA 3510	577020	EPA 8270	577148
50264929001	**MW-133**	EPA 8260C SIM/5030C	174482		
50264929002	**MW-132**	EPA 8260C SIM/5030C	174482		
50264929003	**Dup**	EPA 8260C SIM/5030C	174482		
50264929001	**MW-133**	EPA 5030B/8260	578050		
50264929002	**MW-132**	EPA 5030B/8260	578050		

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50264929

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50264929003	**Dup**	EPA 5030B/8260	578050		
50264929004	**MW-132 (5.5-6.5)**	EPA 8260	578070		
50264929005	**MW-133 (3-4)**	EPA 8260	578070		
50264929006	**MW-133 (10-11)**	EPA 8260	578538		
50264929004	**MW-132 (5.5-6.5)**	SM 2540G	577514		
50264929005	**MW-133 (3-4)**	SM 2540G	577514		
50264929006	**MW-133 (10-11)**	SM 2540G	578336		
50264929001	**MW-133**	EPA 9012	577046	EPA 9012	577089
50264929002	**MW-132**	EPA 9012	577046	EPA 9012	577089
50264929003	**Dup**	EPA 9012	577046	EPA 9012	577089

Pace Analytical
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CHAIN-OF-CUSTODY / A

The Chain-of-Custody is a LEGAL DOCUME

WO# : 50264929

50264929

Section A Required Client Information:

Company: ATC Group Services
Address: 46555 Humboldt dr. Ste. 100 Novi, MI 48377
Email To: ryann.scott@atcgs.com
Phone: 810-610-3466 Fax: n/a
Requested Due Date/TAT: 7 day

Section B Required Project Information:

Report To: ryann.scott@atcgs.com
Copy To:
Purchase Order No.:
Project Name: Detroit Axel
Project Number: NPDAX19001

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #: 40707

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N) (9-15)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION °F	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOCs	SVOCs	PCBs	Alcohols	Metals (Fe, Mn)	Cyanide	1,4 Dioxane	PNAs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-133	WT	G	8/13/20	1314			20.76, 20.7	10	2		1	6	1				Y	X	X			X	X	X	X		L9
2	MW-132	WT	G	8/13/20	1421				10	4	6	1	6	1				Y	X	X	X	X	X	X	X	X		L8
3	DUP	WT	G	8/13/20	0000				10	4	6	1	6	1				Y	X	X	X	X	X	X	X	X		L8
4	~~Field Blank~~	~~WT~~	~~G~~	~~8/13/20~~	~~1500~~				#	#	#																	
5	MW-132 (5.5-6.5)	SL	G	8/12/20	1601				3	2							1	Y	X	X	X	X	X	X				L10
6	MW-133 (3-4)	SL	G	8/12/20	1103				3	2							1	Y	X	X			X					L11
7	(*) MW-133 (10-11)	SL	G	8/12/20	1110				3	2							1	Y	X	X			X					Hold
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
(*) HOLD MW-133 (10-11)	Spencer Overbeck / ATC	8/13/20	1600	D. Nadin	8/13/20 14	1350	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: Spencer Overbeck

DATE Signed (MM/DD/YY): 08/13/20

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 8/14/20	**Evaluated by:** JRL	**WO#: 50264929**	
Client: ATC GROUP		**PM:** BJH **Due Date:** 08/25/20	
Project Manager: BJH	**Profile ID:** 9157	**CLIENT:** GR-ATC	
Rush TAT Requested: YES ✓NO **Due Date:**			
Lab Notified of Rush or Short Holds: YES NO		**Non Conformance Form Required:** YES ✓NO	
Samples Received Via: ✓FedEx UPS Client Pace Courier Other: _____			**Comments:**

Custody Seals Present and Intact:	YES	NO	✓NA	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	✓NA	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	✓N/A	
Short Holds Present (< 72 Hours):	YES	✓NO		
Samples Received in Hold:	✓YES	NO		
Custody Signatures Present:	✓YES	NO		
Collector Signature Present:	✓YES	NO		
Packing Material Used:	✓YES	NO		
Samples Collected Today and On Ice:	YES	NO	✓NA	
IR Gun #: ✓280 281	**Digital Thermometer #:** 282 283			
Ice Type: WET Bagged / WET Loose BLUE NONE	**1.** Cooler Temp Upon Receipt: 2.0/2.5 °C			
Ice Location: TOP BOTTOM MIDDLE ✓DISPERSED	Temp should be 0-6°C (Initial/Corrected)			
Temp Blank Received:	✓YES	NO		
Containers Intact:	✓YES	NO		
Correct Containers:	✓YES	NO		
Sufficient Volume:	✓YES	NO		
Sample pH Acceptable: All containers needing preservation are found to be in complaince with EPA recommendation Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	✓YES	NO	N/A	1909511
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	✓YES	NO	N/A	HC014876
VOA Headspace Acceptable (<6mm):	✓YES	NO	N/A	
Trip Blank Received: HCl MeOH TSP OTHER	YES	✓NO		
Comments:	**2.** Cooler Temp Upon Receipt: _____ °C			
	3. Cooler Temp Upon Receipt: _____ °C			
	4. Cooler Temp Upon Receipt: _____ °C			

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

April 20, 2020

Joshua Schuyler
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale
Pace Project No.: 50254306

Dear Joshua Schuyler:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
April Hehir

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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CERTIFICATIONS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

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SAMPLE SUMMARY

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50254306001	**MW-101**	Water	04/08/20 13:34	04/10/20 08:25
50254306002	**MW-102**	Water	04/08/20 14:29	04/10/20 08:25
50254306003	**MW-103**	Water	04/08/20 15:08	04/10/20 08:25
50254306004	**MW-104**	Water	04/08/20 15:48	04/10/20 08:25
50254306005	**MW-105**	Water	04/08/20 16:23	04/10/20 08:25
50254306006	**MW-106**	Water	04/08/20 17:32	04/10/20 08:25
50254306007	**MW-107**	Water	04/08/20 18:08	04/10/20 08:25
50254306008	**MW-108**	Water	04/08/20 18:40	04/10/20 08:25
50254306009	**MW-109**	Water	04/08/20 19:14	04/10/20 08:25
50254306010	**DUP-1**	Water	04/08/20 00:00	04/10/20 08:25
50254306011	**MW-110**	Water	04/09/20 09:07	04/10/20 08:25
50254306012	**MW-111**	Water	04/09/20 09:38	04/10/20 08:25
50254306013	**MW-112**	Water	04/09/20 10:09	04/10/20 08:25
50254306014	**MW-113**	Water	04/09/20 11:01	04/10/20 08:25
50254306015	**MW-114**	Water	04/09/20 11:36	04/10/20 08:25
50254306016	**MW-115**	Water	04/09/20 12:39	04/10/20 08:25
50254306017	**DUP-2**	Water	04/09/20 00:00	04/10/20 08:25
50254306018	**Trip Blank**	Water	04/09/20 00:00	04/10/20 08:25

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50254306001	**MW-101**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306002	**MW-102**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306003	**MW-103**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306004	**MW-104**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306005	**MW-105**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306006	**MW-106**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306007	**MW-107**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306008	**MW-108**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306009	**MW-109**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306010	**DUP-1**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306011	**MW-110**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306012	**MW-111**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306013	**MW-112**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306014	**MW-113**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306015	**MW-114**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19

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SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 5030B/8260	JPV	75
50254306016	**MW-115**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306017	**DUP-2**	EPA 8015 Alcohol-Glycol	CPH	3
		EPA 6020	DMT	7
		EPA 7470	ILP	1
		EPA 8270 by SIM 40E	GRM	19
		EPA 5030B/8260	JPV	75
50254306018	**Trip Blank**	EPA 5030B/8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-101 **Lab ID: 50254306001** Collected: 04/08/20 13:34 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 19:20	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 19:20	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 19:20	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:35	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 18:35	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 18:35	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 18:35	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 18:35	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:35	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 18:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 10:49	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 21:08	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:08	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:08	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:08	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:08	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:08	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	90	%.	48-123		1	04/13/20 13:00	04/13/20 21:08	321-60-8	
p-Terphenyl-d14 (S)	107	%.	68-138		1	04/13/20 13:00	04/13/20 21:08	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:54	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/14/20 16:54	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-101 **Lab ID: 50254306001** Collected: 04/08/20 13:34 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/14/20 16:54	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/14/20 16:54	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:54	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/14/20 16:54	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/14/20 16:54	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/14/20 16:54	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/14/20 16:54	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 16:54	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 16:54	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:54	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/14/20 16:54	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/14/20 16:54	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-101 **Lab ID: 50254306001** Collected: 04/08/20 13:34 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/14/20 16:54	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:54	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/14/20 16:54	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/14/20 16:54	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/14/20 16:54	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:54	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 16:54	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 16:54	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:54	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/14/20 16:54	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/14/20 16:54	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	85-116		1		04/14/20 16:54	460-00-4	
Dibromofluoromethane (S)	96	%.	75-120		1		04/14/20 16:54	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/14/20 16:54	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-102 **Lab ID: 50254306002** Collected: 04/08/20 14:29 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 19:30	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 19:30	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 19:30	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:40	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 18:40	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 18:40	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 18:40	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 18:40	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:40	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 18:40	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 10:57	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 21:19	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:19	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:19	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:19	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:19	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:19	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	96	%.	48-123		1	04/13/20 13:00	04/13/20 21:19	321-60-8	
p-Terphenyl-d14 (S)	108	%.	68-138		1	04/13/20 13:00	04/13/20 21:19	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:38	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/14/20 16:38	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-102 **Lab ID: 50254306002** Collected: 04/08/20 14:29 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/14/20 16:38	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/14/20 16:38	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:38	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/14/20 16:38	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/14/20 16:38	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/14/20 16:38	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/14/20 16:38	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 16:38	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 16:38	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:38	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/14/20 16:38	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/14/20 16:38	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-102 **Lab ID: 50254306002** Collected: 04/08/20 14:29 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/14/20 16:38	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/14/20 16:38	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/14/20 16:38	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/14/20 16:38	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/14/20 16:38	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 16:38	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 16:38	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 16:38	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 16:38	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/14/20 16:38	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/14/20 16:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	85-116		1		04/14/20 16:38	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/14/20 16:38	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/14/20 16:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-103 **Lab ID: 50254306003** Collected: 04/08/20 15:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 19:39	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 19:39	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 19:39	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:44	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 18:44	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 18:44	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 18:44	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 18:44	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:44	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 18:44	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:04	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 21:30	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:30	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:30	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:30	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:30	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:30	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	94	%.	48-123		1	04/13/20 13:00	04/13/20 21:30	321-60-8	
p-Terphenyl-d14 (S)	113	%.	68-138		1	04/13/20 13:00	04/13/20 21:30	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:11	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/14/20 17:11	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-103 **Lab ID: 50254306003** Collected: 04/08/20 15:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/14/20 17:11	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/14/20 17:11	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:11	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/14/20 17:11	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/14/20 17:11	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/14/20 17:11	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/14/20 17:11	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 17:11	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 17:11	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:11	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/14/20 17:11	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/14/20 17:11	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-103 **Lab ID: 50254306003** Collected: 04/08/20 15:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/14/20 17:11	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:11	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/14/20 17:11	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/14/20 17:11	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	79-01-6	
Trichlorofluoromethane	**1.9J**	ug/L	2.0	1.0	1		04/14/20 17:11	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:11	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 17:11	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 17:11	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:11	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/14/20 17:11	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/14/20 17:11	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	85-116		1		04/14/20 17:11	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		04/14/20 17:11	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/14/20 17:11	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-104 **Lab ID: 50254306004** Collected: 04/08/20 15:48 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 19:49	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 19:49	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 19:49	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:49	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 18:49	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 18:49	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 18:49	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 18:49	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 18:49	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 18:49	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:06	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 21:40	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:40	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:40	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:40	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:40	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	87	%.	48-123		1	04/13/20 13:00	04/13/20 21:40	321-60-8	
p-Terphenyl-d14 (S)	109	%.	68-138		1	04/13/20 13:00	04/13/20 21:40	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:43	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/14/20 17:43	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-104 **Lab ID: 50254306004** Collected: 04/08/20 15:48 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/14/20 17:43	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/14/20 17:43	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:43	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/14/20 17:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/14/20 17:43	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/14/20 17:43	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/14/20 17:43	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 17:43	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/14/20 17:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:43	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/14/20 17:43	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/14/20 17:43	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-104 **Lab ID: 50254306004** Collected: 04/08/20 15:48 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/14/20 17:43	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/14/20 17:43	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/14/20 17:43	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/14/20 17:43	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	79-01-6	
Trichlorofluoromethane	**2.3**	ug/L	2.0	1.0	1		04/14/20 17:43	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/14/20 17:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 17:43	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/14/20 17:43	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/14/20 17:43	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/14/20 17:43	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/14/20 17:43	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	85-116		1		04/14/20 17:43	460-00-4	
Dibromofluoromethane (S)	98	%.	75-120		1		04/14/20 17:43	1868-53-7	
Toluene-d8 (S)	99	%.	83-111		1		04/14/20 17:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-105 **Lab ID: 50254306005** Collected: 04/08/20 16:23 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 19:58	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 19:58	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 19:58	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:21	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:21	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:21	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:21	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:21	7439-92-1	
Selenium	**5.4**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:21	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:21	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:09	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 21:51	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:51	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 21:51	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:51	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 21:51	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 21:51	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	91	%.	48-123		1	04/13/20 13:00	04/13/20 21:51	321-60-8	
p-Terphenyl-d14 (S)	105	%.	68-138		1	04/13/20 13:00	04/13/20 21:51	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 00:49	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 00:49	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-105 **Lab ID: 50254306005** Collected: 04/08/20 16:23 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/15/20 00:49	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 00:49	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 00:49	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 00:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 00:49	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 00:49	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/15/20 00:49	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 00:49	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 00:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 00:49	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/15/20 00:49	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/15/20 00:49	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-105 **Lab ID: 50254306005** Collected: 04/08/20 16:23 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 00:49	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 00:49	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 00:49	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 00:49	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 00:49	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 00:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 00:49	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 00:49	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 00:49	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/15/20 00:49	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/15/20 00:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	111	%.	85-116		1		04/15/20 00:49	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		04/15/20 00:49	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 00:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-106 **Lab ID: 50254306006** Collected: 04/08/20 17:32 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 20:09	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 20:09	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 20:09	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:25	7440-38-2	
Barium	**135**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:25	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:25	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:25	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:25	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:25	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:25	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:11	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 22:02	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:02	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:02	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:02	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:02	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	93	%.	48-123		1	04/13/20 13:00	04/13/20 22:02	321-60-8	
p-Terphenyl-d14 (S)	106	%.	68-138		1	04/13/20 13:00	04/13/20 22:02	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:21	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 01:21	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-106 **Lab ID: 50254306006** Collected: 04/08/20 17:32 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/15/20 01:21	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 01:21	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:21	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	56-23-5	
Chlorobenzene	**8.3**	ug/L	1.0	1.0	1		04/15/20 01:21	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 01:21	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 01:21	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 01:21	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/15/20 01:21	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:21	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:21	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:21	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/15/20 01:21	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/15/20 01:21	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-106 **Lab ID: 50254306006** Collected: 04/08/20 17:32 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 01:21	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:21	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 01:21	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 01:21	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 01:21	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:21	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:21	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:21	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:21	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/15/20 01:21	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/15/20 01:21	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	85-116		1		04/15/20 01:21	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		04/15/20 01:21	1868-53-7	
Toluene-d8 (S)	96	%.	83-111		1		04/15/20 01:21	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-107 **Lab ID: 50254306007** Collected: 04/08/20 18:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 20:18	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 20:18	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 20:18	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:30	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:30	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:30	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:30	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:30	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:30	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:30	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:14	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 22:13	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:13	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:13	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:13	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:13	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:13	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	94	%.	48-123		1	04/13/20 13:00	04/13/20 22:13	321-60-8	
p-Terphenyl-d14 (S)	109	%.	68-138		1	04/13/20 13:00	04/13/20 22:13	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:54	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 01:54	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-107 **Lab ID: 50254306007** Collected: 04/08/20 18:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/15/20 01:54	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 01:54	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:54	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 01:54	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 01:54	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 01:54	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/15/20 01:54	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:54	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:54	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:54	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/15/20 01:54	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/15/20 01:54	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-107 **Lab ID: 50254306007** Collected: 04/08/20 18:08 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 01:54	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:54	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 01:54	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 01:54	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	79-00-5	
Trichloroethene	**18.5**	ug/L	1.0	1.0	1		04/15/20 01:54	79-01-6	
Trichlorofluoromethane	**4.5**	ug/L	2.0	1.0	1		04/15/20 01:54	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:54	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:54	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:54	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:54	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/15/20 01:54	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/15/20 01:54	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	108	%.	85-116		1		04/15/20 01:54	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 01:54	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 01:54	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-108 **Lab ID: 50254306008** Collected: 04/08/20 18:40 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 20:27	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 20:27	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 20:27	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:35	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:35	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:35	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:35	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:35	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:35	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:16	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 22:23	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:23	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:23	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:23	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:23	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	90	%.	48-123		1	04/13/20 13:00	04/13/20 22:23	321-60-8	
p-Terphenyl-d14 (S)	106	%.	68-138		1	04/13/20 13:00	04/13/20 22:23	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:27	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 02:27	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-108 **Lab ID: 50254306008** Collected: 04/08/20 18:40 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/15/20 02:27	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 02:27	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:27	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 02:27	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 02:27	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 02:27	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/15/20 02:27	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:27	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:27	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:27	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/15/20 02:27	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/15/20 02:27	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-108 **Lab ID: 50254306008** Collected: 04/08/20 18:40 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 02:27	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:27	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 02:27	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 02:27	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	79-01-6	
Trichlorofluoromethane	**1.5J**	ug/L	2.0	1.0	1		04/15/20 02:27	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:27	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:27	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:27	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:27	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/15/20 02:27	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/15/20 02:27	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	111	%.	85-116		1		04/15/20 02:27	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 02:27	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/15/20 02:27	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-109 **Lab ID: 50254306009** Collected: 04/08/20 19:14 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 20:37	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 20:37	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 20:37	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:39	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:39	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:39	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:39	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:39	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:39	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:39	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:19	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 22:34	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:34	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:34	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:34	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:34	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:34	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	87	%.	48-123		1	04/13/20 13:00	04/13/20 22:34	321-60-8	
p-Terphenyl-d14 (S)	104	%.	68-138		1	04/13/20 13:00	04/13/20 22:34	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:05	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 01:05	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-109 **Lab ID: 50254306009** Collected: 04/08/20 19:14 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 01:05	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 01:05	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:05	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 01:05	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 01:05	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 01:05	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 01:05	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:05	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:05	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:05	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 01:05	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 01:05	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-109 **Lab ID: 50254306009** Collected: 04/08/20 19:14 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 01:05	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:05	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 01:05	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 01:05	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 01:05	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:05	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:05	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:05	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:05	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 01:05	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 01:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	85-116		1		04/15/20 01:05	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 01:05	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 01:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-1 **Lab ID: 50254306010** Collected: 04/08/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 20:46	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 20:46	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 20:46	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:44	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:44	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:44	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:44	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:44	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:44	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:44	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:28	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/13/20 13:00	04/13/20 22:45	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:45	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/13/20 13:00	04/13/20 22:45	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:45	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/13/20 13:00	04/13/20 22:45	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/13/20 13:00	04/13/20 22:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	93	%.	48-123		1	04/13/20 13:00	04/13/20 22:45	321-60-8	
p-Terphenyl-d14 (S)	104	%.	68-138		1	04/13/20 13:00	04/13/20 22:45	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:38	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 01:38	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-1 **Lab ID: 50254306010** Collected: 04/08/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 01:38	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 01:38	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:38	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 01:38	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 01:38	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 01:38	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 01:38	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:38	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 01:38	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:38	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 01:38	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 01:38	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-1 **Lab ID: 50254306010** Collected: 04/08/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 01:38	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 01:38	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 01:38	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 01:38	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 01:38	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 01:38	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:38	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 01:38	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 01:38	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 01:38	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 01:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	110	%.	85-116		1		04/15/20 01:38	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 01:38	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 01:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-110 **Lab ID: 50254306011** Collected: 04/09/20 09:07 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 21:05	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 21:05	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 21:05	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:48	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:48	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:48	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:48	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:48	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:48	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:48	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:31	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 17:42	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:42	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:42	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:42	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:42	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:42	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	94	%.	48-123		1	04/15/20 11:20	04/15/20 17:42	321-60-8	
p-Terphenyl-d14 (S)	103	%.	68-138		1	04/15/20 11:20	04/15/20 17:42	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:10	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 02:10	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-110 **Lab ID: 50254306011** Collected: 04/09/20 09:07 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 02:10	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 02:10	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:10	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 02:10	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 02:10	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 02:10	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 02:10	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:10	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:10	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:10	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 02:10	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 02:10	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-110 **Lab ID: 50254306011** Collected: 04/09/20 09:07 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 02:10	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:10	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 02:10	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 02:10	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 02:10	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:10	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:10	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:10	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:10	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 02:10	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 02:10	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	109	%.	85-116		1		04/15/20 02:10	460-00-4	
Dibromofluoromethane (S)	98	%.	75-120		1		04/15/20 02:10	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/15/20 02:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-111 **Lab ID: 50254306012** Collected: 04/09/20 09:38 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 22:29	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 22:29	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 22:29	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:53	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:53	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:53	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:53	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:53	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:53	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:53	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:33	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 17:52	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:52	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 17:52	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:52	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 17:52	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 17:52	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	94	%.	48-123		1	04/15/20 11:20	04/15/20 17:52	321-60-8	
p-Terphenyl-d14 (S)	104	%.	68-138		1	04/15/20 11:20	04/15/20 17:52	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:43	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 02:43	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-111 **Lab ID: 50254306012** Collected: 04/09/20 09:38 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 02:43	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 02:43	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:43	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 02:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 02:43	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 02:43	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 02:43	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:43	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 02:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:43	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 02:43	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 02:43	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-111 **Lab ID: 50254306012** Collected: 04/09/20 09:38 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 02:43	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 02:43	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 02:43	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 02:43	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	79-00-5	
Trichloroethene	**2.7**	ug/L	1.0	1.0	1		04/15/20 02:43	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 02:43	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 02:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:43	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 02:43	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 02:43	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 02:43	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 02:43	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	112	%.	85-116		1		04/15/20 02:43	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		04/15/20 02:43	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/15/20 02:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-112 **Lab ID: 50254306013** Collected: 04/09/20 10:09 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 22:38	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 22:38	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 22:38	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:57	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 19:57	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 19:57	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 19:57	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 19:57	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 19:57	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 19:57	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:36	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 18:03	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:03	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:03	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:03	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:03	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	96	%.	48-123		1	04/15/20 11:20	04/15/20 18:03	321-60-8	
p-Terphenyl-d14 (S)	104	%.	68-138		1	04/15/20 11:20	04/15/20 18:03	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:16	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 03:16	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-112 **Lab ID: 50254306013** Collected: 04/09/20 10:09 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 03:16	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 03:16	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:16	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 03:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 03:16	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 03:16	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 03:16	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 03:16	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 03:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:16	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 03:16	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 03:16	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-112 **Lab ID: 50254306013** Collected: 04/09/20 10:09 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 03:16	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:16	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 03:16	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 03:16	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 03:16	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 03:16	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 03:16	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:16	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 03:16	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 03:16	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	111	%.	85-116		1		04/15/20 03:16	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 03:16	1868-53-7	
Toluene-d8 (S)	96	%.	83-111		1		04/15/20 03:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-113 **Lab ID: 50254306014** Collected: 04/09/20 11:01 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 22:48	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 22:48	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 22:48	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:02	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 20:02	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 20:02	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 20:02	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 20:02	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:02	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 20:02	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:38	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 18:14	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:14	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:14	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:14	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:14	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	95	%.	48-123		1	04/15/20 11:20	04/15/20 18:14	321-60-8	
p-Terphenyl-d14 (S)	106	%.	68-138		1	04/15/20 11:20	04/15/20 18:14	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:49	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 03:49	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-113 **Lab ID: 50254306014** Collected: 04/09/20 11:01 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 03:49	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 03:49	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:49	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 03:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 03:49	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 03:49	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 03:49	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 03:49	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 03:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:49	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 03:49	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 03:49	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-113 **Lab ID: 50254306014** Collected: 04/09/20 11:01 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 03:49	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 03:49	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 03:49	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 03:49	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 03:49	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 03:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 03:49	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 03:49	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 03:49	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 03:49	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 03:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	112	%.	85-116		1		04/15/20 03:49	460-00-4	
Dibromofluoromethane (S)	98	%.	75-120		1		04/15/20 03:49	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/15/20 03:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-114 **Lab ID: 50254306015** Collected: 04/09/20 11:36 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 22:57	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 22:57	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 22:57	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**10.8**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:16	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 20:16	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 20:16	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 20:16	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 20:16	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:16	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 20:16	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:41	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 18:24	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:24	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:24	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:24	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:24	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	92	%.	48-123		1	04/15/20 11:20	04/15/20 18:24	321-60-8	
p-Terphenyl-d14 (S)	82	%.	68-138		1	04/15/20 11:20	04/15/20 18:24	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:22	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 04:22	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-114 **Lab ID: 50254306015** Collected: 04/09/20 11:36 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	994-05-8	N2
Benzene	**1.9**	ug/L	1.0	1.0	1		04/15/20 04:22	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 04:22	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 04:22	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:22	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 04:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 04:22	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 04:22	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 04:22	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	75-34-3	
1,2-Dichloroethane	**1.1**	ug/L	1.0	1.0	1		04/15/20 04:22	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	75-35-4	
cis-1,2-Dichloroethene	**6.4**	ug/L	1.0	1.0	1		04/15/20 04:22	156-59-2	
trans-1,2-Dichloroethene	**1.2**	ug/L	1.0	1.0	1		04/15/20 04:22	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 04:22	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 04:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:22	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 04:22	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 04:22	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-114 **Lab ID: 50254306015** Collected: 04/09/20 11:36 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 04:22	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:22	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 04:22	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 04:22	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	79-00-5	
Trichloroethene	**1.4**	ug/L	1.0	1.0	1		04/15/20 04:22	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 04:22	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:22	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 04:22	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 04:22	108-67-8	
Vinyl chloride	**12.9**	ug/L	1.0	1.0	1		04/15/20 04:22	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 04:22	179601-23-1	
o-Xylene	**0.22J**	ug/L	1.0	0.16	1		04/15/20 04:22	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	112	%.	85-116		1		04/15/20 04:22	460-00-4	
Dibromofluoromethane (S)	97	%.	75-120		1		04/15/20 04:22	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 04:22	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-115 **Lab ID: 50254306016** Collected: 04/09/20 12:39 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 23:07	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 23:07	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 23:07	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:20	7440-38-2	
Barium	**106**	ug/L	100	100	1	04/13/20 08:44	04/15/20 20:20	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 20:20	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 20:20	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 20:20	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:20	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 20:20	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:43	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 18:35	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:35	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:35	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:35	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	91-57-6	
Naphthalene	**7.1**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	91-20-3	
Phenanthrene	**2.8**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:35	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	94	%.	48-123		1	04/15/20 11:20	04/15/20 18:35	321-60-8	
p-Terphenyl-d14 (S)	106	%.	68-138		1	04/15/20 11:20	04/15/20 18:35	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:54	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 04:54	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-115 **Lab ID: 50254306016** Collected: 04/09/20 12:39 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	994-05-8	N2
Benzene	**1.5**	ug/L	1.0	1.0	1		04/15/20 04:54	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 04:54	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 04:54	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:54	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 04:54	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 04:54	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 04:54	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 04:54	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 04:54	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 04:54	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:54	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 04:54	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 04:54	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: MW-115 **Lab ID: 50254306016** Collected: 04/09/20 12:39 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 04:54	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 04:54	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	1634-04-4	
Naphthalene	**6.9**	ug/L	5.0	5.0	1		04/15/20 04:54	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 04:54	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 04:54	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 04:54	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 04:54	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 04:54	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 04:54	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 04:54	75-01-4	
m&p-Xylene	**1.8J**	ug/L	2.0	0.24	1		04/15/20 04:54	179601-23-1	
o-Xylene	**0.66J**	ug/L	1.0	0.16	1		04/15/20 04:54	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	112	%.	85-116		1		04/15/20 04:54	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 04:54	1868-53-7	
Toluene-d8 (S)	95	%.	83-111		1		04/15/20 04:54	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-2 **Lab ID: 50254306017** Collected: 04/09/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		04/13/20 23:16	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		04/13/20 23:16	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		04/13/20 23:16	67-56-1	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:25	7440-38-2	
Barium	**<100**	ug/L	100	100	1	04/13/20 08:44	04/15/20 20:25	7440-39-3	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	04/13/20 08:44	04/15/20 20:25	7440-43-9	
Chromium	**<10.0**	ug/L	10.0	10.0	1	04/13/20 08:44	04/15/20 20:25	7440-47-3	
Lead	**<3.0**	ug/L	3.0	3.0	1	04/13/20 08:44	04/15/20 20:25	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	04/13/20 08:44	04/15/20 20:25	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	04/13/20 08:44	04/15/20 20:25	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.079**	ug/L	0.20	0.079	1	04/16/20 10:33	04/17/20 11:46	7439-97-6	
8270 PAH by 3511	Analytical Method: EPA 8270 by SIM 40E Preparation Method: EPA 3511 Pace Analytical Services - Indianapolis								
Acenaphthene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	83-32-9	
Acenaphthylene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	208-96-8	
Anthracene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	120-12-7	
Benzo(a)anthracene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	56-55-3	
Benzo(a)pyrene	**<0.20**	ug/L	0.20	0.20	1	04/15/20 11:20	04/15/20 18:46	50-32-8	
Benzo(b)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	205-99-2	
Benzo(g,h,i)perylene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	191-24-2	
Benzo(k)fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	207-08-9	
Chrysene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	218-01-9	
Dibenz(a,h)anthracene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:46	53-70-3	
Fluoranthene	**<1.0**	ug/L	1.0	1.0	1	04/15/20 11:20	04/15/20 18:46	206-44-0	
Fluorene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:46	193-39-5	
2-Methylnaphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	91-57-6	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	91-20-3	
Phenanthrene	**<2.0**	ug/L	2.0	2.0	1	04/15/20 11:20	04/15/20 18:46	85-01-8	
Pyrene	**<5.0**	ug/L	5.0	5.0	1	04/15/20 11:20	04/15/20 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	99	%.	48-123		1	04/15/20 11:20	04/15/20 18:46	321-60-8	
p-Terphenyl-d14 (S)	99	%.	68-138		1	04/15/20 11:20	04/15/20 18:46	1718-51-0	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 05:27	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 05:27	107-13-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-2 **Lab ID: 50254306017** Collected: 04/09/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 05:27	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 05:27	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 05:27	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 05:27	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 05:27	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 05:27	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 05:27	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 05:27	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 05:27	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 05:27	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 05:27	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 05:27	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: DUP-2 **Lab ID: 50254306017** Collected: 04/09/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 05:27	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 05:27	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 05:27	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 05:27	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 05:27	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 05:27	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 05:27	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 05:27	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 05:27	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 05:27	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 05:27	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	113	%.	85-116		1		04/15/20 05:27	460-00-4	
Dibromofluoromethane (S)	98	%.	75-120		1		04/15/20 05:27	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/15/20 05:27	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: Trip Blank **Lab ID: 50254306018** Collected: 04/09/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 06:00	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/15/20 06:00	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		04/15/20 06:00	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/15/20 06:00	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/15/20 06:00	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/15/20 06:00	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/15/20 06:00	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/15/20 06:00	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		04/15/20 06:00	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 06:00	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/15/20 06:00	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/15/20 06:00	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		04/15/20 06:00	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Sample: Trip Blank **Lab ID: 50254306018** Collected: 04/09/20 00:00 Received: 04/10/20 08:25 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		04/15/20 06:00	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/15/20 06:00	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/15/20 06:00	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/15/20 06:00	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/15/20 06:00	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/15/20 06:00	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/15/20 06:00	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 06:00	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/15/20 06:00	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/15/20 06:00	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		04/15/20 06:00	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		04/15/20 06:00	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	113	%.	85-116		1		04/15/20 06:00	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		04/15/20 06:00	1868-53-7	
Toluene-d8 (S)	97	%.	83-111		1		04/15/20 06:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556643
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010

METHOD BLANK: 2567608 Matrix: Water
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/L	<1000	5000	1000	04/13/20 18:59	
Methanol	ug/L	<400	5000	400	04/13/20 18:59	
n-Butanol	ug/L	<800	5000	800	04/13/20 18:59	

LABORATORY CONTROL SAMPLE: 2567609

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/L	50000	49800	100	69-128	
Methanol	ug/L	50000	48700	97	73-118	
n-Butanol	ug/L	50000	47900	96	77-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2568539 2568540

Parameter	Units	50254210001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/L	ND	50000	50000	44300	47500	89	95	64-132	7	20	
Methanol	ug/L	ND	50000	50000	43000	46400	86	93	66-123	7	20	
n-Butanol	ug/L	ND	50000	50000	41900	45500	84	91	66-130	8	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556644
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

METHOD BLANK: 2567612 Matrix: Water
Associated Lab Samples: 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/L	<1000	5000	1000	04/13/20 19:09	
Methanol	ug/L	<400	5000	400	04/13/20 19:09	
n-Butanol	ug/L	<800	5000	800	04/13/20 19:09	

LABORATORY CONTROL SAMPLE: 2567613

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/L	50000	48500	97	69-128	
Methanol	ug/L	50000	47700	95	73-118	
n-Butanol	ug/L	50000	46300	93	77-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2568541 2568542

Parameter	Units	50254306011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/L	<1000	50000	50000	44500	45000	89	90	64-132	1	20	
Methanol	ug/L	<400	50000	50000	43000	43800	86	88	66-123	2	20	
n-Butanol	ug/L	<800	50000	50000	41900	42700	84	85	66-130	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 557018
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

METHOD BLANK: 2569132
Matrix: Water
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.079	0.20	0.079	04/17/20 10:44	

LABORATORY CONTROL SAMPLE: 2569133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.4	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569134 2569135

Parameter	Units	50254306002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.079	5	5	4.8	4.9	96	97	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556720
QC Batch Method: EPA 200.2
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

METHOD BLANK: 2567969 Matrix: Water
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	<5.0	5.0	5.0	04/15/20 18:26	
Barium	ug/L	<100	100	100	04/15/20 18:26	
Cadmium	ug/L	<1.0	1.0	1.0	04/15/20 18:26	
Chromium	ug/L	<10.0	10.0	10.0	04/15/20 18:26	
Lead	ug/L	<3.0	3.0	3.0	04/15/20 18:26	
Selenium	ug/L	<5.0	5.0	5.0	04/15/20 18:26	
Silver	ug/L	<0.20	0.25	0.20	04/15/20 18:26	

LABORATORY CONTROL SAMPLE: 2567970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	40	36.5	91	80-120	
Barium	ug/L	40	<100	105	80-120	
Cadmium	ug/L	40	39.8	100	80-120	
Chromium	ug/L	40	38.9	97	80-120	
Lead	ug/L	40	41.1	103	80-120	
Selenium	ug/L	40	38.1	95	80-120	
Silver	ug/L	40	41.4	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2567971 2567972

Parameter	Units	50254306004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	<5.0	40	40	37.8	38.0	93	94	75-125	1	20	
Barium	ug/L	<100	40	40	115	112	102	95	75-125	3	20	
Cadmium	ug/L	<1.0	40	40	38.2	37.3	95	93	75-125	2	20	
Chromium	ug/L	<10.0	40	40	37.4	37.8	93	94	75-125	1	20	
Lead	ug/L	<3.0	40	40	40.7	40.0	102	100	75-125	2	20	
Selenium	ug/L	<5.0	40	40	38.1	38.9	92	94	75-125	2	20	
Silver	ug/L	<0.20	40	40	38.7	37.6	97	94	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556981
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306002, 50254306003, 50254306004

METHOD BLANK: 2568931 Matrix: Water
Associated Lab Samples: 50254306002, 50254306003, 50254306004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:17	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/14/20 12:17	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	04/14/20 12:17	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	04/14/20 12:17	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/14/20 12:17	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	04/14/20 12:17	
2-Hexanone	ug/L	<50.0	50.0	50.0	04/14/20 12:17	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	04/14/20 12:17	N2
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	04/14/20 12:17	
Acetone	ug/L	<50.0	50.0	50.0	04/14/20 12:17	
Acrylonitrile	ug/L	<2.0	2.0	2.0	04/14/20 12:17	
Benzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Bromobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Bromochloromethane	ug/L	<0.59	1.0	0.59	04/14/20 12:17	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Bromoform	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Bromomethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Carbon disulfide	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Chlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Chloroethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Chloroform	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Chloromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
cis-1,3-Dichloropropene	ug/L	<100	100	100	04/14/20 12:17	
Cyclohexane	ug/L	<10.0	10.0	10.0	04/14/20 12:17	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

METHOD BLANK: 2568931 Matrix: Water
Associated Lab Samples: 50254306002, 50254306003, 50254306004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Dibromomethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:17	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:17	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Hexachloroethane	ug/L	<5.0	5.0	5.0	04/14/20 12:17	N2
Iodomethane	ug/L	<0.45	5.0	0.45	04/14/20 12:17	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
m&p-Xylene	ug/L	<0.16	2.0	0.16	04/14/20 12:17	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
Methylene Chloride	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
n-Propylbenzene	ug/L	<100	100	100	04/14/20 12:17	
Naphthalene	ug/L	<5.0	5.0	5.0	04/14/20 12:17	
o-Xylene	ug/L	<0.39	1.0	0.39	04/14/20 12:17	
p-Isopropyltoluene	ug/L	<0.28	1.0	0.28	04/14/20 12:17	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Styrene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:17	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	04/14/20 12:17	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	04/14/20 12:17	N2
Toluene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
trans-1,3-Dichloropropene	ug/L	<100	100	100	04/14/20 12:17	
trans-1,4-Dichloro-2-butene	ug/L	<0.82	100	0.82	04/14/20 12:17	
Trichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	04/14/20 12:17	
Vinyl chloride	ug/L	<1.0	1.0	1.0	04/14/20 12:17	
4-Bromofluorobenzene (S)	%.	110	85-116		04/14/20 12:17	
Dibromofluoromethane (S)	%.	99	75-120		04/14/20 12:17	
Toluene-d8 (S)	%.	97	83-111		04/14/20 12:17	

LABORATORY CONTROL SAMPLE: 2568932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.6	101	78-120	
1,1,1-Trichloroethane	ug/L	50	57.7	115	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.0	92	64-126	
1,1,2-Trichloroethane	ug/L	50	49.3	99	73-125	
1,1-Dichloroethane	ug/L	50	58.5	117	77-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2568932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	55.5	111	79-128	
1,2,3-Trichlorobenzene	ug/L	50	53.6	107	75-126	
1,2,3-Trichloropropane	ug/L	50	49.4	99	71-131	
1,2,4-Trichlorobenzene	ug/L	50	55.9	112	76-130	
1,2,4-Trimethylbenzene	ug/L	50	54.0	108	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	49.6	99	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	50.3	101	76-122	
1,2-Dichlorobenzene	ug/L	50	48.5	97	79-113	
1,2-Dichloroethane	ug/L	50	52.1	104	66-127	
1,2-Dichloropropane	ug/L	50	55.6	111	75-127	
1,3,5-Trimethylbenzene	ug/L	50	53.6	107	78-116	
1,3-Dichlorobenzene	ug/L	50	50.5	101	79-120	
1,4-Dichlorobenzene	ug/L	50	48.2	96	77-117	
2-Butanone (MEK)	ug/L	250	212	85	61-138	
2-Hexanone	ug/L	250	232	93	58-138	
2-Methylnaphthalene	ug/L	50	50.3	101	60-136	N2
4-Methyl-2-pentanone (MIBK)	ug/L	250	223	89	60-131	
Acetone	ug/L	250	220	88	57-126	
Acrylonitrile	ug/L	200	177	89	65-127	
Benzene	ug/L	50	53.2	106	75-118	
Bromobenzene	ug/L	50	56.9	114	68-127	
Bromochloromethane	ug/L	50	47.3	95	66-126	
Bromodichloromethane	ug/L	50	51.3	103	75-120	
Bromoform	ug/L	50	43.3	87	61-119	
Bromomethane	ug/L	50	76.1	152	12-184	
Carbon disulfide	ug/L	50	50.8	102	71-123	
Carbon tetrachloride	ug/L	50	55.7	111	73-125	
Chlorobenzene	ug/L	50	51.3	103	80-115	
Chloroethane	ug/L	50	38.0	76	46-133	
Chloroform	ug/L	50	51.4	103	75-117	
Chloromethane	ug/L	50	32.3	65	33-124	
cis-1,2-Dichloroethene	ug/L	50	50.9	102	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	110	73-130	
Cyclohexane	ug/L	50	54.7	109	58-122	N2
Dibromochloromethane	ug/L	50	48.2	96	69-124	
Dibromomethane	ug/L	50	50.8	102	76-124	
Dichlorodifluoromethane	ug/L	50	21.2	42	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	51.7	103	70-130	
Ethylbenzene	ug/L	50	53.4	107	78-120	
Iodomethane	ug/L	100	64.8	65	10-184	
Isopropylbenzene (Cumene)	ug/L	50	58.8	118	82-122	
m&p-Xylene	ug/L	100	109	109	79-118	
Methyl-tert-butyl ether	ug/L	50	51.7	103	79-125	
Methylene Chloride	ug/L	50	51.0	102	68-126	
n-Butylbenzene	ug/L	50	54.8	110	73-123	
n-Propylbenzene	ug/L	50	<100	110	75-119	
Naphthalene	ug/L	50	49.9	100	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2568932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	50	54.6	109	78-121	
p-Isopropyltoluene	ug/L	50	53.5	107	82-119	
sec-Butylbenzene	ug/L	50	53.9	108	79-119	
Styrene	ug/L	50	54.8	110	80-121	
tert-Butyl Alcohol	ug/L	100	96.6	97	10-200	
tert-Butylbenzene	ug/L	50	40.8	82	58-106	
Tetrachloroethene	ug/L	50	52.9	106	70-123	
Tetrahydrofuran	ug/L	50	<90.0	90	50-150	N2
Toluene	ug/L	50	51.1	102	72-114	
trans-1,2-Dichloroethene	ug/L	50	56.3	113	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	101	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	201	100	34-130	
Trichloroethene	ug/L	50	55.4	111	78-120	
Trichlorofluoromethane	ug/L	50	58.3	117	57-156	
Vinyl chloride	ug/L	50	38.7	77	55-122	
4-Bromofluorobenzene (S)	%.			117	85-116	S0
Dibromofluoromethane (S)	%.			101	75-120	
Toluene-d8 (S)	%.			99	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556983
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306001

METHOD BLANK: 2568935 Matrix: Water
Associated Lab Samples: 50254306001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:33	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/14/20 12:33	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	04/14/20 12:33	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	04/14/20 12:33	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/14/20 12:33	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	04/14/20 12:33	
2-Hexanone	ug/L	<50.0	50.0	50.0	04/14/20 12:33	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	04/14/20 12:33	N2
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	04/14/20 12:33	
Acetone	ug/L	<50.0	50.0	50.0	04/14/20 12:33	
Acrylonitrile	ug/L	<2.0	2.0	2.0	04/14/20 12:33	
Benzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Bromobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Bromochloromethane	ug/L	<0.22	1.0	0.22	04/14/20 12:33	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Bromoform	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Bromomethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Carbon disulfide	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Chlorobenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Chloroethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Chloroform	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Chloromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
cis-1,3-Dichloropropene	ug/L	<100	100	100	04/14/20 12:33	
Cyclohexane	ug/L	<10.0	10.0	10.0	04/14/20 12:33	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

METHOD BLANK: 2568935 Matrix: Water
Associated Lab Samples: 50254306001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Dibromomethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:33	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:33	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Hexachloroethane	ug/L	<5.0	5.0	5.0	04/14/20 12:33	N2
Iodomethane	ug/L	<0.51	5.0	0.51	04/14/20 12:33	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
m&p-Xylene	ug/L	<0.24	2.0	0.24	04/14/20 12:33	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
Methylene Chloride	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
n-Propylbenzene	ug/L	<100	100	100	04/14/20 12:33	
Naphthalene	ug/L	<5.0	5.0	5.0	04/14/20 12:33	
o-Xylene	ug/L	<0.16	1.0	0.16	04/14/20 12:33	
p-Isopropyltoluene	ug/L	<0.11	1.0	0.11	04/14/20 12:33	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Styrene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	04/14/20 12:33	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	04/14/20 12:33	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	04/14/20 12:33	N2
Toluene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
trans-1,3-Dichloropropene	ug/L	<100	100	100	04/14/20 12:33	
trans-1,4-Dichloro-2-butene	ug/L	<0.40	100	0.40	04/14/20 12:33	
Trichloroethene	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	04/14/20 12:33	
Vinyl chloride	ug/L	<1.0	1.0	1.0	04/14/20 12:33	
4-Bromofluorobenzene (S)	%.	112	85-116		04/14/20 12:33	
Dibromofluoromethane (S)	%.	98	75-120		04/14/20 12:33	
Toluene-d8 (S)	%.	96	83-111		04/14/20 12:33	

LABORATORY CONTROL SAMPLE: 2568936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	47.3	95	78-120	
1,1,1-Trichloroethane	ug/L	50	54.3	109	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	44.6	89	64-126	
1,1,2-Trichloroethane	ug/L	50	44.9	90	73-125	
1,1-Dichloroethane	ug/L	50	51.2	102	77-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2568936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	51.5	103	79-128	
1,2,3-Trichlorobenzene	ug/L	50	51.4	103	75-126	
1,2,3-Trichloropropane	ug/L	50	45.5	91	71-131	
1,2,4-Trichlorobenzene	ug/L	50	52.6	105	76-130	
1,2,4-Trimethylbenzene	ug/L	50	50.9	102	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	45.9	92	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	45.1	90	76-122	
1,2-Dichlorobenzene	ug/L	50	46.5	93	79-113	
1,2-Dichloroethane	ug/L	50	48.7	97	66-127	
1,2-Dichloropropane	ug/L	50	51.9	104	75-127	
1,3,5-Trimethylbenzene	ug/L	50	51.6	103	78-116	
1,3-Dichlorobenzene	ug/L	50	48.2	96	79-120	
1,4-Dichlorobenzene	ug/L	50	46.9	94	77-117	
2-Butanone (MEK)	ug/L	250	206	82	61-138	
2-Hexanone	ug/L	250	209	83	58-138	
2-Methylnaphthalene	ug/L	50	48.1	96	60-136	N2
4-Methyl-2-pentanone (MIBK)	ug/L	250	201	80	60-131	
Acetone	ug/L	250	226	91	57-126	
Acrylonitrile	ug/L	200	157	79	65-127	
Benzene	ug/L	50	50.2	100	75-118	
Bromobenzene	ug/L	50	54.5	109	68-127	
Bromochloromethane	ug/L	50	41.9	84	66-126	
Bromodichloromethane	ug/L	50	49.2	98	75-120	
Bromoform	ug/L	50	41.4	83	61-119	
Bromomethane	ug/L	50	47.7	95	12-184	
Carbon disulfide	ug/L	50	48.4	97	71-123	
Carbon tetrachloride	ug/L	50	49.8	100	73-125	
Chlorobenzene	ug/L	50	48.5	97	80-115	
Chloroethane	ug/L	50	40.0	80	46-133	
Chloroform	ug/L	50	46.9	94	75-117	
Chloromethane	ug/L	50	26.9	54	33-124	
cis-1,2-Dichloroethene	ug/L	50	50.2	100	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	99	73-130	
Cyclohexane	ug/L	50	50.6	101	58-122	N2
Dibromochloromethane	ug/L	50	44.9	90	69-124	
Dibromomethane	ug/L	50	47.8	96	76-124	
Dichlorodifluoromethane	ug/L	50	19.7	39	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	47.9	96	70-130	
Ethylbenzene	ug/L	50	50.0	100	78-120	
Iodomethane	ug/L	100	62.5	62	10-184	
Isopropylbenzene (Cumene)	ug/L	50	55.3	111	82-122	
m&p-Xylene	ug/L	100	104	104	79-118	
Methyl-tert-butyl ether	ug/L	50	47.8	96	79-125	
Methylene Chloride	ug/L	50	51.2	102	68-126	
n-Butylbenzene	ug/L	50	53.6	107	73-123	
n-Propylbenzene	ug/L	50	<100	106	75-119	
Naphthalene	ug/L	50	45.8	92	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2568936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	50	52.5	105	78-121	
p-Isopropyltoluene	ug/L	50	52.6	105	82-119	
sec-Butylbenzene	ug/L	50	53.1	106	79-119	
Styrene	ug/L	50	51.5	103	80-121	
tert-Butyl Alcohol	ug/L	100	101	101	10-200	
tert-Butylbenzene	ug/L	50	38.8	78	58-106	
Tetrachloroethene	ug/L	50	50.5	101	70-123	
Tetrahydrofuran	ug/L	50	<90.0	90	50-150	N2
Toluene	ug/L	50	46.4	93	72-114	
trans-1,2-Dichloroethene	ug/L	50	49.3	99	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	96	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	232	116	34-130	
Trichloroethene	ug/L	50	51.4	103	78-120	
Trichlorofluoromethane	ug/L	50	52.2	104	57-156	
Vinyl chloride	ug/L	50	36.6	73	55-122	
4-Bromofluorobenzene (S)	%.			116	85-116	
Dibromofluoromethane (S)	%.			97	75-120	
Toluene-d8 (S)	%.			98	83-111	

MATRIX SPIKE SAMPLE: 2569137

Parameter	Units	50254208002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	50	49.5	99	51-135	
1,1,1-Trichloroethane	ug/L	ND	50	57.0	114	56-144	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	46.4	93	47-137	
1,1,2-Trichloroethane	ug/L	ND	50	46.4	93	55-136	
1,1-Dichloroethane	ug/L	ND	50	53.5	107	53-140	
1,1-Dichloroethene	ug/L	ND	50	55.1	110	60-140	
1,2,3-Trichlorobenzene	ug/L	ND	50	48.1	96	35-140	
1,2,3-Trichloropropane	ug/L	ND	50	47.1	94	54-142	
1,2,4-Trichlorobenzene	ug/L	ND	50	48.8	98	31-143	
1,2,4-Trimethylbenzene	ug/L	ND	50	51.1	102	13-152	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	47.5	95	29-145	
1,2-Dibromoethane (EDB)	ug/L	ND	50	46.9	94	56-136	
1,2-Dichlorobenzene	ug/L	ND	50	47.1	94	38-133	
1,2-Dichloroethane	ug/L	ND	50	50.7	101	46-145	
1,2-Dichloropropane	ug/L	ND	50	54.0	108	55-141	
1,3,5-Trimethylbenzene	ug/L	ND	50	50.6	101	23-145	
1,3-Dichlorobenzene	ug/L	ND	50	47.3	95	31-144	
1,4-Dichlorobenzene	ug/L	ND	50	46.8	94	31-138	
2-Butanone (MEK)	ug/L	ND	250	222	89	42-150	
2-Hexanone	ug/L	ND	250	230	92	43-146	
2-Methylnaphthalene	ug/L	ND	50	43.9	88	32-142	N2
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	215	86	42-142	
Acetone	ug/L	ND	250	227	91	36-142	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

MATRIX SPIKE SAMPLE: 2569137

Parameter	Units	50254208002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Acrylonitrile	ug/L	ND	200	173	86	48-137	
Benzene	ug/L	ND	50	53.8	108	49-135	
Bromobenzene	ug/L	ND	50	57.7	115	37-144	
Bromochloromethane	ug/L	ND	50	45.4	91	47-140	
Bromodichloromethane	ug/L	ND	50	51.6	103	55-133	
Bromoform	ug/L	ND	50	40.9	82	45-125	
Bromomethane	ug/L	ND	50	36.3	73	10-191	
Carbon disulfide	ug/L	ND	50	50.4	101	49-136	
Carbon tetrachloride	ug/L	ND	50	53.7	107	55-134	
Chlorobenzene	ug/L	ND	50	50.2	100	42-135	
Chloroethane	ug/L	ND	50	42.8	86	25-154	
Chloroform	ug/L	ND	50	49.8	100	57-130	
Chloromethane	ug/L	ND	50	28.4	57	17-129	
cis-1,2-Dichloroethene	ug/L	ND	50	51.7	103	53-134	
cis-1,3-Dichloropropene	ug/L	ND	50	<100	98	50-136	
Cyclohexane	ug/L	ND	50	52.9	106	33-130	N2
Dibromochloromethane	ug/L	ND	50	46.6	93	53-133	
Dibromomethane	ug/L	ND	50	49.3	99	57-139	
Dichlorodifluoromethane	ug/L	ND	50	22.1	44	21-154	
Diethyl ether (Ethyl ether)	ug/L	ND	50	50.3	101	70-130	
Ethylbenzene	ug/L	ND	50	52.6	105	28-147	
Iodomethane	ug/L	ND	100	41.3	41	10-186	
Isopropylbenzene (Cumene)	ug/L	ND	50	57.3	115	27-151	
m&p-Xylene	ug/L	ND	100	108	108	28-145	
Methyl-tert-butyl ether	ug/L	ND	50	50.2	100	60-142	
Methylene Chloride	ug/L	ND	50	51.7	103	46-138	
n-Butylbenzene	ug/L	ND	50	50.7	101	10-153	
n-Propylbenzene	ug/L	ND	50	<100	104	20-149	
Naphthalene	ug/L	ND	50	45.8	92	41-139	
o-Xylene	ug/L	ND	50	54.4	109	31-145	
p-Isopropyltoluene	ug/L	ND	50	50.8	102	15-155	
sec-Butylbenzene	ug/L	ND	50	51.3	103	17-153	
Styrene	ug/L	ND	50	8.3	17	42-139	M1
tert-Butyl Alcohol	ug/L	ND	100	97.5	97	10-170	
tert-Butylbenzene	ug/L	ND	50	38.7	77	18-123	
Tetrachloroethene	ug/L	ND	50	51.3	103	32-140	
Tetrahydrofuran	ug/L	ND	50	<90.0	95	50-150	N2
Toluene	ug/L	ND	50	48.2	96	42-131	
trans-1,2-Dichloroethene	ug/L	ND	50	53.2	106	57-138	
trans-1,3-Dichloropropene	ug/L	ND	50	<100	94	47-128	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	241	121	10-135	
Trichloroethene	ug/L	ND	50	53.4	107	47-137	
Trichlorofluoromethane	ug/L	ND	50	56.8	114	42-163	
Vinyl chloride	ug/L	ND	50	40.5	81	36-136	
4-Bromofluorobenzene (S)	%.				116	85-116	
Dibromofluoromethane (S)	%.				99	75-120	
Toluene-d8 (S)	%.				96	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

SAMPLE DUPLICATE: 2569136

Parameter	Units	50254208001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,1-Trichloroethane	ug/L	ND	<1.0		20	
1,1,2,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,2-Trichloroethane	ug/L	ND	<1.0		20	
1,1-Dichloroethane	ug/L	ND	<1.0		20	
1,1-Dichloroethene	ug/L	ND	<1.0		20	
1,2,3-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,3-Trichloropropane	ug/L	ND	<1.0		20	
1,2,3-Trimethylbenzene	ug/L	ND	<5.0		20	N2
1,2,4-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,4-Trimethylbenzene	ug/L	ND	<1.0		20	
1,2-Dibromo-3-chloropropane	ug/L	ND	<0.25		20	
1,2-Dibromoethane (EDB)	ug/L	ND	<0.23		20	
1,2-Dichlorobenzene	ug/L	ND	<1.0		20	
1,2-Dichloroethane	ug/L	ND	<1.0		20	
1,2-Dichloropropane	ug/L	ND	<1.0		20	
1,3,5-Trimethylbenzene	ug/L	ND	<1.0		20	
1,3-Dichlorobenzene	ug/L	ND	<1.0		20	
1,4-Dichlorobenzene	ug/L	ND	<1.0		20	
2-Butanone (MEK)	ug/L	ND	<25.0		20	
2-Hexanone	ug/L	ND	<50.0		20	
2-Methylnaphthalene	ug/L	ND	<5.0		20	N2
4-Methyl-2-pentanone (MIBK)	ug/L	ND	<50.0		20	
Acetone	ug/L	ND	<50.0		20	
Acrylonitrile	ug/L	ND	<2.0		20	
Benzene	ug/L	ND	<1.0		20	
Bromobenzene	ug/L	ND	<1.0		20	
Bromochloromethane	ug/L	ND	<0.22		20	
Bromodichloromethane	ug/L	ND	<1.0		20	
Bromoform	ug/L	ND	<1.0		20	
Bromomethane	ug/L	ND	<5.0		20	
Carbon disulfide	ug/L	ND	<5.0		20	
Carbon tetrachloride	ug/L	ND	<1.0		20	
Chlorobenzene	ug/L	ND	<1.0		20	
Chloroethane	ug/L	ND	<5.0		20	
Chloroform	ug/L	ND	<1.0		20	
Chloromethane	ug/L	ND	<5.0		20	
cis-1,2-Dichloroethene	ug/L	ND	<1.0		20	
cis-1,3-Dichloropropene	ug/L	ND	<100		20	
Cyclohexane	ug/L	ND	<10.0		20	N2
Dibromochloromethane	ug/L	ND	<5.0		20	
Dibromomethane	ug/L	ND	<5.0		20	
Dichlorodifluoromethane	ug/L	ND	<5.0		20	
Diethyl ether (Ethyl ether)	ug/L	ND	<5.0		20	
Diisopropyl ether	ug/L	ND	<5.0		20	N2
Ethyl-tert-butyl ether	ug/L	ND	<5.0		20	N2
Ethylbenzene	ug/L	ND	<1.0		20	

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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

SAMPLE DUPLICATE: 2569136

Parameter	Units	50254208001 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloroethane	ug/L	ND	<5.0		20	N2
Iodomethane	ug/L	ND	<0.51		20	
Isopropylbenzene (Cumene)	ug/L	ND	<5.0		20	
m&p-Xylene	ug/L	ND	<0.24		20	
Methyl-tert-butyl ether	ug/L	ND	<5.0		20	
Methylene Chloride	ug/L	ND	<5.0		20	
n-Butylbenzene	ug/L	ND	<1.0		20	
n-Propylbenzene	ug/L	ND	<100		20	
Naphthalene	ug/L	ND	<5.0		20	
o-Xylene	ug/L	ND	<0.16		20	
p-Isopropyltoluene	ug/L	ND	<0.11		20	
sec-Butylbenzene	ug/L	ND	<1.0		20	
Styrene	ug/L	ND	<1.0		20	
tert-Amylmethyl ether	ug/L	ND	<5.0		20	N2
tert-Butyl Alcohol	ug/L	ND	<50.0		20	
tert-Butylbenzene	ug/L	ND	<1.0		20	
Tetrachloroethene	ug/L	ND	<1.0		20	
Tetrahydrofuran	ug/L	ND	<90.0		20	N2
Toluene	ug/L	ND	<1.0		20	
trans-1,2-Dichloroethene	ug/L	ND	<1.0		20	
trans-1,3-Dichloropropene	ug/L	ND	<100		20	
trans-1,4-Dichloro-2-butene	ug/L	ND	<0.40		20	
Trichloroethene	ug/L	ND	<1.0		20	
Trichlorofluoromethane	ug/L	ND	<1.0		20	
Vinyl chloride	ug/L	ND	<1.0		20	
4-Bromofluorobenzene (S)	%.	108	112			
Dibromofluoromethane (S)	%.	87	98			
Toluene-d8 (S)	%.	97	97			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 557020
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306005, 50254306006, 50254306007, 50254306008

METHOD BLANK: 2569143 Matrix: Water
Associated Lab Samples: 50254306005, 50254306006, 50254306007, 50254306008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:16	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/15/20 00:16	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	04/15/20 00:16	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	04/15/20 00:16	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/15/20 00:16	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	04/15/20 00:16	
2-Hexanone	ug/L	<50.0	50.0	50.0	04/15/20 00:16	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	04/15/20 00:16	N2
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	04/15/20 00:16	
Acetone	ug/L	<50.0	50.0	50.0	04/15/20 00:16	
Acrylonitrile	ug/L	<2.0	2.0	2.0	04/15/20 00:16	
Benzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Bromobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Bromochloromethane	ug/L	<0.59	1.0	0.59	04/15/20 00:16	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Bromoform	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Bromomethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Carbon disulfide	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Chlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Chloroethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Chloroform	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Chloromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
cis-1,3-Dichloropropene	ug/L	<100	100	100	04/15/20 00:16	
Cyclohexane	ug/L	<10.0	10.0	10.0	04/15/20 00:16	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

METHOD BLANK: 2569143 Matrix: Water
Associated Lab Samples: 50254306005, 50254306006, 50254306007, 50254306008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Dibromomethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:16	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:16	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Hexachloroethane	ug/L	<5.0	5.0	5.0	04/15/20 00:16	N2
Iodomethane	ug/L	<0.45	5.0	0.45	04/15/20 00:16	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
m&p-Xylene	ug/L	<0.16	2.0	0.16	04/15/20 00:16	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
Methylene Chloride	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
n-Propylbenzene	ug/L	<100	100	100	04/15/20 00:16	
Naphthalene	ug/L	<5.0	5.0	5.0	04/15/20 00:16	
o-Xylene	ug/L	<0.39	1.0	0.39	04/15/20 00:16	
p-Isopropyltoluene	ug/L	<0.28	1.0	0.28	04/15/20 00:16	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Styrene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:16	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	04/15/20 00:16	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	04/15/20 00:16	N2
Toluene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
trans-1,3-Dichloropropene	ug/L	<100	100	100	04/15/20 00:16	
trans-1,4-Dichloro-2-butene	ug/L	<0.82	100	0.82	04/15/20 00:16	
Trichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	04/15/20 00:16	
Vinyl chloride	ug/L	<1.0	1.0	1.0	04/15/20 00:16	
4-Bromofluorobenzene (S)	%.	110	85-116		04/15/20 00:16	
Dibromofluoromethane (S)	%.	98	75-120		04/15/20 00:16	
Toluene-d8 (S)	%.	97	83-111		04/15/20 00:16	

LABORATORY CONTROL SAMPLE: 2569144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.7	97	78-120	
1,1,1-Trichloroethane	ug/L	50	57.6	115	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.2	94	64-126	
1,1,2-Trichloroethane	ug/L	50	47.8	96	73-125	
1,1-Dichloroethane	ug/L	50	57.8	116	77-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2569144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	55.1	110	79-128	
1,2,3-Trichlorobenzene	ug/L	50	51.5	103	75-126	
1,2,3-Trichloropropane	ug/L	50	51.5	103	71-131	
1,2,4-Trichlorobenzene	ug/L	50	52.1	104	76-130	
1,2,4-Trimethylbenzene	ug/L	50	53.4	107	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	50.6	101	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	49.2	98	76-122	
1,2-Dichlorobenzene	ug/L	50	47.3	95	79-113	
1,2-Dichloroethane	ug/L	50	52.5	105	66-127	
1,2-Dichloropropane	ug/L	50	55.4	111	75-127	
1,3,5-Trimethylbenzene	ug/L	50	52.9	106	78-116	
1,3-Dichlorobenzene	ug/L	50	49.4	99	79-120	
1,4-Dichlorobenzene	ug/L	50	46.6	93	77-117	
2-Butanone (MEK)	ug/L	250	224	90	61-138	
2-Hexanone	ug/L	250	235	94	58-138	
2-Methylnaphthalene	ug/L	50	50.3	101	60-136	N2
4-Methyl-2-pentanone (MIBK)	ug/L	250	222	89	60-131	
Acetone	ug/L	250	245	98	57-126	
Acrylonitrile	ug/L	200	187	93	65-127	
Benzene	ug/L	50	52.9	106	75-118	
Bromobenzene	ug/L	50	56.1	112	68-127	
Bromochloromethane	ug/L	50	47.9	96	66-126	
Bromodichloromethane	ug/L	50	51.6	103	75-120	
Bromoform	ug/L	50	43.5	87	61-119	
Bromomethane	ug/L	50	59.0	118	12-184	
Carbon disulfide	ug/L	50	48.2	96	71-123	
Carbon tetrachloride	ug/L	50	54.1	108	73-125	
Chlorobenzene	ug/L	50	49.5	99	80-115	
Chloroethane	ug/L	50	37.2	74	46-133	
Chloroform	ug/L	50	52.2	104	75-117	
Chloromethane	ug/L	50	31.7	63	33-124	
cis-1,2-Dichloroethene	ug/L	50	50.4	101	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	100	73-130	
Cyclohexane	ug/L	50	52.5	105	58-122	N2
Dibromochloromethane	ug/L	50	47.7	95	69-124	
Dibromomethane	ug/L	50	51.5	103	76-124	
Dichlorodifluoromethane	ug/L	50	19.6	39	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	51.0	102	70-130	
Ethylbenzene	ug/L	50	51.5	103	78-120	
Iodomethane	ug/L	100	44.8	45	10-184	
Isopropylbenzene (Cumene)	ug/L	50	56.2	112	82-122	
m&p-Xylene	ug/L	100	104	104	79-118	
Methyl-tert-butyl ether	ug/L	50	51.8	104	79-125	
Methylene Chloride	ug/L	50	50.6	101	68-126	
n-Butylbenzene	ug/L	50	50.5	101	73-123	
n-Propylbenzene	ug/L	50	<100	106	75-119	
Naphthalene	ug/L	50	50.8	102	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2569144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	50	52.7	105	78-121	
p-Isopropyltoluene	ug/L	50	51.1	102	82-119	
sec-Butylbenzene	ug/L	50	52.1	104	79-119	
Styrene	ug/L	50	53.1	106	80-121	
tert-Butyl Alcohol	ug/L	100	101	101	10-200	
tert-Butylbenzene	ug/L	50	39.7	79	58-106	
Tetrachloroethene	ug/L	50	48.7	97	70-123	
Tetrahydrofuran	ug/L	50	<90.0	91	50-150	N2
Toluene	ug/L	50	48.5	97	72-114	
trans-1,2-Dichloroethene	ug/L	50	54.6	109	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	94	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	180	90	34-130	
Trichloroethene	ug/L	50	53.8	108	78-120	
Trichlorofluoromethane	ug/L	50	56.3	113	57-156	
Vinyl chloride	ug/L	50	37.3	75	55-122	
4-Bromofluorobenzene (S)	%.			116	85-116	
Dibromofluoromethane (S)	%.			100	75-120	
Toluene-d8 (S)	%.			96	83-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569145 2569146

Parameter	Units	50253985001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	50	49.7	50.7	99	101	51-135	2	20	
1,1,1-Trichloroethane	ug/L	<1.0	50	50	59.9	58.6	120	117	56-144	2	20	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	50	47.4	47.5	95	95	47-137	0	20	
1,1,2-Trichloroethane	ug/L	<1.0	50	50	50.0	49.0	100	98	55-136	2	20	
1,1-Dichloroethane	ug/L	<1.0	50	50	61.5	59.7	123	119	53-140	3	20	
1,1-Dichloroethene	ug/L	<1.0	50	50	57.5	57.2	115	114	60-140	1	20	
1,2,3-Trichlorobenzene	ug/L	<1.0	50	50	52.0	52.1	104	104	35-140	0	20	
1,2,3-Trichloropropane	ug/L	<1.0	50	50	50.6	52.4	101	105	54-142	3	20	
1,2,4-Trichlorobenzene	ug/L	<1.0	50	50	53.1	51.6	106	103	31-143	3	20	
1,2,4-Trimethylbenzene	ug/L	<5.0	50	50	54.0	53.0	108	106	13-152	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<5.0	50	50	49.1	49.1	98	98	29-145	0	20	
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	50	50.2	50.5	100	101	56-136	1	20	
1,2-Dichlorobenzene	ug/L	<1.0	50	50	47.9	47.4	96	95	38-133	1	20	
1,2-Dichloroethane	ug/L	<1.0	50	50	52.8	53.4	106	107	46-145	1	20	
1,2-Dichloropropane	ug/L	<1.0	50	50	56.7	57.6	113	115	55-141	2	20	
1,3,5-Trimethylbenzene	ug/L	<5.0	50	50	53.6	52.7	107	105	23-145	2	20	
1,3-Dichlorobenzene	ug/L	<1.0	50	50	49.8	49.0	100	98	31-144	2	20	
1,4-Dichlorobenzene	ug/L	<1.0	50	50	47.7	47.1	95	94	31-138	1	20	
2-Butanone (MEK)	ug/L	<5.0	250	250	218	224	87	90	42-150	3	20	
2-Hexanone	ug/L	<5.0	250	250	233	238	93	95	43-146	2	20	
2-Methylnaphthalene	ug/L	<20.0	50	50	49.1	50.3	98	101	32-142	2	20	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569145 2569146

Parameter	Units	50253985001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	250	250	222	225	89	90	42-142	1	20	
Acetone	ug/L	<20.0	250	250	223	245	89	98	36-142	9	20	
Acrylonitrile	ug/L	<5.0	200	200	182	186	91	93	48-137	2	20	
Benzene	ug/L	<1.0	50	50	55.8	55.2	112	110	49-135	1	20	
Bromobenzene	ug/L	<1.0	50	50	56.3	56.8	113	114	37-144	1	20	
Bromochloromethane	ug/L	<1.0	50	50	48.7	46.6	97	93	47-140	4	20	
Bromodichloromethane	ug/L	<1.0	50	50	54.0	53.8	108	108	55-133	0	20	
Bromoform	ug/L	<1.0	50	50	42.9	44.1	86	88	45-125	3	20	
Bromomethane	ug/L	<5.0	50	50	62.7	64.8	125	130	10-191	3	20	
Carbon disulfide	ug/L	<1.0	50	50	51.2	50.1	102	100	49-136	2	20	
Carbon tetrachloride	ug/L	<1.0	50	50	57.0	57.0	114	114	55-134	0	20	
Chlorobenzene	ug/L	<1.0	50	50	51.0	51.3	102	103	42-135	1	20	
Chloroethane	ug/L	<5.0	50	50	39.4	38.8	79	78	25-154	2	20	
Chloroform	ug/L	<1.0	50	50	54.1	53.6	108	107	57-130	1	20	
Chloromethane	ug/L	<5.0	50	50	35.1	34.9	70	70	17-129	1	20	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	51.3	50.8	103	102	53-134	1	20	
cis-1,3-Dichloropropene	ug/L	<1.0	50	50	<100	<100	100	99	50-136	1	20	
Cyclohexane	ug/L	<20.0	50	50	56.6	55.1	113	110	33-130	3	20	N2
Dibromochloromethane	ug/L	<1.0	50	50	47.8	47.7	96	95	53-133	0	20	
Dibromomethane	ug/L	<1.0	50	50	52.4	53.3	105	107	57-139	2	20	
Dichlorodifluoromethane	ug/L	<2.0	50	50	22.5	21.7	45	43	21-154	4	20	
Diethyl ether (Ethyl ether)	ug/L	<5.0	50	50	51.8	51.4	104	103	70-130	1	20	
Ethylbenzene	ug/L	<1.0	50	50	53.1	53.0	106	106	28-147	0	20	
Iodomethane	ug/L	<1.0	100	100	45.3	57.4	45	57	10-186	24	20	R1
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	58.4	58.4	117	117	27-151	0	20	
m&p-Xylene	ug/L	<2.0	100	100	107	107	107	107	28-145	0	20	
Methyl-tert-butyl ether	ug/L	<4.0	50	50	51.0	51.7	102	103	60-142	1	20	
Methylene Chloride	ug/L	<5.0	50	50	50.8	50.8	102	102	46-138	0	20	
n-Butylbenzene	ug/L	<1.0	50	50	51.9	50.4	104	101	10-153	3	20	
n-Propylbenzene	ug/L	<1.0	50	50	<100	<100	111	109	20-149	1	20	
Naphthalene	ug/L	<1.0	50	50	49.4	50.5	99	101	41-139	2	20	
o-Xylene	ug/L	<1.0	50	50	54.7	54.6	109	109	31-145	0	20	
p-Isopropyltoluene	ug/L	<1.0	50	50	52.1	50.9	104	102	15-155	2	20	
sec-Butylbenzene	ug/L	<1.0	50	50	53.9	52.2	108	104	17-153	3	20	
Styrene	ug/L	<1.0	50	50	54.5	54.5	109	109	42-139	0	20	
tert-Butyl Alcohol	ug/L	<10.0	100	100	77.5	82.2	77	82	10-170	6	20	
tert-Butylbenzene	ug/L	<1.0	50	50	41.5	40.9	83	82	18-123	1	20	
Tetrachloroethene	ug/L	<1.0	50	50	51.5	50.2	103	100	32-140	3	20	
Tetrahydrofuran	ug/L	<12.5	50	50	<90.0	<90.0	93	91	50-150	3	20	N2
Toluene	ug/L	<1.0	50	50	51.4	50.4	103	101	42-131	2	20	
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	56.1	55.4	112	111	57-138	1	20	
trans-1,3-Dichloropropene	ug/L	<1.0	50	50	<100	<100	92	93	47-128	1	20	
trans-1,4-Dichloro-2-butene	ug/L	<5.0	200	200	174	177	87	89	10-135	2	20	
Trichloroethene	ug/L	<1.0	50	50	56.8	56.2	114	112	47-137	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569145 2569146

Parameter	Units	50253985001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Trichlorofluoromethane	ug/L	<1.0	50	50	58.7	58.3	117	117	42-163	1	20	
Vinyl chloride	ug/L	<1.0	50	50	40.6	39.6	81	79	36-136	2	20	
4-Bromofluorobenzene (S)	%.						115	116	85-116			
Dibromofluoromethane (S)	%.						98	100	75-120			
Toluene-d8 (S)	%.						98	96	83-111			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 557022 | Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 | Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017, 50254306018

METHOD BLANK: 2569149 Matrix: Water
Associated Lab Samples: 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017, 50254306018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:32	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/15/20 00:32	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	04/15/20 00:32	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	04/15/20 00:32	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/15/20 00:32	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	04/15/20 00:32	
2-Hexanone	ug/L	<50.0	50.0	50.0	04/15/20 00:32	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	04/15/20 00:32	N2
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	04/15/20 00:32	
Acetone	ug/L	<50.0	50.0	50.0	04/15/20 00:32	
Acrylonitrile	ug/L	<2.0	2.0	2.0	04/15/20 00:32	
Benzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Bromobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Bromochloromethane	ug/L	<0.22	1.0	0.22	04/15/20 00:32	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Bromoform	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Bromomethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Carbon disulfide	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Chlorobenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Chloroethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Chloroform	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Chloromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
cis-1,3-Dichloropropene	ug/L	<100	100	100	04/15/20 00:32	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

METHOD BLANK: 2569149 Matrix: Water

Associated Lab Samples: 50254306009, 50254306010, 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017, 50254306018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyclohexane	ug/L	<10.0	10.0	10.0	04/15/20 00:32	N2
Dibromochloromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Dibromomethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:32	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:32	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Hexachloroethane	ug/L	<5.0	5.0	5.0	04/15/20 00:32	N2
Iodomethane	ug/L	<0.51	5.0	0.51	04/15/20 00:32	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
m&p-Xylene	ug/L	<0.24	2.0	0.24	04/15/20 00:32	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
Methylene Chloride	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
n-Propylbenzene	ug/L	<100	100	100	04/15/20 00:32	
Naphthalene	ug/L	<5.0	5.0	5.0	04/15/20 00:32	
o-Xylene	ug/L	<0.16	1.0	0.16	04/15/20 00:32	
p-Isopropyltoluene	ug/L	<0.11	1.0	0.11	04/15/20 00:32	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Styrene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	04/15/20 00:32	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	04/15/20 00:32	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	04/15/20 00:32	N2
Toluene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
trans-1,3-Dichloropropene	ug/L	<100	100	100	04/15/20 00:32	
trans-1,4-Dichloro-2-butene	ug/L	<0.40	100	0.40	04/15/20 00:32	
Trichloroethene	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	04/15/20 00:32	
Vinyl chloride	ug/L	<1.0	1.0	1.0	04/15/20 00:32	
4-Bromofluorobenzene (S)	%.	111	85-116		04/15/20 00:32	
Dibromofluoromethane (S)	%.	97	75-120		04/15/20 00:32	
Toluene-d8 (S)	%.	97	83-111		04/15/20 00:32	

LABORATORY CONTROL SAMPLE: 2569150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.8	94	78-120	
1,1,1-Trichloroethane	ug/L	50	52.4	105	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	45.4	91	64-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2569150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2-Trichloroethane	ug/L	50	43.7	87	73-125	
1,1-Dichloroethane	ug/L	50	49.9	100	77-123	
1,1-Dichloroethene	ug/L	50	49.1	98	79-128	
1,2,3-Trichlorobenzene	ug/L	50	47.5	95	75-126	
1,2,3-Trichloropropane	ug/L	50	45.9	92	71-131	
1,2,4-Trichlorobenzene	ug/L	50	47.7	95	76-130	
1,2,4-Trimethylbenzene	ug/L	50	48.9	98	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	47.2	94	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	46.1	92	76-122	
1,2-Dichlorobenzene	ug/L	50	44.8	90	79-113	
1,2-Dichloroethane	ug/L	50	47.3	95	66-127	
1,2-Dichloropropane	ug/L	50	50.3	101	75-127	
1,3,5-Trimethylbenzene	ug/L	50	48.7	97	78-116	
1,3-Dichlorobenzene	ug/L	50	45.1	90	79-120	
1,4-Dichlorobenzene	ug/L	50	44.4	89	77-117	
2-Butanone (MEK)	ug/L	250	228	91	61-138	
2-Hexanone	ug/L	250	223	89	58-138	
2-Methylnaphthalene	ug/L	50	46.9	94	60-136	N2
4-Methyl-2-pentanone (MIBK)	ug/L	250	214	86	60-131	
Acetone	ug/L	250	238	95	57-126	
Acrylonitrile	ug/L	200	170	85	65-127	
Benzene	ug/L	50	49.4	99	75-118	
Bromobenzene	ug/L	50	53.7	107	68-127	
Bromochloromethane	ug/L	50	41.1	82	66-126	
Bromodichloromethane	ug/L	50	47.4	95	75-120	
Bromoform	ug/L	50	42.4	85	61-119	
Bromomethane	ug/L	50	38.1	76	12-184	
Carbon disulfide	ug/L	50	44.6	89	71-123	
Carbon tetrachloride	ug/L	50	49.0	98	73-125	
Chlorobenzene	ug/L	50	47.1	94	80-115	
Chloroethane	ug/L	50	39.3	79	46-133	
Chloroform	ug/L	50	46.4	93	75-117	
Chloromethane	ug/L	50	26.1	52	33-124	
cis-1,2-Dichloroethene	ug/L	50	48.0	96	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	93	73-130	
Cyclohexane	ug/L	50	47.0	94	58-122	N2
Dibromochloromethane	ug/L	50	43.1	86	69-124	
Dibromomethane	ug/L	50	47.0	94	76-124	
Dichlorodifluoromethane	ug/L	50	18.4	37	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	45.8	92	70-130	
Ethylbenzene	ug/L	50	48.3	97	78-120	
Iodomethane	ug/L	100	50.4	50	10-184	
Isopropylbenzene (Cumene)	ug/L	50	53.5	107	82-122	
m&p-Xylene	ug/L	100	102	102	79-118	
Methyl-tert-butyl ether	ug/L	50	48.0	96	79-125	
Methylene Chloride	ug/L	50	48.9	98	68-126	
n-Butylbenzene	ug/L	50	47.9	96	73-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2569150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
n-Propylbenzene	ug/L	50	<100	100	75-119	
Naphthalene	ug/L	50	45.3	91	70-130	
o-Xylene	ug/L	50	51.3	103	78-121	
p-Isopropyltoluene	ug/L	50	48.0	96	82-119	
sec-Butylbenzene	ug/L	50	48.7	97	79-119	
Styrene	ug/L	50	50.5	101	80-121	
tert-Butyl Alcohol	ug/L	100	115	115	10-200	
tert-Butylbenzene	ug/L	50	36.9	74	58-106	
Tetrachloroethene	ug/L	50	46.8	94	70-123	
Tetrahydrofuran	ug/L	50	<90.0	95	50-150	N2
Toluene	ug/L	50	45.2	90	72-114	
trans-1,2-Dichloroethene	ug/L	50	47.1	94	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	88	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	220	110	34-130	
Trichloroethene	ug/L	50	48.8	98	78-120	
Trichlorofluoromethane	ug/L	50	50.1	100	57-156	
Vinyl chloride	ug/L	50	35.5	71	55-122	
4-Bromofluorobenzene (S)	%.			118	85-116	S0
Dibromofluoromethane (S)	%.			97	75-120	
Toluene-d8 (S)	%.			97	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 556788
QC Batch Method: EPA 3511
Analysis Method: EPA 8270 by SIM 40E
Analysis Description: 8270 Water PAH 40 by SIM MSSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010

METHOD BLANK: 2568220 Matrix: Water
Associated Lab Samples: 50254306001, 50254306002, 50254306003, 50254306004, 50254306005, 50254306006, 50254306007, 50254306008, 50254306009, 50254306010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Acenaphthene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Acenaphthylene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Anthracene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Benzo(a)anthracene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Benzo(a)pyrene	ug/L	<0.20	0.20	0.20	04/13/20 19:00	
Benzo(b)fluoranthene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Benzo(g,h,i)perylene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Benzo(k)fluoranthene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Chrysene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Dibenz(a,h)anthracene	ug/L	<2.0	2.0	2.0	04/13/20 19:00	
Fluoranthene	ug/L	<1.0	1.0	1.0	04/13/20 19:00	
Fluorene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Indeno(1,2,3-cd)pyrene	ug/L	<2.0	2.0	2.0	04/13/20 19:00	
Naphthalene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
Phenanthrene	ug/L	<2.0	2.0	2.0	04/13/20 19:00	
Pyrene	ug/L	<5.0	5.0	5.0	04/13/20 19:00	
2-Fluorobiphenyl (S)	%.	105	48-123		04/13/20 19:00	
p-Terphenyl-d14 (S)	%.	111	68-138		04/13/20 19:00	

LABORATORY CONTROL SAMPLE: 2568221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	25	19.4	78	45-121	
Acenaphthene	ug/L	25	22.3	89	58-113	
Acenaphthylene	ug/L	25	26.3	105	74-128	
Anthracene	ug/L	25	29.7	119	68-142	
Benzo(a)anthracene	ug/L	25	29.0	116	78-142	
Benzo(a)pyrene	ug/L	25	28.9	115	76-142	
Benzo(b)fluoranthene	ug/L	25	29.0	116	69-144	
Benzo(g,h,i)perylene	ug/L	25	25.1	100	56-133	
Benzo(k)fluoranthene	ug/L	25	28.2	113	69-142	
Chrysene	ug/L	25	25.8	103	74-122	
Dibenz(a,h)anthracene	ug/L	25	28.0	112	56-144	
Fluoranthene	ug/L	25	32.0	128	79-149	
Fluorene	ug/L	25	27.7	111	69-131	
Indeno(1,2,3-cd)pyrene	ug/L	25	27.2	109	62-139	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2568221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	25	19.9	80	49-117	
Phenanthrene	ug/L	25	28.7	115	74-128	
Pyrene	ug/L	25	27.2	109	71-127	
2-Fluorobiphenyl (S)	%.			106	48-123	
p-Terphenyl-d14 (S)	%.			102	68-138	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2568222 2568223

Parameter	Units	50254255010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/L	ND	25	25	21.2	21.9	85	88	45-124	4	20	
Acenaphthene	ug/L	ND	25	25	24.0	24.6	96	98	57-116	3	20	
Acenaphthylene	ug/L	ND	25	25	28.5	28.8	114	115	77-129	1	20	
Anthracene	ug/L	ND	25	25	31.6	31.5	126	126	80-141	0	20	
Benzo(a)anthracene	ug/L	ND	25	25	30.8	30.4	123	122	88-141	1	20	
Benzo(a)pyrene	ug/L	ND	25	25	30.8	30.8	123	123	80-143	0	20	
Benzo(b)fluoranthene	ug/L	ND	25	25	32.7	30.5	131	122	79-143	7	20	
Benzo(g,h,i)perylene	ug/L	ND	25	25	26.8	27.2	107	109	66-129	1	20	
Benzo(k)fluoranthene	ug/L	ND	25	25	28.8	30.8	115	123	74-142	7	20	
Chrysene	ug/L	ND	25	25	27.5	27.8	110	111	78-122	1	20	
Dibenz(a,h)anthracene	ug/L	ND	25	25	29.8	30.0	119	120	67-139	1	20	
Fluoranthene	ug/L	ND	25	25	34.2	34.4	137	138	88-149	1	20	
Fluorene	ug/L	ND	25	25	29.6	29.6	118	118	71-135	0	20	
Indeno(1,2,3-cd)pyrene	ug/L	ND	25	25	28.9	29.1	116	116	72-135	1	20	
Naphthalene	ug/L	ND	25	25	21.9	22.7	87	91	41-128	4	20	
Phenanthrene	ug/L	ND	25	25	30.2	30.9	121	124	74-134	2	20	
Pyrene	ug/L	ND	25	25	28.9	29.5	116	118	79-126	2	20	
2-Fluorobiphenyl (S)	%.						99	92	48-123			
p-Terphenyl-d14 (S)	%.						102	95	68-138			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

QC Batch: 557175
QC Batch Method: EPA 3511
Analysis Method: EPA 8270 by SIM 40E
Analysis Description: 8270 Water PAH 40 by SIM MSSV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

METHOD BLANK: 2569648 Matrix: Water
Associated Lab Samples: 50254306011, 50254306012, 50254306013, 50254306014, 50254306015, 50254306016, 50254306017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Acenaphthene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Acenaphthylene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Anthracene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Benzo(a)anthracene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Benzo(a)pyrene	ug/L	<0.20	0.20	0.20	04/15/20 17:21	
Benzo(b)fluoranthene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Benzo(g,h,i)perylene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Benzo(k)fluoranthene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Chrysene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Dibenz(a,h)anthracene	ug/L	<2.0	2.0	2.0	04/15/20 17:21	
Fluoranthene	ug/L	<1.0	1.0	1.0	04/15/20 17:21	
Fluorene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Indeno(1,2,3-cd)pyrene	ug/L	<2.0	2.0	2.0	04/15/20 17:21	
Naphthalene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
Phenanthrene	ug/L	<2.0	2.0	2.0	04/15/20 17:21	
Pyrene	ug/L	<5.0	5.0	5.0	04/15/20 17:21	
2-Fluorobiphenyl (S)	%.	100	48-123		04/15/20 17:21	
p-Terphenyl-d14 (S)	%.	106	68-138		04/15/20 17:21	

LABORATORY CONTROL SAMPLE: 2569649

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	25	16.5	66	45-121	
Acenaphthene	ug/L	25	18.9	76	58-113	
Acenaphthylene	ug/L	25	23.1	92	74-128	
Anthracene	ug/L	25	28.6	114	68-142	
Benzo(a)anthracene	ug/L	25	29.3	117	78-142	
Benzo(a)pyrene	ug/L	25	28.9	116	76-142	
Benzo(b)fluoranthene	ug/L	25	28.8	115	69-144	
Benzo(g,h,i)perylene	ug/L	25	25.5	102	56-133	
Benzo(k)fluoranthene	ug/L	25	27.6	111	69-142	
Chrysene	ug/L	25	26.2	105	74-122	
Dibenz(a,h)anthracene	ug/L	25	28.2	113	56-144	
Fluoranthene	ug/L	25	32.9	132	79-149	
Fluorene	ug/L	25	25.1	100	69-131	
Indeno(1,2,3-cd)pyrene	ug/L	25	27.4	110	62-139	
Naphthalene	ug/L	25	17.2	69	49-117	
Phenanthrene	ug/L	25	27.8	111	74-128	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50254306

LABORATORY CONTROL SAMPLE: 2569649

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/L	25	26.2	105	71-127	
2-Fluorobiphenyl (S)	%.			93	48-123	
p-Terphenyl-d14 (S)	%.			100	68-138	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569650 2569651

Parameter	Units	50254357002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/L	ND	25	25	18.4	19.5	74	78	45-124	6	20	
Acenaphthene	ug/L	ND	25	25	20.8	22.3	83	89	57-116	7	20	
Acenaphthylene	ug/L	ND	25	25	25.2	26.7	101	107	77-129	6	20	
Anthracene	ug/L	ND	25	25	30.7	32.0	123	128	80-141	4	20	
Benzo(a)anthracene	ug/L	ND	25	25	33.2	32.3	133	129	88-141	3	20	
Benzo(a)pyrene	ug/L	ND	25	25	32.1	33.5	128	134	80-143	4	20	
Benzo(b)fluoranthene	ug/L	ND	25	25	32.9	36.4	132	146	79-143	10	20	M1
Benzo(g,h,i)perylene	ug/L	ND	25	25	26.6	27.9	106	112	66-129	5	20	
Benzo(k)fluoranthene	ug/L	ND	25	25	31.0	31.7	124	127	74-142	2	20	
Chrysene	ug/L	ND	25	25	27.3	29.6	109	118	78-122	8	20	
Dibenz(a,h)anthracene	ug/L	ND	25	25	29.3	31.0	117	124	67-139	5	20	
Fluoranthene	ug/L	ND	25	25	33.7	34.0	135	136	88-149	1	20	
Fluorene	ug/L	ND	25	25	26.2	27.6	105	110	71-135	5	20	
Indeno(1,2,3-cd)pyrene	ug/L	ND	25	25	28.7	30.3	115	121	72-135	5	20	
Naphthalene	ug/L	ND	25	25	19.1	20.5	77	82	41-128	7	20	
Phenanthrene	ug/L	ND	25	25	30.5	31.4	122	126	74-134	3	20	
Pyrene	ug/L	ND	25	25	31.3	32.8	125	131	79-126	5	20	M1
2-Fluorobiphenyl (S)	%.						85	92	48-123			
p-Terphenyl-d14 (S)	%.						102	106	68-138			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale
Pace Project No.: 50254306

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50254306001	**MW-101**	EPA 8015 Alcohol-Glycol	556643		
50254306002	**MW-102**	EPA 8015 Alcohol-Glycol	556643		
50254306003	**MW-103**	EPA 8015 Alcohol-Glycol	556643		
50254306004	**MW-104**	EPA 8015 Alcohol-Glycol	556643		
50254306005	**MW-105**	EPA 8015 Alcohol-Glycol	556643		
50254306006	**MW-106**	EPA 8015 Alcohol-Glycol	556643		
50254306007	**MW-107**	EPA 8015 Alcohol-Glycol	556643		
50254306008	**MW-108**	EPA 8015 Alcohol-Glycol	556643		
50254306009	**MW-109**	EPA 8015 Alcohol-Glycol	556643		
50254306010	**DUP-1**	EPA 8015 Alcohol-Glycol	556643		
50254306011	**MW-110**	EPA 8015 Alcohol-Glycol	556644		
50254306012	**MW-111**	EPA 8015 Alcohol-Glycol	556644		
50254306013	**MW-112**	EPA 8015 Alcohol-Glycol	556644		
50254306014	**MW-113**	EPA 8015 Alcohol-Glycol	556644		
50254306015	**MW-114**	EPA 8015 Alcohol-Glycol	556644		
50254306016	**MW-115**	EPA 8015 Alcohol-Glycol	556644		
50254306017	**DUP-2**	EPA 8015 Alcohol-Glycol	556644		
50254306001	**MW-101**	EPA 200.2	556720	EPA 6020	556885
50254306002	**MW-102**	EPA 200.2	556720	EPA 6020	556885
50254306003	**MW-103**	EPA 200.2	556720	EPA 6020	556885
50254306004	**MW-104**	EPA 200.2	556720	EPA 6020	556885
50254306005	**MW-105**	EPA 200.2	556720	EPA 6020	556885
50254306006	**MW-106**	EPA 200.2	556720	EPA 6020	556885
50254306007	**MW-107**	EPA 200.2	556720	EPA 6020	556885
50254306008	**MW-108**	EPA 200.2	556720	EPA 6020	556885
50254306009	**MW-109**	EPA 200.2	556720	EPA 6020	556885
50254306010	**DUP-1**	EPA 200.2	556720	EPA 6020	556885
50254306011	**MW-110**	EPA 200.2	556720	EPA 6020	556885
50254306012	**MW-111**	EPA 200.2	556720	EPA 6020	556885
50254306013	**MW-112**	EPA 200.2	556720	EPA 6020	556885
50254306014	**MW-113**	EPA 200.2	556720	EPA 6020	556885
50254306015	**MW-114**	EPA 200.2	556720	EPA 6020	556885
50254306016	**MW-115**	EPA 200.2	556720	EPA 6020	556885
50254306017	**DUP-2**	EPA 200.2	556720	EPA 6020	556885
50254306001	**MW-101**	EPA 7470	557018	EPA 7470	557589
50254306002	**MW-102**	EPA 7470	557018	EPA 7470	557589
50254306003	**MW-103**	EPA 7470	557018	EPA 7470	557589
50254306004	**MW-104**	EPA 7470	557018	EPA 7470	557589
50254306005	**MW-105**	EPA 7470	557018	EPA 7470	557589
50254306006	**MW-106**	EPA 7470	557018	EPA 7470	557589
50254306007	**MW-107**	EPA 7470	557018	EPA 7470	557589
50254306008	**MW-108**	EPA 7470	557018	EPA 7470	557589
50254306009	**MW-109**	EPA 7470	557018	EPA 7470	557589
50254306010	**DUP-1**	EPA 7470	557018	EPA 7470	557589
50254306011	**MW-110**	EPA 7470	557018	EPA 7470	557589
50254306012	**MW-111**	EPA 7470	557018	EPA 7470	557589
50254306013	**MW-112**	EPA 7470	557018	EPA 7470	557589

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50254306

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50254306014	**MW-113**	EPA 7470	557018	EPA 7470	557589
50254306015	**MW-114**	EPA 7470	557018	EPA 7470	557589
50254306016	**MW-115**	EPA 7470	557018	EPA 7470	557589
50254306017	**DUP-2**	EPA 7470	557018	EPA 7470	557589
50254306001	**MW-101**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306002	**MW-102**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306003	**MW-103**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306004	**MW-104**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306005	**MW-105**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306006	**MW-106**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306007	**MW-107**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306008	**MW-108**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306009	**MW-109**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306010	**DUP-1**	EPA 3511	556788	EPA 8270 by SIM 40E	556848
50254306011	**MW-110**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306012	**MW-111**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306013	**MW-112**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306014	**MW-113**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306015	**MW-114**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306016	**MW-115**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306017	**DUP-2**	EPA 3511	557175	EPA 8270 by SIM 40E	557316
50254306001	**MW-101**	EPA 5030B/8260	556983		
50254306002	**MW-102**	EPA 5030B/8260	556981		
50254306003	**MW-103**	EPA 5030B/8260	556981		
50254306004	**MW-104**	EPA 5030B/8260	556981		
50254306005	**MW-105**	EPA 5030B/8260	557020		
50254306006	**MW-106**	EPA 5030B/8260	557020		
50254306007	**MW-107**	EPA 5030B/8260	557020		
50254306008	**MW-108**	EPA 5030B/8260	557020		
50254306009	**MW-109**	EPA 5030B/8260	557022		
50254306010	**DUP-1**	EPA 5030B/8260	557022		
50254306011	**MW-110**	EPA 5030B/8260	557022		
50254306012	**MW-111**	EPA 5030B/8260	557022		
50254306013	**MW-112**	EPA 5030B/8260	557022		
50254306014	**MW-113**	EPA 5030B/8260	557022		
50254306015	**MW-114**	EPA 5030B/8260	557022		
50254306016	**MW-115**	EPA 5030B/8260	557022		
50254306017	**DUP-2**	EPA 5030B/8260	557022		
50254306018	**Trip Blank**	EPA 5030B/8260	557022		

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CHAIN-OF-CUSTODY / Analytical Reques

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant field

WO# : 50254306

50254306

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	MI

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	Residual Chlorine (Y/N)
1	MW-101	WT	G	4/8/20	1334			54.1	9	6		1	3						3	3	2	1	
2	MW-102				1429			54.2	9														
3	MW-103				1508			53.1	9														
4	MW-104				1548			54.9	9														
5	MW-105				1623			54.1	9														
6	MW-106				1732			56.7	9														
7	MW-107				1808			51.6	9														
8	MW-108				1840			50.3	9														
9	MW-109				1914			49.0	9														
10	DUP1				0000			49.0	9														
11	MW-110			4/9/20	0907			43.5	9														
12	MW-111				0938			43.3	9														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	Spencer Overbeck / ATC	4/9/20	1700		4.10.20	0825	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Spencer Overbeck					
SIGNATURE of SAMPLER:	Spencer Overbeck	DATE Signed: 4/9/20				

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CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO# : 50254306

PM: BJH **Due Date: 04/21/20**

CLIENT: GR-ATC

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency	
State / Location	MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	Residual Chlorine (Y/N)
1	MW-112	WT	G	4/9/20	1009			13.7	9	5		1	3				Y	3	3	2	1	
2	MW-113				1101			14.6															
3	MW-114				1136			15.7															
4	MW-115				1239			16.0															
5	DUP 2				0000			15.7															
6	Trip ~~Blank~~ Blank			4/7/20	1426			X	3				1						1				
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	Spencer Overbeck / ATC	4/9/20	1700		4.10.20	0825	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Spencer Overbeck					
SIGNATURE of SAMPLER:	Spencer Overbeck	DATE Signed: 4/9/20				

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CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields n

WO# : 50254306

PM: BJH Due Date: 04/21/20

CLIENT: GR-ATC

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ATC Group Services - Novi	Report To:	Joshua Schuyler	Attention:	
Address:	46555 Humboldt Drive	Copy To:		Company Name:	
Novi, MI 48377				Address:	
Email:	joshua.schuyler@atcgs.com	Purchase Order #:		Pace Quote:	
Phone:	(248)982-5378 Fax:	Project Name:	8 Mile Ferndale	Pace Project Manager:	brian.hall@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9157

Regulatory Agency
State / Location
MI

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	Residual Chlorine (Y/N)
1	MW-116	WT	G	4/9/20	1341			46.8	9	5		1	3						3	3	2	1	
2	MW-117	↓	↓	↓	1423			46.7	↓	↓		↓	↓						↓	↓	↓	↓	
3	MW-118				1454			50.1															
4	DUP1				0000			46.8															
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please Fill Triplicate Volume for MS/MSD Sample Points as Needed	Spencer Overbeck / ATC	4/9/20	1705		4.10.20	0825	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: Spencer Overbeck DATE Signed: 4/9/20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 4.10.20	Evaluated by: WDC	**WO# : 50254306**	
Client: ATC Group		PM: BJH Due Date: 04/21/20	
Project Manager: BJH	Profile ID:	CLIENT: GR-ATC	
Rush TAT Requested: YES NO	Due Date:		
Lab Notified of Rush or Short Holds: YES NO		Non Conformance Form Required: YES NO	

Samples Received Via: FedEx UPS Client Pace Courier Other: _____

	YES	NO	NA	Comments:
Custody Seals Present and Intact:	YES	NO	NA	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	NA	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	N/A	
Short Holds Present (< 72 Hours):	YES	NO		
Samples Received in Hold:	YES	NO		
Custody Signatures Present:	YES	NO		
Collector Signature Present:	YES	NO		
Packing Material Used:	YES	NO		
Samples Collected Today and On Ice:	YES	NO	N/A	

IR Gun #: 280 281 — Digital Thermometer #: 282 283

Ice Type: WET Bagged / WET Loose BLUE NONE — 1. Cooler Temp Upon Receipt: 2.7|3.5 °C

Ice Location: TOP BOTTOM MIDDLE DISPERSED — Temp should be 0-6°C (Initial/Corrected)

Temp Blank Received:	YES	NO		X3
Containers Intact:	YES	NO		
Correct Containers:	YES	NO		
Sufficient Volume:	YES	NO		
Sample pH Acceptable: All containers needing preservation are found to be in complaince with EPA recommendation. Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	N/A	
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	N/A	
VOA Headspace Acceptable (<6mm):	YES	NO	N/A	
Trip Blank Received: HCl MeOH TSP OTHER	YES	NO		

Comments:

2. Cooler Temp Upon Receipt: 2.2|3.0 °C

3. Cooler Temp Upon Receipt: 1.6|2.4 °C

4. Cooler Temp Upon Receipt: _____ °C

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

April 29, 2020

Joshua Schuyler
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale
Pace Project No.: 50255371

Dear Joshua Schuyler:

Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
April Hehir

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50255371001	**MW-119**	Water	04/23/20 15:15	04/24/20 09:30
50255371002	**MW-120**	Water	04/23/20 14:40	04/24/20 09:30
50255371003	**MW-121**	Water	04/23/20 13:45	04/24/20 09:30
50255371004	**Dup-1**	Water	04/23/20 00:00	04/24/20 09:30
50255371005	**Trip Blank**	Water	04/23/20 17:00	04/24/20 09:30

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50255371001	**MW-119**	EPA 5030B/8260	JPV	75
50255371002	**MW-120**	EPA 5030B/8260	JPV	75
50255371003	**MW-121**	EPA 5030B/8260	JPV	75
50255371004	**Dup-1**	EPA 5030B/8260	JPV	75
50255371005	**Trip Blank**	EPA 5030B/8260	JPV	75

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-119 **Lab ID: 50255371001** Collected: 04/23/20 15:15 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:08	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/25/20 01:08	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/25/20 01:08	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/25/20 01:08	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:08	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/25/20 01:08	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/25/20 01:08	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/25/20 01:08	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/25/20 01:08	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 01:08	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 01:08	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:08	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/25/20 01:08	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-119 **Lab ID: 50255371001** Collected: 04/23/20 15:15 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/25/20 01:08	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/25/20 01:08	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:08	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/25/20 01:08	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/25/20 01:08	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/25/20 01:08	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:08	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 01:08	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 01:08	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:08	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/25/20 01:08	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/25/20 01:08	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%.	85-116		1		04/25/20 01:08	460-00-4	
Dibromofluoromethane (S)	103	%.	75-120		1		04/25/20 01:08	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/25/20 01:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-120 **Lab ID: 50255371002** Collected: 04/23/20 14:40 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:41	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/25/20 01:41	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/25/20 01:41	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/25/20 01:41	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:41	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/25/20 01:41	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/25/20 01:41	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/25/20 01:41	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/25/20 01:41	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 01:41	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 01:41	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:41	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/25/20 01:41	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-120 **Lab ID: 50255371002** Collected: 04/23/20 14:40 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/25/20 01:41	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/25/20 01:41	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/25/20 01:41	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/25/20 01:41	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/25/20 01:41	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/25/20 01:41	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 01:41	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 01:41	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 01:41	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 01:41	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/25/20 01:41	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/25/20 01:41	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	85-116		1		04/25/20 01:41	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		04/25/20 01:41	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/25/20 01:41	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-121 **Lab ID: 50255371003** Collected: 04/23/20 13:45 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:13	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/25/20 02:13	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/25/20 02:13	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/25/20 02:13	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:13	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/25/20 02:13	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/25/20 02:13	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/25/20 02:13	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/25/20 02:13	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 02:13	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 02:13	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:13	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/25/20 02:13	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: MW-121 **Lab ID: 50255371003** Collected: 04/23/20 13:45 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/25/20 02:13	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/25/20 02:13	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:13	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/25/20 02:13	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/25/20 02:13	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/25/20 02:13	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:13	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 02:13	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 02:13	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:13	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/25/20 02:13	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/25/20 02:13	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%.	85-116		1		04/25/20 02:13	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		04/25/20 02:13	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/25/20 02:13	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: Dup-1 **Lab ID: 50255371004** Collected: 04/23/20 00:00 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:46	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/25/20 02:46	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/25/20 02:46	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/25/20 02:46	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:46	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/25/20 02:46	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/25/20 02:46	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/25/20 02:46	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/25/20 02:46	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 02:46	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 02:46	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:46	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/25/20 02:46	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: Dup-1 **Lab ID: 50255371004** Collected: 04/23/20 00:00 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/25/20 02:46	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/25/20 02:46	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/25/20 02:46	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/25/20 02:46	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/25/20 02:46	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/25/20 02:46	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 02:46	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 02:46	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 02:46	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 02:46	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/25/20 02:46	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/25/20 02:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	85-116		1		04/25/20 02:46	460-00-4	
Dibromofluoromethane (S)	105	%.	75-120		1		04/25/20 02:46	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/25/20 02:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: Trip Blank **Lab ID: 50255371005** Collected: 04/23/20 17:00 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 03:18	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		04/25/20 03:18	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		04/25/20 03:18	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		04/25/20 03:18	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		04/25/20 03:18	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		04/25/20 03:18	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		04/25/20 03:18	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		04/25/20 03:18	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		04/25/20 03:18	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 03:18	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		04/25/20 03:18	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		04/25/20 03:18	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		04/25/20 03:18	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Sample: Trip Blank **Lab ID: 50255371005** Collected: 04/23/20 17:00 Received: 04/24/20 09:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		04/25/20 03:18	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		04/25/20 03:18	91-57-6	N2
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		04/25/20 03:18	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		04/25/20 03:18	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		04/25/20 03:18	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		04/25/20 03:18	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		04/25/20 03:18	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 03:18	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		04/25/20 03:18	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		04/25/20 03:18	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		04/25/20 03:18	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		04/25/20 03:18	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%.	85-116		1		04/25/20 03:18	460-00-4	
Dibromofluoromethane (S)	107	%.	75-120		1		04/25/20 03:18	1868-53-7	
Toluene-d8 (S)	98	%.	83-111		1		04/25/20 03:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

QC Batch: 558827
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50255371001, 50255371002, 50255371003, 50255371004, 50255371005

METHOD BLANK: 2577120 Matrix: Water
Associated Lab Samples: 50255371001, 50255371002, 50255371003, 50255371004, 50255371005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	04/25/20 00:03	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/25/20 00:03	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	04/25/20 00:03	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	04/25/20 00:03	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	04/25/20 00:03	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	04/25/20 00:03	
2-Hexanone	ug/L	<50.0	50.0	50.0	04/25/20 00:03	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	04/25/20 00:03	N2
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	04/25/20 00:03	
Acetone	ug/L	<50.0	50.0	50.0	04/25/20 00:03	
Acrylonitrile	ug/L	<2.0	2.0	2.0	04/25/20 00:03	
Benzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Bromobenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Bromochloromethane	ug/L	<0.59	1.0	0.59	04/25/20 00:03	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Bromoform	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Bromomethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Carbon disulfide	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Chlorobenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Chloroethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Chloroform	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Chloromethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
cis-1,3-Dichloropropene	ug/L	<100	100	100	04/25/20 00:03	
Cyclohexane	ug/L	<10.0	10.0	10.0	04/25/20 00:03	N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

METHOD BLANK: 2577120 Matrix: Water
Associated Lab Samples: 50255371001, 50255371002, 50255371003, 50255371004, 50255371005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Dibromomethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	04/25/20 00:03	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/25/20 00:03	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Hexachloroethane	ug/L	<5.0	5.0	5.0	04/25/20 00:03	N2
Iodomethane	ug/L	<0.45	5.0	0.45	04/25/20 00:03	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
m&p-Xylene	ug/L	<0.16	2.0	0.16	04/25/20 00:03	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
Methylene Chloride	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
n-Propylbenzene	ug/L	<100	100	100	04/25/20 00:03	
Naphthalene	ug/L	<5.0	5.0	5.0	04/25/20 00:03	
o-Xylene	ug/L	<0.39	1.0	0.39	04/25/20 00:03	
p-Isopropyltoluene	ug/L	<0.28	1.0	0.28	04/25/20 00:03	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Styrene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	04/25/20 00:03	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	04/25/20 00:03	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	04/25/20 00:03	N2
Toluene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
trans-1,3-Dichloropropene	ug/L	<100	100	100	04/25/20 00:03	
trans-1,4-Dichloro-2-butene	ug/L	<0.82	100	0.82	04/25/20 00:03	
Trichloroethene	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	04/25/20 00:03	
Vinyl chloride	ug/L	<1.0	1.0	1.0	04/25/20 00:03	
4-Bromofluorobenzene (S)	%.	98	85-116		04/25/20 00:03	
Dibromofluoromethane (S)	%.	100	75-120		04/25/20 00:03	
Toluene-d8 (S)	%.	99	83-111		04/25/20 00:03	

LABORATORY CONTROL SAMPLE: 2577121

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.8	94	78-120	
1,1,1-Trichloroethane	ug/L	50	54.0	108	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	44.6	89	64-126	
1,1,2-Trichloroethane	ug/L	50	45.6	91	73-125	
1,1-Dichloroethane	ug/L	50	50.5	101	77-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

LABORATORY CONTROL SAMPLE: 2577121

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	49.8	100	79-128	
1,2,3-Trichlorobenzene	ug/L	50	47.9	96	75-126	
1,2,3-Trichloropropane	ug/L	50	46.2	92	71-131	
1,2,4-Trichlorobenzene	ug/L	50	49.1	98	76-130	
1,2,4-Trimethylbenzene	ug/L	50	50.3	101	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	51.1	102	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	46.2	92	76-122	
1,2-Dichlorobenzene	ug/L	50	43.9	88	79-113	
1,2-Dichloroethane	ug/L	50	43.5	87	66-127	
1,2-Dichloropropane	ug/L	50	47.7	95	75-127	
1,3,5-Trimethylbenzene	ug/L	50	50.9	102	78-116	
1,3-Dichlorobenzene	ug/L	50	45.7	91	79-120	
1,4-Dichlorobenzene	ug/L	50	43.8	88	77-117	
2-Butanone (MEK)	ug/L	250	214	86	61-138	
2-Hexanone	ug/L	250	238	95	58-138	
2-Methylnaphthalene	ug/L	50	45.8	92	60-136	N2
4-Methyl-2-pentanone (MIBK)	ug/L	250	230	92	60-131	
Acetone	ug/L	250	223	89	57-126	
Acrylonitrile	ug/L	200	169	84	65-127	
Benzene	ug/L	50	46.2	92	75-118	
Bromobenzene	ug/L	50	44.6	89	68-127	
Bromochloromethane	ug/L	50	46.0	92	66-126	
Bromodichloromethane	ug/L	50	47.6	95	75-120	
Bromoform	ug/L	50	46.5	93	61-119	
Bromomethane	ug/L	50	40.5	81	12-184	
Carbon disulfide	ug/L	50	48.0	96	71-123	
Carbon tetrachloride	ug/L	50	52.6	105	73-125	
Chlorobenzene	ug/L	50	45.2	90	80-115	
Chloroethane	ug/L	50	52.6	105	46-133	
Chloroform	ug/L	50	47.9	96	75-117	
Chloromethane	ug/L	50	47.1	94	33-124	
cis-1,2-Dichloroethene	ug/L	50	48.7	97	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	97	73-130	
Cyclohexane	ug/L	50	55.3	111	58-122	N2
Dibromochloromethane	ug/L	50	46.7	93	69-124	
Dibromomethane	ug/L	50	47.1	94	76-124	
Dichlorodifluoromethane	ug/L	50	41.5	83	36-145	
Diethyl ether (Ethyl ether)	ug/L	50	45.7	91	70-130	
Ethylbenzene	ug/L	50	47.8	96	78-120	
Iodomethane	ug/L	100	133	133	10-184	
Isopropylbenzene (Cumene)	ug/L	50	50.2	100	82-122	
m&p-Xylene	ug/L	100	94.1	94	79-118	
Methyl-tert-butyl ether	ug/L	50	48.0	96	79-125	
Methylene Chloride	ug/L	50	47.3	95	68-126	
n-Butylbenzene	ug/L	50	50.5	101	73-123	
n-Propylbenzene	ug/L	50	<100	101	75-119	
Naphthalene	ug/L	50	47.2	94	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

LABORATORY CONTROL SAMPLE: 2577121

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	50	48.6	97	78-121	
p-Isopropyltoluene	ug/L	50	50.8	102	82-119	
sec-Butylbenzene	ug/L	50	51.3	103	79-119	
Styrene	ug/L	50	48.2	96	80-121	
tert-Butyl Alcohol	ug/L	100	110	110	10-200	
tert-Butylbenzene	ug/L	50	39.2	78	58-106	
Tetrachloroethene	ug/L	50	47.5	95	70-123	
Tetrahydrofuran	ug/L	50	<90.0	88	50-150	N2
Toluene	ug/L	50	47.0	94	72-114	
trans-1,2-Dichloroethene	ug/L	50	50.3	101	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	95	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	186	93	34-130	
Trichloroethene	ug/L	50	47.4	95	78-120	
Trichlorofluoromethane	ug/L	50	53.0	106	57-156	
Vinyl chloride	ug/L	50	48.4	97	55-122	
4-Bromofluorobenzene (S)	%.			104	85-116	
Dibromofluoromethane (S)	%.			102	75-120	
Toluene-d8 (S)	%.			101	83-111	

MATRIX SPIKE SAMPLE: 2577123

Parameter	Units	50255312001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	50	47.9	96	51-135	
1,1,1-Trichloroethane	ug/L	ND	50	56.7	113	56-144	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	42.8	86	47-137	
1,1,2-Trichloroethane	ug/L	ND	50	44.9	90	55-136	
1,1-Dichloroethane	ug/L	2.8	50	55.0	104	53-140	
1,1-Dichloroethene	ug/L	ND	50	52.8	106	60-140	
1,2,3-Trichlorobenzene	ug/L	ND	50	46.0	92	35-140	
1,2,3-Trichloropropane	ug/L	ND	50	43.3	87	54-142	
1,2,4-Trichlorobenzene	ug/L	ND	50	46.8	94	31-143	
1,2,4-Trimethylbenzene	ug/L	ND	50	50.5	101	13-152	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	48.4	97	29-145	
1,2-Dibromoethane (EDB)	ug/L	ND	50	44.5	89	56-136	
1,2-Dichlorobenzene	ug/L	ND	50	44.0	88	38-133	
1,2-Dichloroethane	ug/L	ND	50	44.6	89	46-145	
1,2-Dichloropropane	ug/L	ND	50	49.5	99	55-141	
1,3,5-Trimethylbenzene	ug/L	ND	50	50.9	102	23-145	
1,3-Dichlorobenzene	ug/L	ND	50	44.7	89	31-144	
1,4-Dichlorobenzene	ug/L	ND	50	43.4	87	31-138	
2-Butanone (MEK)	ug/L	ND	250	212	85	42-150	
2-Hexanone	ug/L	ND	250	226	90	43-146	
2-Methylnaphthalene	ug/L	ND	50	43.9	88	32-142	N2
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	227	91	42-142	
Acetone	ug/L	ND	250	230	92	36-142	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

MATRIX SPIKE SAMPLE: 2577123

Parameter	Units	50255312001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Acrylonitrile	ug/L	ND	200	165	82	48-137	
Benzene	ug/L	ND	50	47.7	95	49-135	
Bromobenzene	ug/L	ND	50	45.8	92	37-144	
Bromochloromethane	ug/L	ND	50	49.3	99	47-140	
Bromodichloromethane	ug/L	ND	50	49.5	99	55-133	
Bromoform	ug/L	ND	50	43.4	87	45-125	
Bromomethane	ug/L	ND	50	38.5	77	10-191	
Carbon disulfide	ug/L	ND	50	50.6	101	49-136	
Carbon tetrachloride	ug/L	ND	50	54.6	109	55-134	
Chlorobenzene	ug/L	ND	50	46.2	92	42-135	
Chloroethane	ug/L	ND	50	54.0	108	25-154	
Chloroform	ug/L	ND	50	49.3	99	57-130	
Chloromethane	ug/L	ND	50	52.4	105	17-129	
cis-1,2-Dichloroethene	ug/L	1.9	50	51.6	99	53-134	
cis-1,3-Dichloropropene	ug/L	ND	50	<100	92	50-136	
Cyclohexane	ug/L	ND	50	58.3	117	33-130	N2
Dibromochloromethane	ug/L	ND	50	46.7	93	53-133	
Dibromomethane	ug/L	ND	50	49.6	99	57-139	
Dichlorodifluoromethane	ug/L	ND	50	43.5	87	21-154	
Diethyl ether (Ethyl ether)	ug/L	1.9J	50	47.9	92	70-130	
Ethylbenzene	ug/L	ND	50	49.1	98	28-147	
Iodomethane	ug/L	ND	100	115	115	10-186	
Isopropylbenzene (Cumene)	ug/L	ND	50	50.8	102	27-151	
m&p-Xylene	ug/L	ND	100	95.6	96	28-145	
Methyl-tert-butyl ether	ug/L	ND	50	47.9	95	60-142	
Methylene Chloride	ug/L	ND	50	50.1	100	46-138	
n-Butylbenzene	ug/L	ND	50	50.3	101	10-153	
n-Propylbenzene	ug/L	ND	50	<100	101	20-149	
Naphthalene	ug/L	ND	50	44.6	89	41-139	
o-Xylene	ug/L	ND	50	49.0	98	31-145	
p-Isopropyltoluene	ug/L	ND	50	51.2	102	15-155	
sec-Butylbenzene	ug/L	ND	50	52.1	104	17-153	
Styrene	ug/L	ND	50	48.2	96	42-139	
tert-Butyl Alcohol	ug/L	ND	100	86.8	87	10-170	
tert-Butylbenzene	ug/L	ND	50	39.6	79	18-123	
Tetrachloroethene	ug/L	ND	50	47.9	95	32-140	
Tetrahydrofuran	ug/L	ND	50	<90.0	89	50-150	N2
Toluene	ug/L	0.082J	50	47.7	95	42-131	
trans-1,2-Dichloroethene	ug/L	ND	50	52.2	104	57-138	
trans-1,3-Dichloropropene	ug/L	ND	50	<100	86	47-128	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	166	83	10-135	
Trichloroethene	ug/L	0.85J	50	52.0	102	47-137	
Trichlorofluoromethane	ug/L	ND	50	57.0	114	42-163	
Vinyl chloride	ug/L	ND	50	51.4	102	36-136	
4-Bromofluorobenzene (S)	%.				104	85-116	
Dibromofluoromethane (S)	%.				105	75-120	
Toluene-d8 (S)	%.				102	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

SAMPLE DUPLICATE: 2577122

Parameter	Units	50255312002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,1-Trichloroethane	ug/L	ND	<1.0		20	
1,1,2,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,2-Trichloroethane	ug/L	ND	<1.0		20	
1,1-Dichloroethane	ug/L	0.54J	<1.0		20	
1,1-Dichloroethene	ug/L	ND	<1.0		20	
1,2,3-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,3-Trichloropropane	ug/L	ND	<1.0		20	
1,2,3-Trimethylbenzene	ug/L	ND	<5.0		20	N2
1,2,4-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,4-Trimethylbenzene	ug/L	ND	<1.0		20	
1,2-Dibromo-3-chloropropane	ug/L	ND	<0.25		20	
1,2-Dibromoethane (EDB)	ug/L	ND	<0.23		20	
1,2-Dichlorobenzene	ug/L	ND	<1.0		20	
1,2-Dichloroethane	ug/L	ND	<1.0		20	
1,2-Dichloropropane	ug/L	ND	<1.0		20	
1,3,5-Trimethylbenzene	ug/L	ND	<1.0		20	
1,3-Dichlorobenzene	ug/L	ND	<1.0		20	
1,4-Dichlorobenzene	ug/L	ND	<1.0		20	
2-Butanone (MEK)	ug/L	ND	<25.0		20	
2-Hexanone	ug/L	ND	<50.0		20	
2-Methylnaphthalene	ug/L	ND	<5.0		20	N2
4-Methyl-2-pentanone (MIBK)	ug/L	ND	<50.0		20	
Acetone	ug/L	ND	<50.0		20	
Acrylonitrile	ug/L	ND	<2.0		20	
Benzene	ug/L	ND	<1.0		20	
Bromobenzene	ug/L	ND	<1.0		20	
Bromochloromethane	ug/L	ND	<0.59		20	
Bromodichloromethane	ug/L	ND	<1.0		20	
Bromoform	ug/L	ND	<1.0		20	
Bromomethane	ug/L	ND	<5.0		20	
Carbon disulfide	ug/L	ND	<5.0		20	
Carbon tetrachloride	ug/L	ND	<1.0		20	
Chlorobenzene	ug/L	ND	<1.0		20	
Chloroethane	ug/L	ND	<5.0		20	
Chloroform	ug/L	ND	<1.0		20	
Chloromethane	ug/L	ND	<5.0		20	
cis-1,2-Dichloroethene	ug/L	ND	<1.0		20	
cis-1,3-Dichloropropene	ug/L	ND	<100		20	
Cyclohexane	ug/L	ND	<10.0		20	N2
Dibromochloromethane	ug/L	ND	<5.0		20	
Dibromomethane	ug/L	ND	<5.0		20	
Dichlorodifluoromethane	ug/L	0.74J	<5.0		20	
Diethyl ether (Ethyl ether)	ug/L	4.8J	<5.0		20	
Diisopropyl ether	ug/L	ND	<5.0		20	N2
Ethyl-tert-butyl ether	ug/L	ND	<5.0		20	N2
Ethylbenzene	ug/L	ND	<1.0		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale
Pace Project No.: 50255371

SAMPLE DUPLICATE: 2577122

Parameter	Units	50255312002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloroethane	ug/L	ND	<5.0		20	N2
Iodomethane	ug/L	ND	<0.45		20	
Isopropylbenzene (Cumene)	ug/L	ND	<5.0		20	
m&p-Xylene	ug/L	ND	<0.16		20	
Methyl-tert-butyl ether	ug/L	ND	<5.0		20	
Methylene Chloride	ug/L	ND	<5.0		20	
n-Butylbenzene	ug/L	ND	<1.0		20	
n-Propylbenzene	ug/L	ND	<100		20	
Naphthalene	ug/L	ND	<5.0		20	
o-Xylene	ug/L	ND	<0.39		20	
p-Isopropyltoluene	ug/L	ND	<0.28		20	
sec-Butylbenzene	ug/L	ND	<1.0		20	
Styrene	ug/L	ND	<1.0		20	
tert-Amylmethyl ether	ug/L	ND	<5.0		20	N2
tert-Butyl Alcohol	ug/L	ND	<50.0		20	
tert-Butylbenzene	ug/L	ND	<1.0		20	
Tetrachloroethene	ug/L	ND	<1.0		20	
Tetrahydrofuran	ug/L	ND	<90.0		20	N2
Toluene	ug/L	0.28J	<1.0		20	
trans-1,2-Dichloroethene	ug/L	ND	<1.0		20	
trans-1,3-Dichloropropene	ug/L	ND	<100		20	
trans-1,4-Dichloro-2-butene	ug/L	ND	<0.82		20	
Trichloroethene	ug/L	ND	<1.0		20	
Trichlorofluoromethane	ug/L	ND	<1.0		20	
Vinyl chloride	ug/L	1.5	1.4	9	20	
4-Bromofluorobenzene (S)	%.	97	100			
Dibromofluoromethane (S)	%.	103	102			
Toluene-d8 (S)	%.	101	99			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale
Pace Project No.: 50255371

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale
Pace Project No.: 50255371

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50255371001	**MW-119**	EPA 5030B/8260	558827		
50255371002	**MW-120**	EPA 5030B/8260	558827		
50255371003	**MW-121**	EPA 5030B/8260	558827		
50255371004	**Dup-1**	EPA 5030B/8260	558827		
50255371005	**Trip Blank**	EPA 5030B/8260	558827		

WO# : 50255371

50255371

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section B — Project Information:		Section C — Invoice Information:	
Company: ATC Group Services - Novi	Report To: Joshua Schuyler	Attention: joshua.schuyler@atcgs.com	
Address: 46555 Humboldt Drive	Copy To:	Company Name: ATC Group Services	
Novi, MI 48377		Address: 46555 Humboldt Dr. Ste 100 Novi, MI 48377	Regulatory Agency
Email: joshua.schuyler@atcgs.com	Purchase Order #:	Pace Quote:	
Phone: (248)982-5378 Fax:	Project Name: 8 Mile Ferndale	Pace Project Manager: brian.hall@pacelabs.com,	State / Location
Requested Due Date:	Project #: NPDAX19001	Pace Profile #: 9157	MI

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOCs by 8260	PAH/Metals/Alcohols	VOC by 8260	PAH by 8270SIM	Alcohols by 8015	Metals, Total	Residual Chlorine (Y/N)	
1	MW-119	WT	G	4/23/20	1515			-	9	S		1	3						3	3	2			1		001
2	MW-120	WT	G	4/23/20	1440			-	9	S		1	3						3	3	2			1		002
3	MW-121	WT	G	4/23/20	1345			-	9	S		1	3						3	3	2			1		003
4	DUP-1	WT	G	4/23/20	0000			-	9	S		1	3						3	3	2			1		004
5	Trip Blank	WT	G	4/23/20	1700			-	3				3						3							005
6																											
7																											
8																											
9																											
10																											
11																											
12																											

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
TAT Rush VOCs only	Spencer Overbeck/ATC	4/23/20	1730	Kelly						
	Kelly			Pace/Fed	4-23-20	9:30	1.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: Spencer Overbeck DATE Signed: 4/23/20

Pace Analytical

SAMPLE CONDITION UPON RECEIPT FORM

Project #: 50255371

Date/Time and Initials of person examining contents: PTH 4-24-20 10:00

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace [ ] Other _____

Tracking #: 1768 4586 9980

Custody Seal on Cooler/Box Present: [X] Yes [ ] No **Seals Intact:** [X] Yes [ ] No

Packing Material: [X] Bubble Wrap [X] Bubble Bags [ ] None [ ] Other _____

Thermometer: 1 2 3 4 5 6 A B C (D) E F Ice Type: [X] Wet [ ] Blue [ ] None | Samples collected today and on ice: [ ] Yes [ ] No [ ] N/A

Cooler Temperature: 1.8/1.7 Ice Visible in Sample Containers?: [ ] Yes [ ] No [ ] N/A

(Initial/Corrected) Temp should be above freezing to 6°C If temp. is Over 6°C or under 0°C, was the PM Notified?: [ ] Yes [ ] No [ ] N/A

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
Are samples from West Virginia? Document any containers out of temp.		X	All containers needing acid/base pres. Have been checked?: **exceptions: VOA, coliform, LLHg, O&G, and any container with a septum cap or preserved with HCl.** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. Circle: (HNO3) H2SO4 NaOH NaOH/ZnAc	X		
USDA Regulated Soils? (ID, NY, WA, OR, CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		X				
Chain of Custody Present:	X					
Chain of Custody Filled Out:	X		Dissolved Metals field filtered?:			X
Short Hold Time Analysis (<72hr)?: Analysis:		X	Headspace Wisconsin Sulfide			X
Time 5035A TC placed in Freezer or Short Holds To Lab:				Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			X
			Residual Chlorine Check (Total/Amenable/Free Cyanide)			Y
Rush TAT Requested: 3 Day	X		Headspace in VOA Vials (>6mm):		X	
Containers Intact?:	X		Trip Blank Present?:	X		
Sample Labels (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	Y		Trip Blank Custody Seals?:		X	
Extra labels on Terracore Vials (soils only)?		N/A				

Comments:

COC PAGE 1 of 1

Sample Container Count

Sample Line Item	WGFU	SBS DI BK Kit R	DG9H VG9H	VOA VIALS (>6mm)	VG9U	DG9U	DG9T	AG0U	AG1H	AG1U	AG3S	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H					Matrix	pH <2	pH >9	pH>12
1			3		2	3										1										SL	1		
2			3		2	3										1											1		
3			3		2	3										1											1		
4			3		2	3										1											1		
5			3																										
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Container Codes

Glass

DG9B	40mL Na Bisulfate amber vial	AG0U	100mL unpres amber glass
DG9H	40mL HCl amber voa vial	AG1H	1L HCl amber glass
DG9M	40mL MeOH clear vial	AG1S	1L H2SO4 amber glass
DG9P	40mL TSP amber vial	AG1T	1L Na Thiosulfate amber glass
DG9S	40mL H2SO4 amber vial	AG1U	1liter unpres amber glass
DG9T	40mL Na Thio amber vial	AG2N	500mL HNO3 amber glass
DG9U	40mL unpreserved **amber** vial	AG2S	500mL H2SO4 amber glass
VG9H	40mL HCl clear vial	AG2U	500mL unpres amber glass
VG9T	40mL Na Thio. clear vial	AG3S	250mL H2SO4 amber glass
VG9U	40mL unpreserved **clear** vial	AG3U	250mL unpres amber glass
VGFX	40mL w/hexane wipe vial	BG1H	1L HCl clear glass
VSG	Headspace septa vial & HCl	BG1S	1L H2SO4 clear glass
WGKU	8oz unpreserved clear jar	BG1T	1L Na Thiosulfate clear glass
WGFU	4oz clear soil jar	BG1U	1L unpreserved glass
JGFU	4oz unpreserved amber wide	BG3H	250mL HCl Clear Glass
CG3H	250mL clear glass HCl	BG3U	250mL Unpres Clear Glass

Plastic / Misc.

BP1A	1L NaOH, Asc Acid plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2N	500mL HNO3 plastic
BP2O	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic (field filtered)
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Ac plastic

AF	Air Filter
C	Air Cassettes
R	Terra core kit
SP5T	120mL Coliform Na Thiosulfate
U	Summa Can
ZPLC	Ziploc Bag

WT	Water
SL	Solid
NAL	Non-aqueous liquid
WP	Wipe

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

July 08, 2020

Ryann Scott
ATC Group Services - Novi
46555 Humboldt Drive
Suite 100
Novi, MI 48377

RE: Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Dear Ryann Scott:

Enclosed are the analytical results for sample(s) received by the laboratory on June 26, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis
- Pace Analytical Services - Melville

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

Sincerely,

Brian Hall
brian.hall@pacelabs.com
(616)975-4500
Project Manager

Enclosures

cc: AP c/o Abigail Jardiine, ATC Group Services
Michael Hauswirth, ATC Group Services
Joshua Schuyler, ATC Group Services - Novi

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

CERTIFICATIONS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Laboratory #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE SUMMARY

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50260974001	**MW-12**	Water	06/23/20 16:30	06/26/20 09:15
50260974002	**MW-123**	Water	06/23/20 15:50	06/26/20 09:15
50260974003	**MW-124**	Water	06/23/20 14:10	06/26/20 09:15
50260974004	**MW-125**	Water	06/23/20 12:55	06/26/20 09:15
50260974005	**MW-126**	Water	06/23/20 12:10	06/26/20 09:15
50260974006	**MW-130**	Water	06/23/20 15:10	06/26/20 09:15
50260974007	**MW-122**	Water	06/24/20 13:45	06/26/20 09:15
50260974008	**MW-127**	Water	06/24/20 12:50	06/26/20 09:15
50260974009	**MW-128**	Water	06/24/20 11:10	06/26/20 09:15
50260974010	**MW-129**	Water	06/24/20 12:10	06/26/20 09:15
50260974011	**MW-131**	Water	06/24/20 14:56	06/26/20 09:15
50260974012	**DUP-1**	Water	06/23/20 00:00	06/26/20 09:15
50260974013	**DUP-3**	Water	06/24/20 00:00	06/26/20 09:15
50260974014	**Trip Blank**	Water	06/23/20 08:00	06/26/20 09:15
50260974015	**Field Blank**	Water	06/23/20 11:00	06/26/20 09:15
50260974016	**Trip Blank**	Water	06/24/20 08:00	06/26/20 09:15
50260974017	**Field Blank**	Water	06/24/20 11:00	06/26/20 09:15

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50260974001	**MW-12**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974002	**MW-123**	EPA 8082	KAV	10	PASI-I
		EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974003	**MW-124**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974004	**MW-125**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974005	**MW-126**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
50260974006	**MW-130**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	RAM	16	PASI-I

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974007	**MW-122**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974008	**MW-127**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974009	**MW-128**	EPA 8015 Alcohol-Glycol	CPH	3	PASI-I
		EPA 8082	KAV	10	PASI-I
		EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974010	**MW-129**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

SAMPLE ANALYTE COUNT

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974011	**MW-131**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974012	**DUP-1**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 5030B/8260	JPV	75	PASI-I
50260974013	**DUP-3**	EPA 6010	RAM	16	PASI-I
		EPA 6020	DMT	10	PASI-I
		EPA 7470	LBT	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	48	PASI-I
		EPA 8260C SIM/5030C	BBL	3	PASI-L
		EPA 5030B/8260	JPV	75	PASI-I
		EPA 9012	NMW	1	PASI-I
50260974014	**Trip Blank**	EPA 5030B/8260	JPV	75	PASI-I
50260974015	**Field Blank**	EPA 5030B/8260	JPV	75	PASI-I
50260974016	**Trip Blank**	EPA 5030B/8260	JPV	75	PASI-I
50260974017	**Field Blank**	EPA 5030B/8260	JPV	75	PASI-I

PASI-I = Pace Analytical Services - Indianapolis
PASI-L = Pace Analytical Services - Melville

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-12 **Lab ID: 50260974001** Collected: 06/23/20 16:30 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 08:51	7440-38-2	
Barium	**185**	ug/L	100	100	1	06/30/20 05:43	07/07/20 08:51	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 08:51	7440-42-8	
Calcium	**89500**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:51	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 08:51	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:51	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 08:51	7440-50-8	
Iron	**<200**	ug/L	200	200	1	06/30/20 05:43	07/07/20 08:51	7439-89-6	
Magnesium	**17900**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:51	7439-95-4	
Manganese	**945**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:51	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:51	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:51	7440-02-0	
Potassium	**3880**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:51	7440-09-7	
Sodium	**276000**	ug/L	2000	2000	2	06/30/20 05:43	07/07/20 10:54	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:51	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:51	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 09:59	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 09:59	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 09:59	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 09:59	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 09:59	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 09:59	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 09:59	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 09:59	7440-28-0	
Titanium	**172**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 00:44	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 09:59	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:01	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 18:27	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-12 **Lab ID: 50260974001** Collected: 06/23/20 16:30 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:27	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:27	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:27	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:27	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:27	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	47	%.	32-107		1	06/29/20 10:44	06/29/20 18:27	321-60-8	
p-Terphenyl-d14 (S)	85	%.	29-143		1	06/29/20 10:44	06/29/20 18:27	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 18:31	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:31	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 18:31	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 18:31	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 18:31	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:31	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 18:31	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 18:31	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:31	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 18:31	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 18:31	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 18:31	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 18:31	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 18:31	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 18:31	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 18:31	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 18:31		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 18:31	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-12 **Lab ID: 50260974001** Collected: 06/23/20 16:30 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 18:31	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 18:31	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 18:31	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 18:31	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 18:31	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 18:31	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 18:31	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:31	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 18:31	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	49	%.	42-109		1	06/29/20 10:44	06/29/20 18:31	4165-60-0	
Phenol-d5 (S)	28	%.	11-56		1	06/29/20 10:44	06/29/20 18:31	4165-62-2	
2-Fluorophenol (S)	36	%.	16-75		1	06/29/20 10:44	06/29/20 18:31	367-12-4	
2,4,6-Tribromophenol (S)	70	%.	45-126		1	06/29/20 10:44	06/29/20 18:31	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:04	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 02:04	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 02:04	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 02:04	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:04	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 02:04	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 02:04	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 02:04	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-12 **Lab ID: 50260974001** Collected: 06/23/20 16:30 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 02:04	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 02:04	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 02:04	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:04	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 02:04	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 02:04	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 02:04	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:04	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 02:04	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 02:04	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 02:04	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:04	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 02:04	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 02:04	108-67-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-12 **Lab ID: 50260974001** Collected: 06/23/20 16:30 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:04	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 02:04	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 02:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	85-116		1		06/30/20 02:04	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 02:04	1868-53-7	
Toluene-d8 (S)	108	%.	83-111		1		06/30/20 02:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-123 **Lab ID: 50260974002** Collected: 06/23/20 15:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 03:53	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	45	%.	10-144		1	06/30/20 21:50	07/02/20 03:53	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 08:54	7440-38-2	
Barium	**283**	ug/L	100	100	1	06/30/20 05:43	07/07/20 08:54	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 08:54	7440-42-8	
Calcium	**119000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:54	7440-70-2	
Chromium	**25.5**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 08:54	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:54	7440-48-4	
Copper	**17.8**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 08:54	7440-50-8	
Iron	**10800**	ug/L	200	200	1	06/30/20 05:43	07/07/20 08:54	7439-89-6	
Magnesium	**18300**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:54	7439-95-4	
Manganese	**218**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:54	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:54	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:54	7440-02-0	
Potassium	**63600**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:54	7440-09-7	
Sodium	**59300**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:54	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:54	7440-24-6	
Zinc	**342**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:54	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**9930**	ug/L	1000	1000	20	06/30/20 09:29	07/02/20 01:07	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:30	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:30	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:30	7440-43-9	
Lead	**18.8**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 10:30	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 10:30	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 10:30	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:30	7440-28-0	
Titanium	**436**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 01:11	7440-32-6	N2
Vanadium	**33.5**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 10:30	7440-62-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-123 **Lab ID: 50260974002** Collected: 06/23/20 15:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**0.27**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:08	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 18:38	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	218-01-9	
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:38	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 18:38	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:38	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 18:38	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:38	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%.	32-107		1	06/29/20 10:44	06/29/20 18:38	321-60-8	
p-Terphenyl-d14 (S)	76	%.	29-143		1	06/29/20 10:44	06/29/20 18:38	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 18:48	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:48	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 18:48	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 18:48	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 18:48	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:48	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 18:48	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 18:48	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:48	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 18:48	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 18:48	51-28-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-123 **Lab ID: 50260974002** Collected: 06/23/20 15:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 18:48	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 18:48	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 18:48	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 18:48	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 18:48	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 18:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 18:48		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 18:48	88-74-4	
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 18:48	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 18:48	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 18:48	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 18:48	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 18:48	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 18:48	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 18:48	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 18:48	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 18:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	42-109		1	06/29/20 10:44	06/29/20 18:48	4165-60-0	
Phenol-d5 (S)	35	%.	11-56		1	06/29/20 10:44	06/29/20 18:48	4165-62-2	
2-Fluorophenol (S)	45	%.	16-75		1	06/29/20 10:44	06/29/20 18:48	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	45-126		1	06/29/20 10:44	06/29/20 18:48	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:37	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 02:37	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 02:37	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 02:37	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:37	75-65-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-123 **Lab ID: 50260974002** Collected: 06/23/20 15:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 02:37	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 02:37	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 02:37	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 02:37	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 02:37	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 02:37	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:37	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 02:37	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 02:37	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 02:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 02:37	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 02:37	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-123 **Lab ID: 50260974002** Collected: 06/23/20 15:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 02:37	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 02:37	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 02:37	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 02:37	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 02:37	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 02:37	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 02:37	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 02:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%.	85-116		1		06/30/20 02:37	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 02:37	1868-53-7	
Toluene-d8 (S)	109	%.	83-111		1		06/30/20 02:37	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-124 **Lab ID: 50260974003** Collected: 06/23/20 14:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 08:56	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 08:56	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 08:56	7440-42-8	
Calcium	**103000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:56	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 08:56	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:56	7440-48-4	
Copper	**8.7**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 08:56	7440-50-8	
Iron	**1290**	ug/L	200	200	1	06/30/20 05:43	07/07/20 08:56	7439-89-6	
Magnesium	**14600**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:56	7439-95-4	
Manganese	**781**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:56	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:56	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 08:56	7440-02-0	
Potassium	**1940**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:56	7440-09-7	
Sodium	**21500**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:56	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 08:56	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 08:56	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**784**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 10:35	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:35	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:35	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:35	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 10:35	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 10:35	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 10:35	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:35	7440-28-0	
Titanium	**221**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 01:16	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 10:35	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:10	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	06/29/20 10:44	06/29/20 18:49	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-124 **Lab ID: 50260974003** Collected: 06/23/20 14:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 18:49	53-70-3	
Fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 18:49	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 18:49	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	91-57-6	
Naphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	91-20-3	
Phenanthrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 18:49	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 18:49	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%.	32-107		1	06/29/20 10:44	06/29/20 18:49	321-60-8	
p-Terphenyl-d14 (S)	74	%.	29-143		1	06/29/20 10:44	06/29/20 18:49	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	06/29/20 10:44	06/29/20 19:04	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	85-68-7	
Carbazole	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:04	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	06/29/20 10:44	06/29/20 19:04	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	06/29/20 10:44	06/29/20 19:04	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	06/29/20 10:44	06/29/20 19:04	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:04	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:04	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:04	132-64-9	
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:04	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:04	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	06/29/20 10:44	06/29/20 19:04	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	06/29/20 10:44	06/29/20 19:04	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	06/29/20 10:44	06/29/20 19:04	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:04	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	06/29/20 10:44	06/29/20 19:04	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	06/29/20 10:44	06/29/20 19:04	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:04		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	06/29/20 10:44	06/29/20 19:04	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-124 **Lab ID: 50260974003** Collected: 06/23/20 14:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	06/29/20 10:44	06/29/20 19:04	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	06/29/20 10:44	06/29/20 19:04	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:04	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	06/29/20 10:44	06/29/20 19:04	100-02-7	
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:04	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	06/29/20 10:44	06/29/20 19:04	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	06/29/20 10:44	06/29/20 19:04	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:04	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:04	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%.	42-109		1	06/29/20 10:44	06/29/20 19:04	4165-60-0	
Phenol-d5 (S)	34	%.	11-56		1	06/29/20 10:44	06/29/20 19:04	4165-62-2	
2-Fluorophenol (S)	46	%.	16-75		1	06/29/20 10:44	06/29/20 19:04	367-12-4	
2,4,6-Tribromophenol (S)	72	%.	45-126		1	06/29/20 10:44	06/29/20 19:04	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:10	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 03:10	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 03:10	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 03:10	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:10	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 03:10	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 03:10	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 03:10	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-124 **Lab ID: 50260974003** Collected: 06/23/20 14:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 03:10	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 03:10	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 03:10	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:10	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 03:10	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 03:10	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 03:10	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:10	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 03:10	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 03:10	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 03:10	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:10	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 03:10	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 03:10	108-67-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-124 **Lab ID: 50260974003** Collected: 06/23/20 14:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:10	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 03:10	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 03:10	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	85-116		1		06/30/20 03:10	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		06/30/20 03:10	1868-53-7	
Toluene-d8 (S)	106	%.	83-111		1		06/30/20 03:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-125 **Lab ID: 50260974004** Collected: 06/23/20 12:55 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		06/29/20 13:13	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		06/29/20 13:13	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		06/29/20 13:13	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:07	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	35	%.	10-144		1	06/30/20 21:50	07/02/20 04:07	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:07	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:07	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:07	7440-42-8	
Calcium	**107000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:07	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:07	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:07	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:07	7440-50-8	
Iron	**727**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:07	7439-89-6	
Magnesium	**15600**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:07	7439-95-4	
Manganese	**69.9**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:07	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:07	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:07	7440-02-0	
Potassium	**17100**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:07	7440-09-7	
Sodium	**12900**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:07	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:07	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:07	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**516**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 10:40	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:40	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:40	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:40	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 10:40	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 10:40	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-125 **Lab ID: 50260974004** Collected: 06/23/20 12:55 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 10:40	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:40	7440-28-0	
Titanium	**212**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 01:21	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 10:40	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:12	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	06/29/20 10:44	06/29/20 19:01	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:01	53-70-3	
Fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:01	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:01	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	91-57-6	
Naphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	91-20-3	
Phenanthrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:01	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	45	%.	32-107		1	06/29/20 10:44	06/29/20 19:01	321-60-8	
p-Terphenyl-d14 (S)	83	%.	29-143		1	06/29/20 10:44	06/29/20 19:01	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	06/29/20 10:44	06/29/20 19:20	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	85-68-7	
Carbazole	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:20	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	06/29/20 10:44	06/29/20 19:20	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	06/29/20 10:44	06/29/20 19:20	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	06/29/20 10:44	06/29/20 19:20	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:20	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:20	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:20	132-64-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-125 **Lab ID: 50260974004** Collected: 06/23/20 12:55 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:20	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:20	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	06/29/20 10:44	06/29/20 19:20	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	06/29/20 10:44	06/29/20 19:20	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	06/29/20 10:44	06/29/20 19:20	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:20	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	06/29/20 10:44	06/29/20 19:20	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	06/29/20 10:44	06/29/20 19:20	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:20	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:20		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	06/29/20 10:44	06/29/20 19:20	88-74-4	
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	06/29/20 10:44	06/29/20 19:20	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	06/29/20 10:44	06/29/20 19:20	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:20	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	06/29/20 10:44	06/29/20 19:20	100-02-7	
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:20	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	06/29/20 10:44	06/29/20 19:20	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	06/29/20 10:44	06/29/20 19:20	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:20	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:20	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	49	%.	42-109		1	06/29/20 10:44	06/29/20 19:20	4165-60-0	
Phenol-d5 (S)	29	%.	11-56		1	06/29/20 10:44	06/29/20 19:20	4165-62-2	
2-Fluorophenol (S)	41	%.	16-75		1	06/29/20 10:44	06/29/20 19:20	367-12-4	
2,4,6-Tribromophenol (S)	70	%.	45-126		1	06/29/20 10:44	06/29/20 19:20	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:43	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 03:43	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	71-43-2	

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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-125 **Lab ID: 50260974004** Collected: 06/23/20 12:55 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 03:43	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 03:43	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:43	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 03:43	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 03:43	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 03:43	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 03:43	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 03:43	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 03:43	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:43	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 03:43	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 03:43	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 03:43	91-57-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-125 **Lab ID: 50260974004** Collected: 06/23/20 12:55 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 03:43	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 03:43	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 03:43	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 03:43	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 03:43	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 03:43	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 03:43	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 03:43	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 03:43	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 03:43	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	85-116		1		06/30/20 03:43	460-00-4	
Dibromofluoromethane (S)	102	%.	75-120		1		06/30/20 03:43	1868-53-7	
Toluene-d8 (S)	109	%.	83-111		1		06/30/20 03:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-126 **Lab ID: 50260974005** Collected: 06/23/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:13	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:13	7440-39-3	
Boron	**590**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:13	7440-42-8	
Calcium	**181000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:13	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:13	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:13	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:13	7440-50-8	
Iron	**1270**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:13	7439-89-6	
Magnesium	**13900**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:13	7439-95-4	
Manganese	**251**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:13	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:13	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:13	7440-02-0	
Potassium	**36900**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:13	7440-09-7	
Sodium	**62300**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:13	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:13	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:13	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**376**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 10:44	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:44	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:44	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:44	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 10:44	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 10:44	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 10:44	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:44	7440-28-0	
Titanium	**364**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 01:34	7440-32-6	N2
Vanadium	**11.1**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 10:44	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:14	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	06/29/20 10:44	06/29/20 19:12	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-126 **Lab ID: 50260974005** Collected: 06/23/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:12	53-70-3	
Fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:12	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:12	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	91-57-6	
Naphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	91-20-3	
Phenanthrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:12	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:12	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	61	%.	32-107		1	06/29/20 10:44	06/29/20 19:12	321-60-8	
p-Terphenyl-d14 (S)	78	%.	29-143		1	06/29/20 10:44	06/29/20 19:12	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	06/29/20 10:44	06/29/20 19:36	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	85-68-7	
Carbazole	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:36	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	06/29/20 10:44	06/29/20 19:36	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	06/29/20 10:44	06/29/20 19:36	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	06/29/20 10:44	06/29/20 19:36	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:36	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:36	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:36	132-64-9	
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:36	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:36	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	06/29/20 10:44	06/29/20 19:36	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	06/29/20 10:44	06/29/20 19:36	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	06/29/20 10:44	06/29/20 19:36	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:36	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	06/29/20 10:44	06/29/20 19:36	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	06/29/20 10:44	06/29/20 19:36	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:36		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	06/29/20 10:44	06/29/20 19:36	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-126 **Lab ID: 50260974005** Collected: 06/23/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	06/29/20 10:44	06/29/20 19:36	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	06/29/20 10:44	06/29/20 19:36	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:36	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	06/29/20 10:44	06/29/20 19:36	100-02-7	
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:36	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	06/29/20 10:44	06/29/20 19:36	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	06/29/20 10:44	06/29/20 19:36	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:36	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:36	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	79	%.	42-109		1	06/29/20 10:44	06/29/20 19:36	4165-60-0	
Phenol-d5 (S)	42	%.	11-56		1	06/29/20 10:44	06/29/20 19:36	4165-62-2	
2-Fluorophenol (S)	50	%.	16-75		1	06/29/20 10:44	06/29/20 19:36	367-12-4	
2,4,6-Tribromophenol (S)	89	%.	45-126		1	06/29/20 10:44	06/29/20 19:36	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 16:44	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	87	%	60-140		1		07/02/20 16:44	2199-69-1	
4-Bromofluorobenzene (S)	97	%	79-124		1		07/02/20 16:44	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:16	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 04:16	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 04:16	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 04:16	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:16	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-126 **Lab ID: 50260974005** Collected: 06/23/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 04:16	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 04:16	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 04:16	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 04:16	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 04:16	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 04:16	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:16	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 04:16	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 04:16	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 04:16	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:16	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 04:16	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	79-34-5	
Tetrachloroethene	**6.0**	ug/L	1.0	1.0	1		06/30/20 04:16	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 04:16	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-126 **Lab ID: 50260974005** Collected: 06/23/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	1.0	1		06/30/20 04:16	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 04:16	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:16	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 04:16	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 04:16	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:16	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 04:16	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 04:16	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%.	85-116		1		06/30/20 04:16	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 04:16	1868-53-7	
Toluene-d8 (S)	111	%.	83-111		1		06/30/20 04:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-130 **Lab ID: 50260974006** Collected: 06/23/20 15:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		06/29/20 13:22	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		06/29/20 13:22	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		06/29/20 13:22	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.18**	ug/L	0.18	0.18	1	06/30/20 21:50	07/02/20 04:21	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	52	%.	10-144		1	06/30/20 21:50	07/02/20 04:21	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:15	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:15	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:15	7440-42-8	
Calcium	**102000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:15	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:15	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:15	7440-48-4	
Copper	**<4.0**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:15	7440-50-8	
Iron	**710**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:15	7439-89-6	
Magnesium	**17000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:15	7439-95-4	
Manganese	**273**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:15	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:15	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:15	7440-02-0	
Potassium	**7410**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:15	7440-09-7	
Sodium	**36000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:15	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:15	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:15	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**462**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 10:49	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:49	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:49	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 10:49	7440-43-9	
Lead	**3.2**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 10:49	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 10:49	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-130 **Lab ID: 50260974006** Collected: 06/23/20 15:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 10:49	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 10:49	7440-28-0	
Titanium	**208**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 01:39	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 10:49	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:20	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	06/29/20 10:44	06/29/20 19:24	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	218-01-9	
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:24	53-70-3	
Fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 19:24	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:24	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	91-57-6	
Naphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	91-20-3	
Phenanthrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 19:24	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:24	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	33	%.	32-107		1	06/29/20 10:44	06/29/20 19:24	321-60-8	
p-Terphenyl-d14 (S)	68	%.	29-143		1	06/29/20 10:44	06/29/20 19:24	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	06/29/20 10:44	06/29/20 19:52	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	85-68-7	
Carbazole	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:52	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	06/29/20 10:44	06/29/20 19:52	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	06/29/20 10:44	06/29/20 19:52	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	06/29/20 10:44	06/29/20 19:52	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:52	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:52	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:52	132-64-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-130 **Lab ID: 50260974006** Collected: 06/23/20 15:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:52	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:52	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	06/29/20 10:44	06/29/20 19:52	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	06/29/20 10:44	06/29/20 19:52	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	06/29/20 10:44	06/29/20 19:52	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:52	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	06/29/20 10:44	06/29/20 19:52	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	06/29/20 10:44	06/29/20 19:52	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 19:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 19:52		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	06/29/20 10:44	06/29/20 19:52	88-74-4	
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	06/29/20 10:44	06/29/20 19:52	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	06/29/20 10:44	06/29/20 19:52	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 19:52	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	06/29/20 10:44	06/29/20 19:52	100-02-7	
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 19:52	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	06/29/20 10:44	06/29/20 19:52	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	06/29/20 10:44	06/29/20 19:52	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 19:52	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 19:52	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	34	%.	42-109		1	06/29/20 10:44	06/29/20 19:52	4165-60-0	S0
Phenol-d5 (S)	21	%.	11-56		1	06/29/20 10:44	06/29/20 19:52	4165-62-2	
2-Fluorophenol (S)	26	%.	16-75		1	06/29/20 10:44	06/29/20 19:52	367-12-4	
2,4,6-Tribromophenol (S)	51	%.	45-126		1	06/29/20 10:44	06/29/20 19:52	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:49	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 04:49	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-130 **Lab ID: 50260974006** Collected: 06/23/20 15:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 04:49	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 04:49	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:49	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 04:49	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 04:49	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 04:49	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 04:49	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 04:49	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 04:49	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:49	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 04:49	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 04:49	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 04:49	91-57-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-130 **Lab ID: 50260974006** Collected: 06/23/20 15:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 04:49	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 04:49	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 04:49	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 04:49	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 04:49	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 04:49	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 04:49	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 04:49	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 04:49	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 04:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%.	85-116		1		06/30/20 04:49	460-00-4	
Dibromofluoromethane (S)	105	%.	75-120		1		06/30/20 04:49	1868-53-7	
Toluene-d8 (S)	103	%.	83-111		1		06/30/20 04:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-122 **Lab ID: 50260974007** Collected: 06/24/20 13:45 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:18	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:18	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:18	7440-42-8	
Calcium	**106000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:18	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:18	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:18	7440-48-4	
Copper	**9.2**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:18	7440-50-8	
Iron	**1940**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:18	7439-89-6	
Magnesium	**16800**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:18	7439-95-4	
Manganese	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:18	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:18	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:18	7440-02-0	
Potassium	**15700**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:18	7440-09-7	
Sodium	**14100**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:18	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:18	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:18	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**1130**	ug/L	100	100	2	06/30/20 09:29	07/02/20 01:44	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:02	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:02	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:02	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:02	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:02	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:02	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:02	7440-28-0	
Titanium	**239**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 01:44	7440-32-6	N2
Vanadium	**10.6**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:02	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**0.15J**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:22	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 19:47	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-122 **Lab ID: 50260974007** Collected: 06/24/20 13:45 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:47	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:47	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:47	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:47	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:47	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	46	%.	32-107		1	06/29/20 10:44	06/29/20 19:47	321-60-8	
p-Terphenyl-d14 (S)	77	%.	29-143		1	06/29/20 10:44	06/29/20 19:47	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 20:25	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:25	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 20:25	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 20:25	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 20:25	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:25	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:25	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:25	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:25	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:25	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 20:25	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 20:25	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 20:25	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:25	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 20:25	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 20:25	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:25	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:25		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 20:25	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-122 **Lab ID: 50260974007** Collected: 06/24/20 13:45 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 20:25	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 20:25	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:25	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 20:25	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:25	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 20:25	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 20:25	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:25	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:25	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	45	%.	42-109		1	06/29/20 10:44	06/29/20 20:25	4165-60-0	
Phenol-d5 (S)	30	%.	11-56		1	06/29/20 10:44	06/29/20 20:25	4165-62-2	
2-Fluorophenol (S)	37	%.	16-75		1	06/29/20 10:44	06/29/20 20:25	367-12-4	
2,4,6-Tribromophenol (S)	70	%.	45-126		1	06/29/20 10:44	06/29/20 20:25	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 17:10	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	68	%	60-140		1		07/02/20 17:10	2199-69-1	
4-Bromofluorobenzene (S)	103	%	79-124		1		07/02/20 17:10	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:22	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 05:22	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 05:22	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 05:22	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:22	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-122 **Lab ID: 50260974007** Collected: 06/24/20 13:45 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 05:22	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 05:22	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 05:22	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 05:22	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:22	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:22	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:22	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 05:22	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 05:22	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 05:22	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:22	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 05:22	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 05:22	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-122 **Lab ID: 50260974007** Collected: 06/24/20 13:45 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 05:22	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:22	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 05:22	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 05:22	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:22	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 05:22	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 05:22	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	85-116		1		06/30/20 05:22	460-00-4	
Dibromofluoromethane (S)	99	%.	75-120		1		06/30/20 05:22	1868-53-7	
Toluene-d8 (S)	108	%.	83-111		1		06/30/20 05:22	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012 Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:11	57-12-5	

REPORT OF LABORATORY ANALYSIS

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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-127 **Lab ID: 50260974008** Collected: 06/24/20 12:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		06/29/20 13:32	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		06/29/20 13:32	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		06/29/20 13:32	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:36	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	49	%.	10-144		1	06/30/20 21:50	07/02/20 04:36	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:20	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:20	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:20	7440-42-8	
Calcium	**163000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:20	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:20	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:20	7440-48-4	
Copper	**6.8**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:20	7440-50-8	
Iron	**2000**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:20	7439-89-6	
Magnesium	**22900**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:20	7439-95-4	
Manganese	**422**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:20	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:20	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:20	7440-02-0	
Potassium	**11300**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:20	7440-09-7	
Sodium	**33200**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:20	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:20	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:20	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**1530**	ug/L	250	250	5	06/30/20 09:29	07/02/20 01:48	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:07	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:07	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:07	7440-43-9	
Lead	**3.4**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:07	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:07	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-127 **Lab ID: 50260974008** Collected: 06/24/20 12:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:07	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:07	7440-28-0	
Titanium	**352**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 01:48	7440-32-6	N2
Vanadium	**4.5**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:07	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:24	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	120-12-7	
Benzo(a)anthracene	**1.2**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	56-55-3	
Benzo(a)pyrene	**1.1**	ug/L	0.19	0.19	1	06/29/20 10:44	06/30/20 20:52	50-32-8	
Benzo(b)fluoranthene	**1.3**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	207-08-9	
Chrysene	**1.3**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	218-01-9	
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/30/20 20:52	53-70-3	
Fluoranthene	**2.0**	ug/L	0.95	0.95	1	06/29/20 10:44	06/30/20 20:52	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/30/20 20:52	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	91-20-3	
Phenanthrene	**3.7**	ug/L	1.9	1.9	1	06/29/20 10:44	06/30/20 20:52	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 20:52	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%.	32-107		1	06/29/20 10:44	06/30/20 20:52	321-60-8	
p-Terphenyl-d14 (S)	79	%.	29-143		1	06/29/20 10:44	06/30/20 20:52	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/30/20 19:37	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/30/20 19:37	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/30/20 19:37	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/30/20 19:37	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/30/20 19:37	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/30/20 19:37	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/30/20 19:37	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/30/20 19:37	132-64-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-127 **Lab ID: 50260974008** Collected: 06/24/20 12:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/30/20 19:37	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/30/20 19:37	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/30/20 19:37	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/30/20 19:37	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/30/20 19:37	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/30/20 19:37	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/30/20 19:37	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/30/20 19:37	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/30/20 19:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/30/20 19:37		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/30/20 19:37	88-74-4	
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/30/20 19:37	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/30/20 19:37	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/30/20 19:37	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/30/20 19:37	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/30/20 19:37	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/30/20 19:37	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/30/20 19:37	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/30/20 19:37	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/30/20 19:37	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	75	%.	42-109		1	06/29/20 10:44	06/30/20 19:37	4165-60-0	
Phenol-d5 (S)	38	%.	11-56		1	06/29/20 10:44	06/30/20 19:37	4165-62-2	
2-Fluorophenol (S)	52	%.	16-75		1	06/29/20 10:44	06/30/20 19:37	367-12-4	
2,4,6-Tribromophenol (S)	88	%.	45-126		1	06/29/20 10:44	06/30/20 19:37	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 17:37	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	110	%	60-140		1		07/02/20 17:37	2199-69-1	
4-Bromofluorobenzene (S)	113	%	79-124		1		07/02/20 17:37	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-127 **Lab ID: 50260974008** Collected: 06/24/20 12:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:55	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 05:55	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 05:55	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 05:55	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:55	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	56-23-5	
Chlorobenzene	**2.7**	ug/L	1.0	1.0	1		06/30/20 05:55	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 05:55	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 05:55	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 05:55	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	74-95-3	
1,2-Dichlorobenzene	**1.6**	ug/L	1.0	1.0	1		06/30/20 05:55	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 05:55	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:55	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:55	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:55	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 05:55	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-127 **Lab ID: 50260974008** Collected: 06/24/20 12:50 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	98-82-8	
p-Isopropyltoluene	**0.12J**	ug/L	1.0	0.11	1		06/30/20 05:55	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	75-09-2	
2-Methylnaphthalene	**18.5J**	ug/L	20.0	5.0	1		06/30/20 05:55	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:55	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	1634-04-4	
Naphthalene	**8.0**	ug/L	5.0	5.0	1		06/30/20 05:55	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 05:55	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 05:55	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	79-01-6	
Trichlorofluoromethane	**1.6J**	ug/L	2.0	1.0	1		06/30/20 05:55	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:55	526-73-8	N2
1,2,4-Trimethylbenzene	**2.9J**	ug/L	5.0	1.0	1		06/30/20 05:55	95-63-6	
1,3,5-Trimethylbenzene	**1.1J**	ug/L	5.0	1.0	1		06/30/20 05:55	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:55	75-01-4	
m&p-Xylene	**0.77J**	ug/L	2.0	0.24	1		06/30/20 05:55	179601-23-1	
o-Xylene	**1.6**	ug/L	1.0	0.16	1		06/30/20 05:55	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	85-116		1		06/30/20 05:55	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 05:55	1868-53-7	
Toluene-d8 (S)	108	%.	83-111		1		06/30/20 05:55	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012								
	Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:13	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-128 **Lab ID: 50260974009** Collected: 06/24/20 11:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015M Alcohols in water	Analytical Method: EPA 8015 Alcohol-Glycol Pace Analytical Services - Indianapolis								
n-Butanol	**<800**	ug/L	5000	800	1		06/29/20 13:41	71-36-3	
Ethanol	**<1000**	ug/L	5000	1000	1		06/29/20 13:41	64-17-5	
Methanol	**<400**	ug/L	5000	400	1		06/29/20 13:41	67-56-1	
8082 GCS PCB RV Waters	Analytical Method: EPA 8082 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
PCB-1016 (Aroclor 1016)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	37324-23-5	N2
PCB-1268 (Aroclor 1268)	**<0.19**	ug/L	0.19	0.19	1	06/30/20 21:50	07/02/20 04:50	11100-14-4	N2
Surrogates									
Tetrachloro-m-xylene (S)	53	%.	10-144		1	06/30/20 21:50	07/02/20 04:50	877-09-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:22	7440-38-2	
Barium	**128**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:22	7440-39-3	
Boron	**928**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:22	7440-42-8	
Calcium	**209000**	ug/L	2000	2000	2	06/30/20 05:43	07/07/20 10:56	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:22	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:22	7440-48-4	
Copper	**4.6**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:22	7440-50-8	
Iron	**356**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:22	7439-89-6	
Magnesium	**34100**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:22	7439-95-4	
Manganese	**239**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:22	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:22	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:22	7440-02-0	
Potassium	**43100**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:22	7440-09-7	
Sodium	**40800**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:22	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:22	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:22	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**204**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 11:11	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:11	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:11	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:11	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:11	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:11	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-128 **Lab ID: 50260974009** Collected: 06/24/20 11:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:11	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:11	7440-28-0	
Titanium	**412**	ug/L	10.0	0.97	10	06/30/20 09:29	07/02/20 01:53	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:11	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:27	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 20:10	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	218-01-9	
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:10	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:10	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:10	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:10	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	65	%.	32-107		1	06/29/20 10:44	06/29/20 20:10	321-60-8	
p-Terphenyl-d14 (S)	83	%.	29-143		1	06/29/20 10:44	06/29/20 20:10	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 20:57	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:57	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 20:57	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 20:57	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 20:57	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:57	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:57	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:57	132-64-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-128 **Lab ID: 50260974009** Collected: 06/24/20 11:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:57	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:57	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 20:57	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 20:57	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 20:57	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:57	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 20:57	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 20:57	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:57		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 20:57	88-74-4	
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 20:57	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 20:57	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:57	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 20:57	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:57	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 20:57	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 20:57	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:57	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	63	%.	42-109		1	06/29/20 10:44	06/29/20 20:57	4165-60-0	
Phenol-d5 (S)	43	%.	11-56		1	06/29/20 10:44	06/29/20 20:57	4165-62-2	
2-Fluorophenol (S)	52	%.	16-75		1	06/29/20 10:44	06/29/20 20:57	367-12-4	
2,4,6-Tribromophenol (S)	82	%.	45-126		1	06/29/20 10:44	06/29/20 20:57	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 18:04	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	97	%	60-140		1		07/02/20 18:04	2199-69-1	
4-Bromofluorobenzene (S)	116	%	79-124		1		07/02/20 18:04	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-128 **Lab ID: 50260974009** Collected: 06/24/20 11:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:28	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 06:28	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 06:28	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 06:28	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:28	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 06:28	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 06:28	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 06:28	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 06:28	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:28	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:28	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:28	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 06:28	74-88-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-128 **Lab ID: 50260974009** Collected: 06/24/20 11:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 06:28	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 06:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:28	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 06:28	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	79-34-5	
Tetrachloroethene	**7.8**	ug/L	1.0	1.0	1		06/30/20 06:28	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 06:28	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 06:28	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:28	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:28	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:28	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:28	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 06:28	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 06:28	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	85-116		1		06/30/20 06:28	460-00-4	
Dibromofluoromethane (S)	107	%.	75-120		1		06/30/20 06:28	1868-53-7	
Toluene-d8 (S)	107	%.	83-111		1		06/30/20 06:28	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012								
	Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:14	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-129 **Lab ID: 50260974010** Collected: 06/24/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**6.5**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:25	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:25	7440-39-3	
Boron	**583**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:25	7440-42-8	
Calcium	**112000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:25	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:25	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:25	7440-48-4	
Copper	**11.4**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:25	7440-50-8	
Iron	**636**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:25	7439-89-6	
Magnesium	**5240**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:25	7439-95-4	
Manganese	**338**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:25	7439-96-5	
Molybdenum	**50.2**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:25	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:25	7440-02-0	
Potassium	**60200**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:25	7440-09-7	
Sodium	**59700**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:25	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:25	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:25	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**461**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 11:16	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:16	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:16	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:16	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:16	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:16	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:16	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:16	7440-28-0	
Titanium	**228**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 01:57	7440-32-6	N2
Vanadium	**7.2**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:16	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:35	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	83-32-9	
Acenaphthylene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	208-96-8	
Anthracene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	120-12-7	
Benzo(a)anthracene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	56-55-3	
Benzo(a)pyrene	**<0.18**	ug/L	0.18	0.18	1	06/29/20 10:44	06/29/20 20:21	50-32-8	
Benzo(b)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	205-99-2	
Benzo(g,h,i)perylene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	191-24-2	
Benzo(k)fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	207-08-9	
Chrysene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-129 **Lab ID: 50260974010** Collected: 06/24/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 20:21	53-70-3	
Fluoranthene	**<0.91**	ug/L	0.91	0.91	1	06/29/20 10:44	06/29/20 20:21	206-44-0	
Fluorene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 20:21	193-39-5	
2-Methylnaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	91-57-6	
Naphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	91-20-3	
Phenanthrene	**<1.8**	ug/L	1.8	1.8	1	06/29/20 10:44	06/29/20 20:21	85-01-8	
Pyrene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 20:21	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%.	32-107		1	06/29/20 10:44	06/29/20 20:21	321-60-8	
p-Terphenyl-d14 (S)	88	%.	29-143		1	06/29/20 10:44	06/29/20 20:21	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.2**	ug/L	9.1	3.2	1	06/29/20 10:44	06/29/20 21:13	101-55-3	
Butylbenzylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	85-68-7	
Carbazole	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 21:13	86-74-8	
4-Chloro-3-methylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	59-50-7	
bis(2-Chloroethoxy)methane	**<3.4**	ug/L	9.1	3.4	1	06/29/20 10:44	06/29/20 21:13	111-91-1	
bis(2-Chloroethyl) ether	**<2.0**	ug/L	4.5	2.0	1	06/29/20 10:44	06/29/20 21:13	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.6**	ug/L	9.1	3.6	1	06/29/20 10:44	06/29/20 21:13	108-60-1	
2-Chloronaphthalene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	91-58-7	
2-Chlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 21:13	95-57-8	
4-Chlorophenylphenyl ether	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 21:13	7005-72-3	
Dibenzofuran	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 21:13	132-64-9	
2,4-Dichlorophenol	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 21:13	120-83-2	
Diethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	84-66-2	
2,4-Dimethylphenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	105-67-9	
Dimethylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	131-11-3	
Di-n-butylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	84-74-2	
4,6-Dinitro-2-methylphenol	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 21:13	534-52-1	
2,4-Dinitrophenol	**<3.5**	ug/L	45.5	3.5	1	06/29/20 10:44	06/29/20 21:13	51-28-5	
2,4-Dinitrotoluene	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	121-14-2	
2,6-Dinitrotoluene	**<3.0**	ug/L	4.5	3.0	1	06/29/20 10:44	06/29/20 21:13	606-20-2	
Di-n-octylphthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	117-84-0	
1,2-Diphenylhydrazine	**<3.3**	ug/L	9.1	3.3	1	06/29/20 10:44	06/29/20 21:13	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	117-81-7	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 21:13	87-68-3	
Hexachlorobenzene	**<2.4**	ug/L	4.5	2.4	1	06/29/20 10:44	06/29/20 21:13	118-74-1	
Hexachlorocyclopentadiene	**<22.7**	ug/L	22.7	22.7	1	06/29/20 10:44	06/29/20 21:13	77-47-4	
Hexachloroethane	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	67-72-1	
Isophorone	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	78-59-1	
2-Methylphenol(o-Cresol)	**<9.1**	ug/L	9.1	9.1	1	06/29/20 10:44	06/29/20 21:13	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<18.2**	ug/L	18.2	18.2	1	06/29/20 10:44	06/29/20 21:13		
2-Nitroaniline	**<5.3**	ug/L	9.1	5.3	1	06/29/20 10:44	06/29/20 21:13	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-129 **Lab ID: 50260974010** Collected: 06/24/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.6**	ug/L	9.1	4.6	1	06/29/20 10:44	06/29/20 21:13	99-09-2	
4-Nitroaniline	**<4.4**	ug/L	9.1	4.4	1	06/29/20 10:44	06/29/20 21:13	100-01-6	
Nitrobenzene	**<2.7**	ug/L	4.5	2.7	1	06/29/20 10:44	06/29/20 21:13	98-95-3	
2-Nitrophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	88-75-5	
4-Nitrophenol	**<5.5**	ug/L	45.5	5.5	1	06/29/20 10:44	06/29/20 21:13	100-02-7	
N-Nitrosodimethylamine	**<2.6**	ug/L	9.1	2.6	1	06/29/20 10:44	06/29/20 21:13	62-75-9	
N-Nitroso-di-n-propylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	621-64-7	
N-Nitrosodiphenylamine	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	18.2	1.8	1	06/29/20 10:44	06/29/20 21:13	87-86-5	
Phenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	108-95-2	
1,2,4-Trichlorobenzene	**<0.99**	ug/L	9.1	0.99	1	06/29/20 10:44	06/29/20 21:13	120-82-1	
2,4,5-Trichlorophenol	**<4.5**	ug/L	4.5	4.5	1	06/29/20 10:44	06/29/20 21:13	95-95-4	
2,4,6-Trichlorophenol	**<3.6**	ug/L	4.5	3.6	1	06/29/20 10:44	06/29/20 21:13	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	68	%.	42-109		1	06/29/20 10:44	06/29/20 21:13	4165-60-0	
Phenol-d5 (S)	52	%.	11-56		1	06/29/20 10:44	06/29/20 21:13	4165-62-2	
2-Fluorophenol (S)	60	%.	16-75		1	06/29/20 10:44	06/29/20 21:13	367-12-4	
2,4,6-Tribromophenol (S)	95	%.	45-126		1	06/29/20 10:44	06/29/20 21:13	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 18:31	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	101	%	60-140		1		07/02/20 18:31	2199-69-1	
4-Bromofluorobenzene (S)	119	%	79-124		1		07/02/20 18:31	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:02	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 07:02	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 07:02	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 07:02	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:02	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	108-90-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-129 **Lab ID: 50260974010** Collected: 06/24/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 07:02	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 07:02	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 07:02	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 07:02	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	75-71-8	L1
1,1-Dichloroethane	**1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 07:02	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 07:02	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:02	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 07:02	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 07:02	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 07:02	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:02	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 07:02	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 07:02	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-129 **Lab ID: 50260974010** Collected: 06/24/20 12:10 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	79-00-5	
Trichloroethene	**1.5**	ug/L	1.0	1.0	1		06/30/20 07:02	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 07:02	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:02	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 07:02	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 07:02	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:02	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 07:02	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 07:02	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	85-116		1		06/30/20 07:02	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 07:02	1868-53-7	
Toluene-d8 (S)	108	%.	83-111		1		06/30/20 07:02	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012 Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:16	57-12-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-131 **Lab ID: 50260974011** Collected: 06/24/20 14:56 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:27	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:27	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:27	7440-42-8	
Calcium	**70500**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:27	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:27	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:27	7440-48-4	
Copper	**6.3**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:27	7440-50-8	
Iron	**3320**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:27	7439-89-6	
Magnesium	**7520**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:27	7439-95-4	
Manganese	**553**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:27	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:27	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:27	7440-02-0	
Potassium	**9520**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:27	7440-09-7	
Sodium	**16000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:27	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:27	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:27	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**2400**	ug/L	250	250	5	06/30/20 09:29	07/02/20 02:02	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:21	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:21	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:21	7440-43-9	
Lead	**5.8**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:21	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:21	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:21	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:21	7440-28-0	
Titanium	**189**	ug/L	5.0	0.48	5	06/30/20 09:29	07/02/20 02:02	7440-32-6	N2
Vanadium	**6.7**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:21	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:37	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 20:33	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-131 **Lab ID: 50260974011** Collected: 06/24/20 14:56 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:33	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:33	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:33	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:33	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	73	%.	32-107		1	06/29/20 10:44	06/29/20 20:33	321-60-8	
p-Terphenyl-d14 (S)	87	%.	29-143		1	06/29/20 10:44	06/29/20 20:33	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 21:30	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:30	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 21:30	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 21:30	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 21:30	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:30	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 21:30	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 21:30	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:30	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 21:30	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 21:30	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 21:30	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 21:30	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 21:30	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 21:30	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 21:30	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 21:30		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 21:30	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-131 **Lab ID: 50260974011** Collected: 06/24/20 14:56 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 21:30	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 21:30	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 21:30	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 21:30	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 21:30	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 21:30	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 21:30	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:30	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 21:30	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	86	%.	42-109		1	06/29/20 10:44	06/29/20 21:30	4165-60-0	
Phenol-d5 (S)	54	%.	11-56		1	06/29/20 10:44	06/29/20 21:30	4165-62-2	
2-Fluorophenol (S)	64	%.	16-75		1	06/29/20 10:44	06/29/20 21:30	367-12-4	
2,4,6-Tribromophenol (S)	96	%.	45-126		1	06/29/20 10:44	06/29/20 21:30	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**0.46**	ug/L	0.20	0.090	1		07/02/20 21:10	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	104	%	60-140		1		07/02/20 21:10	2199-69-1	
4-Bromofluorobenzene (S)	122	%	79-124		1		07/02/20 21:10	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:35	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 07:35	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 07:35	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 07:35	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:35	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-131 **Lab ID: 50260974011** Collected: 06/24/20 14:56 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 07:35	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 07:35	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 07:35	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 07:35	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 07:35	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 07:35	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:35	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 07:35	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 07:35	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 07:35	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 07:35	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 07:35	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 07:35	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: MW-131 **Lab ID: 50260974011** Collected: 06/24/20 14:56 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 07:35	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 07:35	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 07:35	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 07:35	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 07:35	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 07:35	179601-23-1	
o-Xylene	**0.18J**	ug/L	1.0	0.16	1		06/30/20 07:35	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	85-116		1		06/30/20 07:35	460-00-4	
Dibromofluoromethane (S)	100	%.	75-120		1		06/30/20 07:35	1868-53-7	
Toluene-d8 (S)	114	%.	83-111		1		06/30/20 07:35	2037-26-5	S3
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012 Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:16	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-1 **Lab ID: 50260974012** Collected: 06/23/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:29	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:29	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:29	7440-42-8	
Calcium	**101000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:29	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:29	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:29	7440-48-4	
Copper	**8.3**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:29	7440-50-8	
Iron	**1220**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:29	7439-89-6	
Magnesium	**13700**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:29	7439-95-4	
Manganese	**784**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:29	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:29	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:29	7440-02-0	
Potassium	**1910**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:29	7440-09-7	
Sodium	**22400**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:29	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:29	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:29	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis								
Aluminum	**810**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 11:34	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:34	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:34	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:34	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:34	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:34	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:34	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:34	7440-28-0	
Titanium	**209**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 02:07	7440-32-6	N2
Vanadium	**<4.0**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:34	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:39	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 19:35	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-1 **Lab ID: 50260974012** Collected: 06/23/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:35	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 19:35	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:35	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 19:35	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 19:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%.	32-107		1	06/29/20 10:44	06/29/20 19:35	321-60-8	
p-Terphenyl-d14 (S)	84	%.	29-143		1	06/29/20 10:44	06/29/20 19:35	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 20:09	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:09	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 20:09	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 20:09	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 20:09	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:09	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:09	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:09	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:09	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:09	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 20:09	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 20:09	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 20:09	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:09	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 20:09	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 20:09	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 20:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 20:09		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 20:09	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-1 **Lab ID: 50260974012** Collected: 06/23/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 20:09	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 20:09	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 20:09	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 20:09	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 20:09	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 20:09	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 20:09	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:09	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 20:09	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	83	%.	42-109		1	06/29/20 10:44	06/29/20 20:09	4165-60-0	
Phenol-d5 (S)	45	%.	11-56		1	06/29/20 10:44	06/29/20 20:09	4165-62-2	
2-Fluorophenol (S)	60	%.	16-75		1	06/29/20 10:44	06/29/20 20:09	367-12-4	
2,4,6-Tribromophenol (S)	92	%.	45-126		1	06/29/20 10:44	06/29/20 20:09	118-79-6	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:08	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 08:08	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 08:08	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 08:08	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:08	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 08:08	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 08:08	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 08:08	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-1 **Lab ID: 50260974012** Collected: 06/23/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 08:08	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 08:08	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 08:08	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:08	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 08:08	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 08:08	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 08:08	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:08	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 08:08	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 08:08	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 08:08	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:08	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 08:08	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 08:08	108-67-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-1 **Lab ID: 50260974012** Collected: 06/23/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:08	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 08:08	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 08:08	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	85-116		1		06/30/20 08:08	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		06/30/20 08:08	1868-53-7	
Toluene-d8 (S)	106	%.	83-111		1		06/30/20 08:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-3 **Lab ID: 50260974013** Collected: 06/24/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Indianapolis								
Arsenic	**<5.0**	ug/L	5.0	5.0	1	06/30/20 05:43	07/07/20 09:31	7440-38-2	
Barium	**<100**	ug/L	100	100	1	06/30/20 05:43	07/07/20 09:31	7440-39-3	
Boron	**<300**	ug/L	300	300	1	06/30/20 05:43	07/07/20 09:31	7440-42-8	
Calcium	**107000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:31	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	10.0	1	06/30/20 05:43	07/07/20 09:31	7440-47-3	
Cobalt	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:31	7440-48-4	
Copper	**6.8**	ug/L	4.0	4.0	1	06/30/20 05:43	07/07/20 09:31	7440-50-8	
Iron	**830**	ug/L	200	200	1	06/30/20 05:43	07/07/20 09:31	7439-89-6	
Magnesium	**16300**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:31	7439-95-4	
Manganese	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:31	7439-96-5	
Molybdenum	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:31	7439-98-7	
Nickel	**<20.0**	ug/L	20.0	20.0	1	06/30/20 05:43	07/07/20 09:31	7440-02-0	
Potassium	**15700**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:31	7440-09-7	
Sodium	**13600**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:31	7440-23-5	
Strontium	**<1000**	ug/L	1000	1000	1	06/30/20 05:43	07/07/20 09:31	7440-24-6	
Zinc	**<50.0**	ug/L	50.0	50.0	1	06/30/20 05:43	07/07/20 09:31	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 200.2								
	Pace Analytical Services - Indianapolis								
Aluminum	**495**	ug/L	50.0	50.0	1	06/30/20 09:29	07/01/20 11:39	7429-90-5	
Antimony	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:39	7440-36-0	
Beryllium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:39	7440-41-7	
Cadmium	**<1.0**	ug/L	1.0	1.0	1	06/30/20 09:29	07/01/20 11:39	7440-43-9	
Lead	**<3.0**	ug/L	3.0	3.0	1	06/30/20 09:29	07/01/20 11:39	7439-92-1	
Selenium	**<5.0**	ug/L	5.0	5.0	1	06/30/20 09:29	07/01/20 11:39	7782-49-2	
Silver	**<0.20**	ug/L	0.25	0.20	1	06/30/20 09:29	07/01/20 11:39	7440-22-4	
Thallium	**<2.0**	ug/L	2.0	2.0	1	06/30/20 09:29	07/01/20 11:39	7440-28-0	
Titanium	**214**	ug/L	2.0	0.19	2	06/30/20 09:29	07/02/20 02:11	7440-32-6	N2
Vanadium	**7.2**	ug/L	4.0	4.0	1	06/30/20 09:29	07/01/20 11:39	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Indianapolis								
Mercury	**<0.12**	ug/L	0.20	0.12	1	07/01/20 11:50	07/01/20 23:41	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
	Pace Analytical Services - Indianapolis								
Acenaphthene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	83-32-9	
Acenaphthylene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	208-96-8	
Anthracene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	120-12-7	
Benzo(a)anthracene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	56-55-3	
Benzo(a)pyrene	**<0.19**	ug/L	0.19	0.19	1	06/29/20 10:44	06/29/20 20:44	50-32-8	
Benzo(b)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	205-99-2	
Benzo(g,h,i)perylene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	191-24-2	
Benzo(k)fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	207-08-9	
Chrysene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	218-01-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-3 **Lab ID: 50260974013** Collected: 06/24/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
Dibenz(a,h)anthracene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:44	53-70-3	
Fluoranthene	**<0.95**	ug/L	0.95	0.95	1	06/29/20 10:44	06/29/20 20:44	206-44-0	
Fluorene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:44	193-39-5	
2-Methylnaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	91-57-6	
Naphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	91-20-3	
Phenanthrene	**<1.9**	ug/L	1.9	1.9	1	06/29/20 10:44	06/29/20 20:44	85-01-8	
Pyrene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 20:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%.	32-107		1	06/29/20 10:44	06/29/20 20:44	321-60-8	
p-Terphenyl-d14 (S)	78	%.	29-143		1	06/29/20 10:44	06/29/20 20:44	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
4-Bromophenylphenyl ether	**<3.4**	ug/L	9.5	3.4	1	06/29/20 10:44	06/29/20 21:46	101-55-3	
Butylbenzylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	85-68-7	
Carbazole	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:46	86-74-8	
4-Chloro-3-methylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	59-50-7	
bis(2-Chloroethoxy)methane	**<3.6**	ug/L	9.5	3.6	1	06/29/20 10:44	06/29/20 21:46	111-91-1	
bis(2-Chloroethyl) ether	**<2.1**	ug/L	4.8	2.1	1	06/29/20 10:44	06/29/20 21:46	111-44-4	
bis(2-Chloroisopropyl) ether	**<3.8**	ug/L	9.5	3.8	1	06/29/20 10:44	06/29/20 21:46	108-60-1	
2-Chloronaphthalene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	91-58-7	
2-Chlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:46	95-57-8	
4-Chlorophenylphenyl ether	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 21:46	7005-72-3	
Dibenzofuran	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 21:46	132-64-9	
2,4-Dichlorophenol	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:46	120-83-2	
Diethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	84-66-2	
2,4-Dimethylphenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	105-67-9	
Dimethylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	131-11-3	
Di-n-butylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 21:46	534-52-1	
2,4-Dinitrophenol	**<3.7**	ug/L	47.6	3.7	1	06/29/20 10:44	06/29/20 21:46	51-28-5	
2,4-Dinitrotoluene	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	121-14-2	
2,6-Dinitrotoluene	**<3.2**	ug/L	4.8	3.2	1	06/29/20 10:44	06/29/20 21:46	606-20-2	
Di-n-octylphthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	117-84-0	
1,2-Diphenylhydrazine	**<3.5**	ug/L	9.5	3.5	1	06/29/20 10:44	06/29/20 21:46	122-66-7	
bis(2-Ethylhexyl)phthalate	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	117-81-7	
Hexachloro-1,3-butadiene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 21:46	87-68-3	
Hexachlorobenzene	**<2.6**	ug/L	4.8	2.6	1	06/29/20 10:44	06/29/20 21:46	118-74-1	
Hexachlorocyclopentadiene	**<23.8**	ug/L	23.8	23.8	1	06/29/20 10:44	06/29/20 21:46	77-47-4	
Hexachloroethane	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	67-72-1	
Isophorone	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	78-59-1	
2-Methylphenol(o-Cresol)	**<9.5**	ug/L	9.5	9.5	1	06/29/20 10:44	06/29/20 21:46	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<19.0**	ug/L	19.0	19.0	1	06/29/20 10:44	06/29/20 21:46		
2-Nitroaniline	**<5.5**	ug/L	9.5	5.5	1	06/29/20 10:44	06/29/20 21:46	88-74-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-3 **Lab ID: 50260974013** Collected: 06/24/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Pace Analytical Services - Indianapolis								
3-Nitroaniline	**<4.8**	ug/L	9.5	4.8	1	06/29/20 10:44	06/29/20 21:46	99-09-2	
4-Nitroaniline	**<4.6**	ug/L	9.5	4.6	1	06/29/20 10:44	06/29/20 21:46	100-01-6	
Nitrobenzene	**<2.9**	ug/L	4.8	2.9	1	06/29/20 10:44	06/29/20 21:46	98-95-3	
2-Nitrophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	88-75-5	
4-Nitrophenol	**<5.8**	ug/L	47.6	5.8	1	06/29/20 10:44	06/29/20 21:46	100-02-7	
N-Nitrosodimethylamine	**<2.7**	ug/L	9.5	2.7	1	06/29/20 10:44	06/29/20 21:46	62-75-9	
N-Nitroso-di-n-propylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	621-64-7	
N-Nitrosodiphenylamine	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	86-30-6	
Pentachlorophenol	**<1.8**	ug/L	19.0	1.8	1	06/29/20 10:44	06/29/20 21:46	87-86-5	
Phenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	108-95-2	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	9.5	1.0	1	06/29/20 10:44	06/29/20 21:46	120-82-1	
2,4,5-Trichlorophenol	**<4.8**	ug/L	4.8	4.8	1	06/29/20 10:44	06/29/20 21:46	95-95-4	
2,4,6-Trichlorophenol	**<3.8**	ug/L	4.8	3.8	1	06/29/20 10:44	06/29/20 21:46	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%.	42-109		1	06/29/20 10:44	06/29/20 21:46	4165-60-0	
Phenol-d5 (S)	39	%.	11-56		1	06/29/20 10:44	06/29/20 21:46	4165-62-2	
2-Fluorophenol (S)	46	%.	16-75		1	06/29/20 10:44	06/29/20 21:46	367-12-4	
2,4,6-Tribromophenol (S)	87	%.	45-126		1	06/29/20 10:44	06/29/20 21:46	118-79-6	
8260C SIM Volatile Organics	Analytical Method: EPA 8260C SIM/5030C Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	**<0.090**	ug/L	0.20	0.090	1		07/02/20 20:43	123-91-1	
Surrogates									
1,2-Dichlorobenzene-d4 (S)	103	%	60-140		1		07/02/20 20:43	2199-69-1	
4-Bromofluorobenzene (S)	122	%	79-124		1		07/02/20 20:43	460-00-4	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:41	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 08:41	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 08:41	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 08:41	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:41	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	108-90-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-3 **Lab ID: 50260974013** Collected: 06/24/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 08:41	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 08:41	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 08:41	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 08:41	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 08:41	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 08:41	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:41	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 08:41	74-88-4	
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 08:41	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 08:41	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 08:41	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 08:41	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 08:41	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	71-55-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: DUP-3 **Lab ID: 50260974013** Collected: 06/24/20 00:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 08:41	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 08:41	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 08:41	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 08:41	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 08:41	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 08:41	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 08:41	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	85-116		1		06/30/20 08:41	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		06/30/20 08:41	1868-53-7	
Toluene-d8 (S)	106	%.	83-111		1		06/30/20 08:41	2037-26-5	
9012 Cyanide, Total	Analytical Method: EPA 9012 Preparation Method: EPA 9012 Pace Analytical Services - Indianapolis								
Cyanide	**<5.0**	ug/L	5.0	5.0	1	07/01/20 12:15	07/02/20 16:18	57-12-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Trip Blank **Lab ID: 50260974014** Collected: 06/23/20 08:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 09:14	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 09:14	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	108-86-1	
Bromochloromethane	**<0.22**	ug/L	1.0	0.22	1		06/30/20 09:14	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 09:14	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 09:14	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 09:14	110-82-7	N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 09:14	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 09:14	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.40**	ug/L	100	0.40	1		06/30/20 09:14	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 09:14	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 09:14	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 09:14	591-78-6	
Iodomethane	**<0.51**	ug/L	5.0	0.51	1		06/30/20 09:14	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Trip Blank **Lab ID: 50260974014** Collected: 06/23/20 08:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	98-82-8	
p-Isopropyltoluene	**<0.11**	ug/L	1.0	0.11	1		06/30/20 09:14	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 09:14	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 09:14	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 09:14	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 09:14	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 09:14	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 09:14	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 09:14	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 09:14	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 09:14	75-01-4	
m&p-Xylene	**<0.24**	ug/L	2.0	0.24	1		06/30/20 09:14	179601-23-1	
o-Xylene	**<0.16**	ug/L	1.0	0.16	1		06/30/20 09:14	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%.	85-116		1		06/30/20 09:14	460-00-4	
Dibromofluoromethane (S)	101	%.	75-120		1		06/30/20 09:14	1868-53-7	
Toluene-d8 (S)	110	%.	83-111		1		06/30/20 09:14	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Field Blank **Lab ID: 50260974015** Collected: 06/23/20 11:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:39	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 05:39	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		06/30/20 05:39	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 05:39	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:39	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	75-15-0	L1
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 05:39	110-82-7	L1,N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 05:39	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 05:39	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		06/30/20 05:39	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:39	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 05:39	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:39	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		06/30/20 05:39	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Field Blank **Lab ID: 50260974015** Collected: 06/23/20 11:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		06/30/20 05:39	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 05:39	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 05:39	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 05:39	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 05:39	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 05:39	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 05:39	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 05:39	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 05:39	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 05:39	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		06/30/20 05:39	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		06/30/20 05:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	85-116		1		06/30/20 05:39	460-00-4	
Dibromofluoromethane (S)	102	%.	75-120		1		06/30/20 05:39	1868-53-7	
Toluene-d8 (S)	108	%.	83-111		1		06/30/20 05:39	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Trip Blank **Lab ID: 50260974016** Collected: 06/24/20 08:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:12	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 06:12	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		06/30/20 06:12	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 06:12	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:12	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	75-15-0	L1
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 06:12	110-82-7	L1,N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 06:12	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 06:12	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		06/30/20 06:12	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:12	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:12	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:12	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		06/30/20 06:12	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Trip Blank **Lab ID: 50260974016** Collected: 06/24/20 08:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		06/30/20 06:12	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 06:12	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:12	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 06:12	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 06:12	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 06:12	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:12	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:12	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:12	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:12	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		06/30/20 06:12	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		06/30/20 06:12	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%.	85-116		1		06/30/20 06:12	460-00-4	
Dibromofluoromethane (S)	104	%.	75-120		1		06/30/20 06:12	1868-53-7	
Toluene-d8 (S)	109	%.	83-111		1		06/30/20 06:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Field Blank **Lab ID: 50260974017** Collected: 06/24/20 11:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis								
Acetone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:45	67-64-1	
Acrylonitrile	**<2.0**	ug/L	2.0	2.0	1		06/30/20 06:45	107-13-1	
tert-Amylmethyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	994-05-8	N2
Benzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	108-86-1	
Bromochloromethane	**<0.59**	ug/L	1.0	0.59	1		06/30/20 06:45	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	74-83-9	
2-Butanone (MEK)	**<25.0**	ug/L	25.0	25.0	1		06/30/20 06:45	78-93-3	
tert-Butyl Alcohol	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:45	75-65-0	
n-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	98-06-6	
Carbon disulfide	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	75-15-0	L1
Carbon tetrachloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	74-87-3	
Cyclohexane	**<10.0**	ug/L	10.0	10.0	1		06/30/20 06:45	110-82-7	L1,N2
1,2-Dibromo-3-chloropropane	**<0.25**	ug/L	0.50	0.25	1		06/30/20 06:45	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	124-48-1	
1,2-Dibromoethane (EDB)	**<0.23**	ug/L	0.50	0.23	1		06/30/20 06:45	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	106-46-7	
trans-1,4-Dichloro-2-butene	**<0.82**	ug/L	100	0.82	1		06/30/20 06:45	110-57-6	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	75-71-8	L1
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	78-87-5	
cis-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:45	10061-01-5	
trans-1,3-Dichloropropene	**<100**	ug/L	100	100	1		06/30/20 06:45	10061-02-6	
Diethyl ether (Ethyl ether)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	60-29-7	
Diisopropyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	108-20-3	N2
Ethylbenzene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	100-41-4	
Ethyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	637-92-3	N2
Hexachloroethane	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	67-72-1	N2
2-Hexanone	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:45	591-78-6	
Iodomethane	**<0.45**	ug/L	5.0	0.45	1		06/30/20 06:45	74-88-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

ANALYTICAL RESULTS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Sample: Field Blank **Lab ID: 50260974017** Collected: 06/24/20 11:00 Received: 06/26/20 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Indianapolis								
Isopropylbenzene (Cumene)	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	98-82-8	
p-Isopropyltoluene	**<0.28**	ug/L	1.0	0.28	1		06/30/20 06:45	99-87-6	
Methylene Chloride	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	75-09-2	
2-Methylnaphthalene	**<5.0**	ug/L	20.0	5.0	1		06/30/20 06:45	91-57-6	
4-Methyl-2-pentanone (MIBK)	**<50.0**	ug/L	50.0	50.0	1		06/30/20 06:45	108-10-1	
Methyl-tert-butyl ether	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	1634-04-4	
Naphthalene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	91-20-3	
n-Propylbenzene	**<100**	ug/L	100	100	1		06/30/20 06:45	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	127-18-4	
Tetrahydrofuran	**<90.0**	ug/L	90.0	90.0	1		06/30/20 06:45	109-99-9	N2
Toluene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	108-88-3	
1,2,3-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	87-61-6	
1,2,4-Trichlorobenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	2.0	1.0	1		06/30/20 06:45	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	96-18-4	
1,2,3-Trimethylbenzene	**<5.0**	ug/L	5.0	5.0	1		06/30/20 06:45	526-73-8	N2
1,2,4-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:45	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	5.0	1.0	1		06/30/20 06:45	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1.0	1		06/30/20 06:45	75-01-4	
m&p-Xylene	**<0.16**	ug/L	2.0	0.16	1		06/30/20 06:45	179601-23-1	
o-Xylene	**<0.39**	ug/L	1.0	0.39	1		06/30/20 06:45	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%.	85-116		1		06/30/20 06:45	460-00-4	
Dibromofluoromethane (S)	107	%.	75-120		1		06/30/20 06:45	1868-53-7	
Toluene-d8 (S)	110	%.	83-111		1		06/30/20 06:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569752
QC Batch Method: EPA 8015 Alcohol-Glycol
Analysis Method: EPA 8015 Alcohol-Glycol
Analysis Description: EPA 8015 Modified
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974004, 50260974006, 50260974008, 50260974009

METHOD BLANK: 2628768 Matrix: Water
Associated Lab Samples: 50260974004, 50260974006, 50260974008, 50260974009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethanol	ug/L	<1000	5000	1000	06/29/20 13:04	
Methanol	ug/L	<400	5000	400	06/29/20 13:04	
n-Butanol	ug/L	<800	5000	800	06/29/20 13:04	

LABORATORY CONTROL SAMPLE: 2628769

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethanol	ug/L	50000	51300	103	69-128	
Methanol	ug/L	50000	40300	81	73-118	
n-Butanol	ug/L	50000	41300	83	77-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628845 2628846

Parameter	Units	50260974004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethanol	ug/L	<1000	50000	50000	57800	51400	116	103	64-132	12	20	
Methanol	ug/L	<400	50000	50000	45300	39700	90	79	66-123	13	20	
n-Butanol	ug/L	<800	50000	50000	46700	41300	93	83	66-130	12	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569860 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

METHOD BLANK: 2629080 | Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.12	0.20	0.12	07/01/20 22:42	

LABORATORY CONTROL SAMPLE: 2629081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.8	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2629082 2629083

Parameter	Units	50260974005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.12	5	5	5.0	5.0	100	100	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569644
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

METHOD BLANK: 2628421 Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	ug/L	<5.0	5.0	5.0	07/07/20 08:47	
Barium	ug/L	<100	100	100	07/07/20 08:47	
Boron	ug/L	<300	300	300	07/07/20 08:47	
Calcium	ug/L	<1000	1000	1000	07/07/20 08:47	
Chromium	ug/L	<10.0	10.0	10.0	07/07/20 08:47	
Cobalt	ug/L	<20.0	20.0	20.0	07/07/20 08:47	
Copper	ug/L	<4.0	4.0	4.0	07/07/20 08:47	
Iron	ug/L	<200	200	200	07/07/20 08:47	
Magnesium	ug/L	<1000	1000	1000	07/07/20 08:47	
Manganese	ug/L	<50.0	50.0	50.0	07/07/20 08:47	
Molybdenum	ug/L	<50.0	50.0	50.0	07/07/20 08:47	
Nickel	ug/L	<20.0	20.0	20.0	07/07/20 08:47	
Potassium	ug/L	<1000	1000	1000	07/07/20 08:47	
Sodium	ug/L	<1000	1000	1000	07/07/20 08:47	
Strontium	ug/L	<1000	1000	1000	07/07/20 08:47	
Zinc	ug/L	<50.0	50.0	50.0	07/07/20 08:47	

LABORATORY CONTROL SAMPLE: 2628422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	963	96	80-120	
Barium	ug/L	1000	909	91	80-120	
Boron	ug/L	1000	936	94	80-120	
Calcium	ug/L	10000	9350	94	80-120	
Chromium	ug/L	1000	919	92	80-120	
Cobalt	ug/L	1000	914	91	80-120	
Copper	ug/L	1000	902	90	80-120	
Iron	ug/L	10000	9020	90	80-120	
Magnesium	ug/L	10000	9080	91	80-120	
Manganese	ug/L	1000	915	92	80-120	
Molybdenum	ug/L	1000	969	97	80-120	
Nickel	ug/L	1000	926	93	80-120	
Potassium	ug/L	10000	9090	91	80-120	
Sodium	ug/L	10000	9230	92	80-120	
Strontium	ug/L	1000	<1000	93	80-120	
Zinc	ug/L	1000	949	95	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628423 2628424

Parameter	Units	50260974003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	<5.0	1000	1000	976	987	98	99	75-125	1	20	
Barium	ug/L	<100	1000	1000	929	946	90	91	75-125	2	20	
Boron	ug/L	<300	1000	1000	1000	1010	95	97	75-125	1	20	
Calcium	ug/L	103000	10000	10000	110000	111000	76	78	75-125	0	20	
Chromium	ug/L	<10.0	1000	1000	903	914	90	91	75-125	1	20	
Cobalt	ug/L	<20.0	1000	1000	888	898	89	89	75-125	1	20	
Copper	ug/L	8.7	1000	1000	909	914	90	91	75-125	1	20	
Iron	ug/L	1290	10000	10000	10000	10200	87	89	75-125	1	20	
Magnesium	ug/L	14600	10000	10000	23000	23300	83	87	75-125	2	20	
Manganese	ug/L	781	1000	1000	1660	1680	88	90	75-125	1	20	
Molybdenum	ug/L	<50.0	1000	1000	976	989	97	98	75-125	1	20	
Nickel	ug/L	<20.0	1000	1000	897	906	89	90	75-125	1	20	
Potassium	ug/L	1940	10000	10000	11000	11200	91	93	75-125	2	20	
Sodium	ug/L	21500	10000	10000	30300	30800	87	93	75-125	2	20	
Strontium	ug/L	<1000	1000	1000	1060	1070	92	94	75-125	2	20	
Zinc	ug/L	<50.0	1000	1000	928	941	92	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569653
QC Batch Method: EPA 200.2
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

METHOD BLANK: 2628462 Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	ug/L	<50.0	50.0	50.0	07/01/20 09:40	
Antimony	ug/L	<2.0	2.0	2.0	07/01/20 09:40	
Beryllium	ug/L	<1.0	1.0	1.0	07/01/20 09:40	
Cadmium	ug/L	<1.0	1.0	1.0	07/01/20 09:40	
Lead	ug/L	<3.0	3.0	3.0	07/01/20 09:40	
Selenium	ug/L	<5.0	5.0	5.0	07/01/20 09:40	
Silver	ug/L	<0.20	0.25	0.20	07/01/20 09:40	
Thallium	ug/L	<2.0	2.0	2.0	07/01/20 09:40	
Titanium	ug/L	<0.097	1.0	0.097	07/01/20 09:40	N2
Vanadium	ug/L	<4.0	4.0	4.0	07/01/20 09:40	

LABORATORY CONTROL SAMPLE: 2628463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	400	407	102	80-120	
Antimony	ug/L	40	41.5	104	80-120	
Beryllium	ug/L	40	38.6	96	80-120	
Cadmium	ug/L	40	38.7	97	80-120	
Lead	ug/L	40	39.7	99	80-120	
Selenium	ug/L	40	40.2	100	80-120	
Silver	ug/L	40	40.0	100	80-120	
Thallium	ug/L	40	40.2	101	80-120	
Titanium	ug/L	40	41.4	103	80-120	N2
Vanadium	ug/L	40	39.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628464 2628465

Parameter	Units	50260974001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	<50.0	400	400	404	409	98	99	75-125	1	20	
Antimony	ug/L	<2.0	40	40	40.7	41.6	101	103	75-125	2	20	
Beryllium	ug/L	<1.0	40	40	39.7	40.6	99	102	75-125	2	20	
Cadmium	ug/L	<1.0	40	40	36.7	37.3	92	93	75-125	2	20	
Lead	ug/L	<3.0	40	40	40.1	40.6	100	101	75-125	1	20	
Selenium	ug/L	<5.0	40	40	37.2	37.7	92	94	75-125	1	20	
Silver	ug/L	<0.20	40	40	37.7	38.3	94	96	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628464 2628465

Parameter	Units	50260974001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Thallium	ug/L	<2.0	40	40	41.2	41.4	103	103	75-125	0	20	
Titanium	ug/L	172	40	40	212	214	99	106	75-125	1	20	N2
Vanadium	ug/L	<4.0	40	40	40.4	40.9	98	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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5560 Corporate Exchange Ct. SE
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 167346
QC Batch Method: EPA 8260C SIM/5030C
Analysis Method: EPA 8260C SIM/5030C
Analysis Description: 8260C SIM 5030C
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 50260974005, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974013

METHOD BLANK: 808309 Matrix: Water
Associated Lab Samples: 50260974005, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.090	0.20	0.090	07/02/20 15:51	
1,2-Dichlorobenzene-d4 (S)	%	85	60-140		07/02/20 15:51	
4-Bromofluorobenzene (S)	%	96	79-124		07/02/20 15:51	

LABORATORY CONTROL SAMPLE: 808310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	2.5	2.1	85	60-140	
1,2-Dichlorobenzene-d4 (S)	%			84	60-140	
4-Bromofluorobenzene (S)	%			96	79-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 809492 809493

Parameter	Units	50260974007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.090	2.5	2.5	2.9	3.0	116	122	60-140	5	20	
1,2-Dichlorobenzene-d4 (S)	%						104	104	60-140		20	
4-Bromofluorobenzene (S)	%						124	123	79-124		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569767
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974015, 50260974016, 50260974017

METHOD BLANK: 2628823 Matrix: Water
Associated Lab Samples: 50260974015, 50260974016, 50260974017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:35	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	06/29/20 23:35	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	06/29/20 23:35	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	06/29/20 23:35	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	06/29/20 23:35	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	06/29/20 23:35	
2-Hexanone	ug/L	<50.0	50.0	50.0	06/29/20 23:35	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	06/29/20 23:35	
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	06/29/20 23:35	
Acetone	ug/L	<50.0	50.0	50.0	06/29/20 23:35	
Acrylonitrile	ug/L	<2.0	2.0	2.0	06/29/20 23:35	
Benzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Bromobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Bromochloromethane	ug/L	<0.59	1.0	0.59	06/29/20 23:35	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Bromoform	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Bromomethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Carbon disulfide	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Chlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Chloroethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Chloroform	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Chloromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
cis-1,3-Dichloropropene	ug/L	<100	100	100	06/29/20 23:35	
Cyclohexane	ug/L	<10.0	10.0	10.0	06/29/20 23:35	N2

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

METHOD BLANK: 2628823 Matrix: Water
Associated Lab Samples: 50260974015, 50260974016, 50260974017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Dibromomethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:35	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:35	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Hexachloroethane	ug/L	<5.0	5.0	5.0	06/29/20 23:35	N2
Iodomethane	ug/L	<0.45	5.0	0.45	06/29/20 23:35	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
m&p-Xylene	ug/L	<0.16	2.0	0.16	06/29/20 23:35	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
Methylene Chloride	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
n-Propylbenzene	ug/L	<100	100	100	06/29/20 23:35	
Naphthalene	ug/L	<5.0	5.0	5.0	06/29/20 23:35	
o-Xylene	ug/L	<0.39	1.0	0.39	06/29/20 23:35	
p-Isopropyltoluene	ug/L	<0.28	1.0	0.28	06/29/20 23:35	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Styrene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:35	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	06/29/20 23:35	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	06/29/20 23:35	N2
Toluene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
trans-1,3-Dichloropropene	ug/L	<100	100	100	06/29/20 23:35	
trans-1,4-Dichloro-2-butene	ug/L	<0.82	100	0.82	06/29/20 23:35	
Trichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	06/29/20 23:35	
Vinyl chloride	ug/L	<1.0	1.0	1.0	06/29/20 23:35	
4-Bromofluorobenzene (S)	%.	102	85-116		06/29/20 23:35	
Dibromofluoromethane (S)	%.	103	75-120		06/29/20 23:35	
Toluene-d8 (S)	%.	111	83-111		06/29/20 23:35	

LABORATORY CONTROL SAMPLE: 2628824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.6	103	78-120	
1,1,1-Trichloroethane	ug/L	50	56.9	114	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.4	99	64-126	
1,1,2-Trichloroethane	ug/L	50	55.5	111	73-125	
1,1-Dichloroethane	ug/L	50	61.1	122	77-123	

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5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

LABORATORY CONTROL SAMPLE: 2628824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	60.8	122	79-128	
1,2,3-Trichlorobenzene	ug/L	50	47.8	96	75-126	
1,2,3-Trichloropropane	ug/L	50	51.0	102	71-131	
1,2,4-Trichlorobenzene	ug/L	50	47.6	95	76-130	
1,2,4-Trimethylbenzene	ug/L	50	51.7	103	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	45.7	91	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	76-122	
1,2-Dichlorobenzene	ug/L	50	48.2	96	79-113	
1,2-Dichloroethane	ug/L	50	52.3	105	66-127	
1,2-Dichloropropane	ug/L	50	61.4	123	75-127	
1,3,5-Trimethylbenzene	ug/L	50	53.5	107	78-116	
1,3-Dichlorobenzene	ug/L	50	48.9	98	79-120	
1,4-Dichlorobenzene	ug/L	50	47.9	96	77-117	
2-Butanone (MEK)	ug/L	250	273	109	61-138	
2-Hexanone	ug/L	250	282	113	58-138	
2-Methylnaphthalene	ug/L	50	51.6	103	60-136	
4-Methyl-2-pentanone (MIBK)	ug/L	250	277	111	60-131	
Acetone	ug/L	250	234	94	57-126	
Acrylonitrile	ug/L	200	211	105	65-127	
Benzene	ug/L	50	56.8	114	75-118	
Bromobenzene	ug/L	50	52.0	104	68-127	
Bromochloromethane	ug/L	50	53.2	106	66-126	
Bromodichloromethane	ug/L	50	51.0	102	75-120	
Bromoform	ug/L	50	44.4	89	61-119	
Bromomethane	ug/L	50	35.6	71	12-184	
Carbon disulfide	ug/L	50	62.1	124	71-123	L1
Carbon tetrachloride	ug/L	50	56.6	113	73-125	
Chlorobenzene	ug/L	50	53.0	106	80-115	
Chloroethane	ug/L	50	46.5	93	46-133	
Chloroform	ug/L	50	51.5	103	75-117	
Chloromethane	ug/L	50	60.4	121	33-124	
cis-1,2-Dichloroethene	ug/L	50	53.0	106	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	113	73-130	
Cyclohexane	ug/L	50	67.0	134	58-122	L1,N2
Dibromochloromethane	ug/L	50	50.1	100	69-124	
Dibromomethane	ug/L	50	52.1	104	76-124	
Dichlorodifluoromethane	ug/L	50	81.1	162	36-145	L1
Diethyl ether (Ethyl ether)	ug/L	50	58.5	117	70-130	
Ethylbenzene	ug/L	50	54.0	108	78-120	
Iodomethane	ug/L	100	20.9	21	10-184	
Isopropylbenzene (Cumene)	ug/L	50	54.5	109	82-122	
m&p-Xylene	ug/L	100	109	109	79-118	
Methyl-tert-butyl ether	ug/L	50	53.6	107	79-125	
Methylene Chloride	ug/L	50	55.3	111	68-126	
n-Butylbenzene	ug/L	50	53.9	108	73-123	
n-Propylbenzene	ug/L	50	<100	110	75-119	
Naphthalene	ug/L	50	43.3	87	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

LABORATORY CONTROL SAMPLE: 2628824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	50	52.6	105	78-121	
p-Isopropyltoluene	ug/L	50	53.6	107	82-119	
sec-Butylbenzene	ug/L	50	55.1	110	79-119	
Styrene	ug/L	50	52.6	105	80-121	
tert-Butyl Alcohol	ug/L	100	152	152	10-200	
tert-Butylbenzene	ug/L	50	40.4	81	58-106	
Tetrachloroethene	ug/L	50	53.2	106	70-123	
Tetrahydrofuran	ug/L	50	<90.0	100	50-150	N2
Toluene	ug/L	50	55.3	111	72-114	
trans-1,2-Dichloroethene	ug/L	50	57.8	116	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	103	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	179	90	34-130	
Trichloroethene	ug/L	50	54.5	109	78-120	
Trichlorofluoromethane	ug/L	50	57.7	115	57-156	
Vinyl chloride	ug/L	50	54.8	110	55-122	
4-Bromofluorobenzene (S)	%.			103	85-116	
Dibromofluoromethane (S)	%.			104	75-120	
Toluene-d8 (S)	%.			105	83-111	

MATRIX SPIKE SAMPLE: 2628825

Parameter	Units	50260996001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	50	53.5	107	51-135	
1,1,1-Trichloroethane	ug/L	24.4	50	85.4	122	56-144	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	48.4	97	47-137	
1,1,2-Trichloroethane	ug/L	ND	50	56.5	113	55-136	
1,1-Dichloroethane	ug/L	55.4	50	123	136	53-140	
1,1-Dichloroethene	ug/L	0.47J	50	64.3	128	60-140	
1,2,3-Trichlorobenzene	ug/L	ND	50	46.7	93	35-140	
1,2,3-Trichloropropane	ug/L	ND	50	48.9	98	54-142	
1,2,4-Trichlorobenzene	ug/L	ND	50	46.4	93	31-143	
1,2,4-Trimethylbenzene	ug/L	ND	50	52.1	104	13-152	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	44.1	88	29-145	
1,2-Dibromoethane (EDB)	ug/L	ND	50	51.9	104	56-136	
1,2-Dichlorobenzene	ug/L	ND	50	48.0	96	38-133	
1,2-Dichloroethane	ug/L	ND	50	54.4	109	46-145	
1,2-Dichloropropane	ug/L	ND	50	65.0	130	55-141	
1,3,5-Trimethylbenzene	ug/L	ND	50	53.3	107	23-145	
1,3-Dichlorobenzene	ug/L	ND	50	48.8	98	31-144	
1,4-Dichlorobenzene	ug/L	ND	50	47.0	94	31-138	
2-Butanone (MEK)	ug/L	ND	250	234	93	42-150	
2-Hexanone	ug/L	ND	250	273	109	43-146	
2-Methylnaphthalene	ug/L	ND	50	45.5	91	32-142	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	250	277	111	42-142	
Acetone	ug/L	ND	250	218	87	36-142	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

MATRIX SPIKE SAMPLE: 2628825

Parameter	Units	50260996001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Acrylonitrile	ug/L	ND	200	201	100	48-137	
Benzene	ug/L	ND	50	59.3	119	49-135	
Bromobenzene	ug/L	ND	50	54.4	109	37-144	
Bromochloromethane	ug/L	ND	50	55.5	111	47-140	
Bromodichloromethane	ug/L	ND	50	53.4	107	55-133	
Bromoform	ug/L	ND	50	44.0	88	45-125	
Bromomethane	ug/L	ND	50	30.6	61	10-191	
Carbon disulfide	ug/L	ND	50	62.6	125	49-136	
Carbon tetrachloride	ug/L	ND	50	60.3	121	55-134	
Chlorobenzene	ug/L	ND	50	54.4	109	42-135	
Chloroethane	ug/L	ND	50	50.3	101	25-154	
Chloroform	ug/L	ND	50	53.7	107	57-130	
Chloromethane	ug/L	ND	50	65.6	131	17-129	M1
cis-1,2-Dichloroethene	ug/L	42.3	50	98.7	113	53-134	
cis-1,3-Dichloropropene	ug/L	ND	50	<100	114	50-136	
Cyclohexane	ug/L	ND	50	69.5	139	33-130	M0,N2
Dibromochloromethane	ug/L	ND	50	52.4	105	53-133	
Dibromomethane	ug/L	ND	50	53.7	107	57-139	
Dichlorodifluoromethane	ug/L	ND	50	85.0	170	21-154	M0
Diethyl ether (Ethyl ether)	ug/L	ND	50	58.9	118	70-130	
Ethylbenzene	ug/L	ND	50	56.9	114	28-147	
Iodomethane	ug/L	ND	100	19.2	19	10-186	
Isopropylbenzene (Cumene)	ug/L	ND	50	57.5	115	27-151	
m&p-Xylene	ug/L	ND	100	114	114	28-145	
Methyl-tert-butyl ether	ug/L	ND	50	53.4	107	60-142	
Methylene Chloride	ug/L	ND	50	54.9	110	46-138	
n-Butylbenzene	ug/L	ND	50	53.0	106	10-153	
n-Propylbenzene	ug/L	ND	50	<100	112	20-149	
Naphthalene	ug/L	ND	50	41.1	82	41-139	
o-Xylene	ug/L	ND	50	55.1	110	31-145	
p-Isopropyltoluene	ug/L	ND	50	52.8	106	15-155	
sec-Butylbenzene	ug/L	ND	50	55.4	111	17-153	
Styrene	ug/L	ND	50	54.3	109	42-139	
tert-Butyl Alcohol	ug/L	ND	100	65.8	66	10-170	
tert-Butylbenzene	ug/L	ND	50	41.0	82	18-123	
Tetrachloroethene	ug/L	ND	50	53.2	106	32-140	
Tetrahydrofuran	ug/L	ND	50	<90.0	88	50-150	N2
Toluene	ug/L	0.097J	50	57.7	115	42-131	
trans-1,2-Dichloroethene	ug/L	3.1	50	61.6	117	57-138	
trans-1,3-Dichloropropene	ug/L	ND	50	<100	99	47-128	
trans-1,4-Dichloro-2-butene	ug/L	ND	200	169	84	10-135	
Trichloroethene	ug/L	8.0	50	64.5	113	47-137	
Trichlorofluoromethane	ug/L	ND	50	62.9	126	42-163	
Vinyl chloride	ug/L	ND	50	59.4	119	36-136	
4-Bromofluorobenzene (S)	%.				103	85-116	
Dibromofluoromethane (S)	%.				103	75-120	
Toluene-d8 (S)	%.				106	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

SAMPLE DUPLICATE: 2628826

Parameter	Units	50260996002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,1-Trichloroethane	ug/L	ND	<1.0		20	
1,1,2,2-Tetrachloroethane	ug/L	ND	<1.0		20	
1,1,2-Trichloroethane	ug/L	ND	<1.0		20	
1,1-Dichloroethane	ug/L	3.5	3.5	1	20	
1,1-Dichloroethene	ug/L	ND	<1.0		20	
1,2,3-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,3-Trichloropropane	ug/L	ND	<1.0		20	
1,2,3-Trimethylbenzene	ug/L	ND	<5.0		20	N2
1,2,4-Trichlorobenzene	ug/L	ND	<5.0		20	
1,2,4-Trimethylbenzene	ug/L	ND	<1.0		20	
1,2-Dibromo-3-chloropropane	ug/L	ND	<0.25		20	
1,2-Dibromoethane (EDB)	ug/L	ND	<0.23		20	
1,2-Dichlorobenzene	ug/L	ND	<1.0		20	
1,2-Dichloroethane	ug/L	0.74J	<1.0		20	
1,2-Dichloropropane	ug/L	ND	<1.0		20	
1,3,5-Trimethylbenzene	ug/L	ND	<1.0		20	
1,3-Dichlorobenzene	ug/L	ND	<1.0		20	
1,4-Dichlorobenzene	ug/L	ND	<1.0		20	
2-Butanone (MEK)	ug/L	ND	<25.0		20	
2-Hexanone	ug/L	ND	<50.0		20	
2-Methylnaphthalene	ug/L	ND	<5.0		20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	<50.0		20	
Acetone	ug/L	ND	<50.0		20	
Acrylonitrile	ug/L	ND	<2.0		20	
Benzene	ug/L	ND	<1.0		20	
Bromobenzene	ug/L	ND	<1.0		20	
Bromochloromethane	ug/L	ND	<0.59		20	
Bromodichloromethane	ug/L	ND	<1.0		20	
Bromoform	ug/L	ND	<1.0		20	
Bromomethane	ug/L	ND	<5.0		20	
Carbon disulfide	ug/L	ND	<5.0		20	
Carbon tetrachloride	ug/L	ND	<1.0		20	
Chlorobenzene	ug/L	ND	<1.0		20	
Chloroethane	ug/L	0.69J	<5.0		20	
Chloroform	ug/L	ND	<1.0		20	
Chloromethane	ug/L	ND	<5.0		20	
cis-1,2-Dichloroethene	ug/L	4.6	4.4	4	20	
cis-1,3-Dichloropropene	ug/L	ND	<100		20	
Cyclohexane	ug/L	ND	<10.0		20	N2
Dibromochloromethane	ug/L	ND	<5.0		20	
Dibromomethane	ug/L	ND	<5.0		20	
Dichlorodifluoromethane	ug/L	ND	<5.0		20	
Diethyl ether (Ethyl ether)	ug/L	ND	<5.0		20	
Diisopropyl ether	ug/L	ND	<5.0		20	N2
Ethyl-tert-butyl ether	ug/L	ND	<5.0		20	N2
Ethylbenzene	ug/L	ND	<1.0		20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

SAMPLE DUPLICATE: 2628826

Parameter	Units	50260996002 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachloroethane	ug/L	ND	<5.0		20	N2
Iodomethane	ug/L	ND	<0.45		20	
Isopropylbenzene (Cumene)	ug/L	ND	<5.0		20	
m&p-Xylene	ug/L	ND	<0.16		20	
Methyl-tert-butyl ether	ug/L	ND	<5.0		20	
Methylene Chloride	ug/L	ND	<5.0		20	
n-Butylbenzene	ug/L	ND	<1.0		20	
n-Propylbenzene	ug/L	ND	<100		20	
Naphthalene	ug/L	ND	<5.0		20	
o-Xylene	ug/L	ND	<0.39		20	
p-Isopropyltoluene	ug/L	ND	<0.28		20	
sec-Butylbenzene	ug/L	ND	<1.0		20	
Styrene	ug/L	ND	<1.0		20	
tert-Amylmethyl ether	ug/L	ND	<5.0		20	N2
tert-Butyl Alcohol	ug/L	8.8J	<50.0		20	
tert-Butylbenzene	ug/L	ND	<1.0		20	
Tetrachloroethene	ug/L	ND	<1.0		20	
Tetrahydrofuran	ug/L	ND	<90.0		20	N2
Toluene	ug/L	0.085J	<1.0		20	
trans-1,2-Dichloroethene	ug/L	ND	<1.0		20	
trans-1,3-Dichloropropene	ug/L	ND	<100		20	
trans-1,4-Dichloro-2-butene	ug/L	ND	<0.82		20	
Trichloroethene	ug/L	ND	<1.0		20	
Trichlorofluoromethane	ug/L	ND	<1.0		20	
Vinyl chloride	ug/L	6.9	7.5	7	20	
4-Bromofluorobenzene (S)	%.	98	97			
Dibromofluoromethane (S)	%.	104	105			
Toluene-d8 (S)	%.	109	109			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569770
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013, 50260974014

METHOD BLANK: 2628832
Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013, 50260974014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,1-Dichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,1-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,2,3-Trichlorobenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,2,3-Trimethylbenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:52	N2
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
1,2,4-Trimethylbenzene	ug/L	<1.0	5.0	1.0	06/29/20 23:52	
1,2-Dibromo-3-chloropropane	ug/L	<0.25	0.50	0.25	06/29/20 23:52	
1,2-Dibromoethane (EDB)	ug/L	<0.23	0.50	0.23	06/29/20 23:52	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,2-Dichloroethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,2-Dichloropropane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,3,5-Trimethylbenzene	ug/L	<1.0	5.0	1.0	06/29/20 23:52	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
2-Butanone (MEK)	ug/L	<25.0	25.0	25.0	06/29/20 23:52	
2-Hexanone	ug/L	<50.0	50.0	50.0	06/29/20 23:52	
2-Methylnaphthalene	ug/L	<5.0	20.0	5.0	06/29/20 23:52	
4-Methyl-2-pentanone (MIBK)	ug/L	<50.0	50.0	50.0	06/29/20 23:52	
Acetone	ug/L	<50.0	50.0	50.0	06/29/20 23:52	
Acrylonitrile	ug/L	<2.0	2.0	2.0	06/29/20 23:52	
Benzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Bromobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Bromochloromethane	ug/L	<0.22	1.0	0.22	06/29/20 23:52	
Bromodichloromethane	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Bromoform	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Bromomethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Carbon disulfide	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Carbon tetrachloride	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Chlorobenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Chloroethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Chloroform	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Chloromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
cis-1,3-Dichloropropene	ug/L	<100	100	100	06/29/20 23:52	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

METHOD BLANK: 2628832 Matrix: Water

Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013, 50260974014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyclohexane	ug/L	<10.0	10.0	10.0	06/29/20 23:52	N2
Dibromochloromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Dibromomethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Dichlorodifluoromethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Diethyl ether (Ethyl ether)	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Diisopropyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:52	N2
Ethyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:52	N2
Ethylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Hexachloroethane	ug/L	<5.0	5.0	5.0	06/29/20 23:52	N2
Iodomethane	ug/L	<0.51	5.0	0.51	06/29/20 23:52	
Isopropylbenzene (Cumene)	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
m&p-Xylene	ug/L	<0.24	2.0	0.24	06/29/20 23:52	
Methyl-tert-butyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
Methylene Chloride	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
n-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
n-Propylbenzene	ug/L	<100	100	100	06/29/20 23:52	
Naphthalene	ug/L	<5.0	5.0	5.0	06/29/20 23:52	
o-Xylene	ug/L	<0.16	1.0	0.16	06/29/20 23:52	
p-Isopropyltoluene	ug/L	<0.11	1.0	0.11	06/29/20 23:52	
sec-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Styrene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
tert-Amylmethyl ether	ug/L	<5.0	5.0	5.0	06/29/20 23:52	N2
tert-Butyl Alcohol	ug/L	<50.0	50.0	50.0	06/29/20 23:52	
tert-Butylbenzene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Tetrachloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Tetrahydrofuran	ug/L	<90.0	90.0	90.0	06/29/20 23:52	N2
Toluene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
trans-1,3-Dichloropropene	ug/L	<100	100	100	06/29/20 23:52	
trans-1,4-Dichloro-2-butene	ug/L	<0.40	100	0.40	06/29/20 23:52	
Trichloroethene	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
Trichlorofluoromethane	ug/L	<1.0	2.0	1.0	06/29/20 23:52	
Vinyl chloride	ug/L	<1.0	1.0	1.0	06/29/20 23:52	
4-Bromofluorobenzene (S)	%.	103	85-116		06/29/20 23:52	
Dibromofluoromethane (S)	%.	99	75-120		06/29/20 23:52	
Toluene-d8 (S)	%.	107	83-111		06/29/20 23:52	

LABORATORY CONTROL SAMPLE: 2628833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.0	92	78-120	
1,1,1-Trichloroethane	ug/L	50	50.0	100	78-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.6	105	64-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

LABORATORY CONTROL SAMPLE: 2628833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2-Trichloroethane	ug/L	50	48.5	97	73-125	
1,1-Dichloroethane	ug/L	50	53.7	107	77-123	
1,1-Dichloroethene	ug/L	50	51.1	102	79-128	
1,2,3-Trichlorobenzene	ug/L	50	43.8	88	75-126	
1,2,3-Trichloropropane	ug/L	50	44.0	88	71-131	
1,2,4-Trichlorobenzene	ug/L	50	44.8	90	76-130	
1,2,4-Trimethylbenzene	ug/L	50	46.4	93	76-119	
1,2-Dibromo-3-chloropropane	ug/L	50	41.9	84	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	45.7	91	76-122	
1,2-Dichlorobenzene	ug/L	50	43.5	87	79-113	
1,2-Dichloroethane	ug/L	50	45.3	91	66-127	
1,2-Dichloropropane	ug/L	50	52.8	106	75-127	
1,3,5-Trimethylbenzene	ug/L	50	46.9	94	78-116	
1,3-Dichlorobenzene	ug/L	50	43.7	87	79-120	
1,4-Dichlorobenzene	ug/L	50	42.1	84	77-117	
2-Butanone (MEK)	ug/L	250	226	90	61-138	
2-Hexanone	ug/L	250	302	121	58-138	
2-Methylnaphthalene	ug/L	50	39.1	78	60-136	
4-Methyl-2-pentanone (MIBK)	ug/L	250	254	102	60-131	
Acetone	ug/L	250	275	110	57-126	
Acrylonitrile	ug/L	200	187	94	65-127	
Benzene	ug/L	50	48.7	97	75-118	
Bromobenzene	ug/L	50	47.5	95	68-127	
Bromochloromethane	ug/L	50	44.8	90	66-126	
Bromodichloromethane	ug/L	50	46.1	92	75-120	
Bromoform	ug/L	50	39.5	79	61-119	
Bromomethane	ug/L	50	31.3	63	12-184	
Carbon disulfide	ug/L	50	53.5	107	71-123	
Carbon tetrachloride	ug/L	50	52.6	105	73-125	
Chlorobenzene	ug/L	50	48.0	96	80-115	
Chloroethane	ug/L	50	40.8	82	46-133	
Chloroform	ug/L	50	44.1	88	75-117	
Chloromethane	ug/L	50	44.0	88	33-124	
cis-1,2-Dichloroethene	ug/L	50	46.7	93	76-120	
cis-1,3-Dichloropropene	ug/L	50	<100	102	73-130	
Cyclohexane	ug/L	50	57.8	116	58-122	N2
Dibromochloromethane	ug/L	50	45.7	91	69-124	
Dibromomethane	ug/L	50	46.6	93	76-124	
Dichlorodifluoromethane	ug/L	50	77.0	154	36-145	L1
Diethyl ether (Ethyl ether)	ug/L	50	48.9	98	70-130	
Ethylbenzene	ug/L	50	48.6	97	78-120	
Iodomethane	ug/L	100	54.7	55	10-184	
Isopropylbenzene (Cumene)	ug/L	50	50.0	100	82-122	
m&p-Xylene	ug/L	100	98.2	98	79-118	
Methyl-tert-butyl ether	ug/L	50	47.6	95	79-125	
Methylene Chloride	ug/L	50	50.8	102	68-126	
n-Butylbenzene	ug/L	50	49.9	100	73-123	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

LABORATORY CONTROL SAMPLE: 2628833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
n-Propylbenzene	ug/L	50	<100	99	75-119	
Naphthalene	ug/L	50	47.9	96	70-130	
o-Xylene	ug/L	50	48.5	97	78-121	
p-Isopropyltoluene	ug/L	50	48.2	96	82-119	
sec-Butylbenzene	ug/L	50	48.9	98	79-119	
Styrene	ug/L	50	48.0	96	80-121	
tert-Butyl Alcohol	ug/L	100	151	151	10-200	
tert-Butylbenzene	ug/L	50	36.2	72	58-106	
Tetrachloroethene	ug/L	50	47.7	95	70-123	
Tetrahydrofuran	ug/L	50	<90.0	99	50-150	N2
Toluene	ug/L	50	50.4	101	72-114	
trans-1,2-Dichloroethene	ug/L	50	48.8	98	79-126	
trans-1,3-Dichloropropene	ug/L	50	<100	90	68-122	
trans-1,4-Dichloro-2-butene	ug/L	200	173	87	34-130	
Trichloroethene	ug/L	50	47.5	95	78-120	
Trichlorofluoromethane	ug/L	50	56.7	113	57-156	
Vinyl chloride	ug/L	50	54.2	108	55-122	
4-Bromofluorobenzene (S)	%.			106	85-116	
Dibromofluoromethane (S)	%.			99	75-120	
Toluene-d8 (S)	%.			104	83-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 570077
QC Batch Method: EPA 3510
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB Mod
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974002, 50260974004, 50260974006, 50260974008, 50260974009

METHOD BLANK: 2630095 Matrix: Water
Associated Lab Samples: 50260974002, 50260974004, 50260974006, 50260974008, 50260974009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1221 (Aroclor 1221)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1232 (Aroclor 1232)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1242 (Aroclor 1242)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1248 (Aroclor 1248)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1254 (Aroclor 1254)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1260 (Aroclor 1260)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	
PCB-1262 (Aroclor 1262)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	N2
PCB-1268 (Aroclor 1268)	ug/L	<0.20	0.20	0.20	07/02/20 03:24	N2
Tetrachloro-m-xylene (S)	%.	39	10-144		07/02/20 03:24	

LABORATORY CONTROL SAMPLE: 2630096

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	3.0	60	45-148	
PCB-1260 (Aroclor 1260)	ug/L	5	4.0	79	48-142	
Tetrachloro-m-xylene (S)	%.			48	10-144	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630097 2630098

Parameter	Units	50261148005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	ND	4.8	5	2.9	3.2	62	63	10-165	8	20	
PCB-1260 (Aroclor 1260)	ug/L	ND	4.8	5	4.3	4.0	91	81	10-155	7	20	
Tetrachloro-m-xylene (S)	%.						40	45	10-144			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569662
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water PAH Low Volume
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

METHOD BLANK: 2628493 Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Acenaphthene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Acenaphthylene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Anthracene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Benzo(a)anthracene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Benzo(a)pyrene	ug/L	<0.20	0.20	0.20	06/29/20 18:04	
Benzo(b)fluoranthene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Benzo(g,h,i)perylene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Benzo(k)fluoranthene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Chrysene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Dibenz(a,h)anthracene	ug/L	<2.0	2.0	2.0	06/29/20 18:04	
Fluoranthene	ug/L	<1.0	1.0	1.0	06/29/20 18:04	
Fluorene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Indeno(1,2,3-cd)pyrene	ug/L	<2.0	2.0	2.0	06/29/20 18:04	
Naphthalene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
Phenanthrene	ug/L	<2.0	2.0	2.0	06/29/20 18:04	
Pyrene	ug/L	<5.0	5.0	5.0	06/29/20 18:04	
2-Fluorobiphenyl (S)	%.	61	32-107		06/29/20 18:04	
p-Terphenyl-d14 (S)	%.	93	29-143		06/29/20 18:04	

LABORATORY CONTROL SAMPLE: 2628494

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	10	5.8	58	44-105	
Acenaphthene	ug/L	10	6.7	67	53-102	
Acenaphthylene	ug/L	10	6.8	68	56-105	
Anthracene	ug/L	10	7.2	72	56-125	
Benzo(a)anthracene	ug/L	10	7.2	72	55-134	
Benzo(a)pyrene	ug/L	10	7.7	77	38-123	
Benzo(b)fluoranthene	ug/L	10	9.4	94	46-139	
Benzo(g,h,i)perylene	ug/L	10	7.4	74	27-113	
Benzo(k)fluoranthene	ug/L	10	8.1	81	39-126	
Chrysene	ug/L	10	7.8	78	65-120	
Dibenz(a,h)anthracene	ug/L	10	7.7	77	23-119	
Fluoranthene	ug/L	10	8.6	86	61-133	
Fluorene	ug/L	10	7.3	73	53-126	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.6	76	30-118	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

LABORATORY CONTROL SAMPLE: 2628494

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	10	5.9	59	45-96	
Phenanthrene	ug/L	10	7.7	77	59-131	
Pyrene	ug/L	10	7.4	74	60-142	
2-Fluorobiphenyl (S)	%.			70	32-107	
p-Terphenyl-d14 (S)	%.			86	29-143	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
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(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 569661
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water Scan LV
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

METHOD BLANK: 2628491
Matrix: Water
Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	<1.1	10.0	1.1	06/29/20 17:59	
1,2-Diphenylhydrazine	ug/L	<3.7	10.0	3.7	06/29/20 17:59	
2,4,5-Trichlorophenol	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
2,4,6-Trichlorophenol	ug/L	<4.0	5.0	4.0	06/29/20 17:59	
2,4-Dichlorophenol	ug/L	<10.0	10.0	10.0	06/29/20 17:59	
2,4-Dimethylphenol	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
2,4-Dinitrophenol	ug/L	<3.9	50.0	3.9	06/29/20 17:59	
2,4-Dinitrotoluene	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
2,6-Dinitrotoluene	ug/L	<3.4	5.0	3.4	06/29/20 17:59	
2-Chloronaphthalene	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
2-Chlorophenol	ug/L	<10.0	10.0	10.0	06/29/20 17:59	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	10.0	06/29/20 17:59	
2-Nitroaniline	ug/L	<5.8	10.0	5.8	06/29/20 17:59	
2-Nitrophenol	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
3&4-Methylphenol(m&p Cresol)	ug/L	<20.0	20.0	20.0	06/29/20 17:59	
3-Nitroaniline	ug/L	<5.0	10.0	5.0	06/29/20 17:59	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	20.0	06/29/20 17:59	
4-Bromophenylphenyl ether	ug/L	<3.6	10.0	3.6	06/29/20 17:59	
4-Chloro-3-methylphenol	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
4-Chlorophenylphenyl ether	ug/L	<2.9	10.0	2.9	06/29/20 17:59	
4-Nitroaniline	ug/L	<4.9	10.0	4.9	06/29/20 17:59	
4-Nitrophenol	ug/L	<6.0	50.0	6.0	06/29/20 17:59	
bis(2-Chloroethoxy)methane	ug/L	<3.8	10.0	3.8	06/29/20 17:59	
bis(2-Chloroethyl) ether	ug/L	<2.2	5.0	2.2	06/29/20 17:59	
bis(2-Chloroisopropyl) ether	ug/L	<3.9	10.0	3.9	06/29/20 17:59	
bis(2-Ethylhexyl)phthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Butylbenzylphthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Carbazole	ug/L	<10.0	10.0	10.0	06/29/20 17:59	
Di-n-butylphthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Di-n-octylphthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Dibenzofuran	ug/L	<4.0	5.0	4.0	06/29/20 17:59	
Diethylphthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Dimethylphthalate	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Hexachloro-1,3-butadiene	ug/L	<3.0	5.0	3.0	06/29/20 17:59	
Hexachlorobenzene	ug/L	<2.7	5.0	2.7	06/29/20 17:59	
Hexachlorocyclopentadiene	ug/L	<25.0	25.0	25.0	06/29/20 17:59	
Hexachloroethane	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Isophorone	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
N-Nitroso-di-n-propylamine	ug/L	<5.0	5.0	5.0	06/29/20 17:59	

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REPORT OF LABORATORY ANALYSIS

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Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

METHOD BLANK: 2628491 Matrix: Water

Associated Lab Samples: 50260974001, 50260974002, 50260974003, 50260974004, 50260974005, 50260974006, 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974012, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
N-Nitrosodimethylamine	ug/L	<2.9	10.0	2.9	06/29/20 17:59	
N-Nitrosodiphenylamine	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
Nitrobenzene	ug/L	<3.0	5.0	3.0	06/29/20 17:59	
Pentachlorophenol	ug/L	<1.9	20.0	1.9	06/29/20 17:59	
Phenol	ug/L	<5.0	5.0	5.0	06/29/20 17:59	
2,4,6-Tribromophenol (S)	%.	94	45-126		06/29/20 17:59	
2-Fluorophenol (S)	%.	46	16-75		06/29/20 17:59	
Nitrobenzene-d5 (S)	%.	59	42-109		06/29/20 17:59	
Phenol-d5 (S)	%.	38	11-56		06/29/20 17:59	

LABORATORY CONTROL SAMPLE: 2628492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	100	50.2	50	10-103	
2,4-Dinitrotoluene	ug/L	100	84.5	84	50-136	
2-Chlorophenol	ug/L	100	80.8	81	28-102	
4-Chloro-3-methylphenol	ug/L	100	99.4	99	38-126	
4-Nitrophenol	ug/L	100	69.1	69	10-75	
N-Nitroso-di-n-propylamine	ug/L	100	75.5	75	45-113	
Pentachlorophenol	ug/L	100	102	102	29-146	
Phenol	ug/L	100	48.7	49	10-58	
2,4,6-Tribromophenol (S)	%.			95	45-126	
2-Fluorophenol (S)	%.			61	16-75	
Nitrobenzene-d5 (S)	%.			77	42-109	
Phenol-d5 (S)	%.			50	11-56	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

QC Batch: 570159 | Analysis Method: EPA 9012
QC Batch Method: EPA 9012 | Analysis Description: 9012 Cyanide, Total
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974013

METHOD BLANK: 2630289 Matrix: Water
Associated Lab Samples: 50260974007, 50260974008, 50260974009, 50260974010, 50260974011, 50260974013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cyanide	ug/L	<5.0	5.0	5.0	07/02/20 16:02	

LABORATORY CONTROL SAMPLE: 2630290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	100	100	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630291 2630292

Parameter	Units	50260869009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	ug/L	<0.0029 mg/L	100	100	101	6.2	100	5	90-110	177	20	M0,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630293 2630306

Parameter	Units	50261015003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	ug/L	ND	100	100	101	101	101	101	90-110	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALIFIERS

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260974004	**MW-125**	EPA 8015 Alcohol-Glycol	569752		
50260974006	**MW-130**	EPA 8015 Alcohol-Glycol	569752		
50260974008	**MW-127**	EPA 8015 Alcohol-Glycol	569752		
50260974009	**MW-128**	EPA 8015 Alcohol-Glycol	569752		
50260974002	**MW-123**	EPA 3510	570077	EPA 8082	570169
50260974004	**MW-125**	EPA 3510	570077	EPA 8082	570169
50260974006	**MW-130**	EPA 3510	570077	EPA 8082	570169
50260974008	**MW-127**	EPA 3510	570077	EPA 8082	570169
50260974009	**MW-128**	EPA 3510	570077	EPA 8082	570169
50260974001	**MW-12**	EPA 3010	569644	EPA 6010	570755
50260974002	**MW-123**	EPA 3010	569644	EPA 6010	570755
50260974003	**MW-124**	EPA 3010	569644	EPA 6010	570755
50260974004	**MW-125**	EPA 3010	569644	EPA 6010	570755
50260974005	**MW-126**	EPA 3010	569644	EPA 6010	570755
50260974006	**MW-130**	EPA 3010	569644	EPA 6010	570755
50260974007	**MW-122**	EPA 3010	569644	EPA 6010	570755
50260974008	**MW-127**	EPA 3010	569644	EPA 6010	570755
50260974009	**MW-128**	EPA 3010	569644	EPA 6010	570755
50260974010	**MW-129**	EPA 3010	569644	EPA 6010	570755
50260974011	**MW-131**	EPA 3010	569644	EPA 6010	570755
50260974012	**DUP-1**	EPA 3010	569644	EPA 6010	570755
50260974013	**DUP-3**	EPA 3010	569644	EPA 6010	570755
50260974001	**MW-12**	EPA 200.2	569653	EPA 6020	570062
50260974002	**MW-123**	EPA 200.2	569653	EPA 6020	570062
50260974003	**MW-124**	EPA 200.2	569653	EPA 6020	570062
50260974004	**MW-125**	EPA 200.2	569653	EPA 6020	570062
50260974005	**MW-126**	EPA 200.2	569653	EPA 6020	570062
50260974006	**MW-130**	EPA 200.2	569653	EPA 6020	570062
50260974007	**MW-122**	EPA 200.2	569653	EPA 6020	570062
50260974008	**MW-127**	EPA 200.2	569653	EPA 6020	570062
50260974009	**MW-128**	EPA 200.2	569653	EPA 6020	570062
50260974010	**MW-129**	EPA 200.2	569653	EPA 6020	570062
50260974011	**MW-131**	EPA 200.2	569653	EPA 6020	570062
50260974012	**DUP-1**	EPA 200.2	569653	EPA 6020	570062
50260974013	**DUP-3**	EPA 200.2	569653	EPA 6020	570062
50260974001	**MW-12**	EPA 7470	569860	EPA 7470	570304
50260974002	**MW-123**	EPA 7470	569860	EPA 7470	570304
50260974003	**MW-124**	EPA 7470	569860	EPA 7470	570304
50260974004	**MW-125**	EPA 7470	569860	EPA 7470	570304
50260974005	**MW-126**	EPA 7470	569860	EPA 7470	570304
50260974006	**MW-130**	EPA 7470	569860	EPA 7470	570304
50260974007	**MW-122**	EPA 7470	569860	EPA 7470	570304
50260974008	**MW-127**	EPA 7470	569860	EPA 7470	570304
50260974009	**MW-128**	EPA 7470	569860	EPA 7470	570304
50260974010	**MW-129**	EPA 7470	569860	EPA 7470	570304
50260974011	**MW-131**	EPA 7470	569860	EPA 7470	570304
50260974012	**DUP-1**	EPA 7470	569860	EPA 7470	570304

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260974013	DUP-3	EPA 7470	569860	EPA 7470	570304
50260974001	MW-12	EPA 3510	569662	EPA 8270 by SIM	569818
50260974002	MW-123	EPA 3510	569662	EPA 8270 by SIM	569818
50260974003	MW-124	EPA 3510	569662	EPA 8270 by SIM	569818
50260974004	MW-125	EPA 3510	569662	EPA 8270 by SIM	569818
50260974005	MW-126	EPA 3510	569662	EPA 8270 by SIM	569818
50260974006	MW-130	EPA 3510	569662	EPA 8270 by SIM	569818
50260974007	MW-122	EPA 3510	569662	EPA 8270 by SIM	569818
50260974008	MW-127	EPA 3510	569662	EPA 8270 by SIM	569818
50260974009	MW-128	EPA 3510	569662	EPA 8270 by SIM	569818
50260974010	MW-129	EPA 3510	569662	EPA 8270 by SIM	569818
50260974011	MW-131	EPA 3510	569662	EPA 8270 by SIM	569818
50260974012	DUP-1	EPA 3510	569662	EPA 8270 by SIM	569818
50260974013	DUP-3	EPA 3510	569662	EPA 8270 by SIM	569818
50260974001	MW-12	EPA 3510	569661	EPA 8270	569819
50260974002	MW-123	EPA 3510	569661	EPA 8270	569819
50260974003	MW-124	EPA 3510	569661	EPA 8270	569819
50260974004	MW-125	EPA 3510	569661	EPA 8270	569819
50260974005	MW-126	EPA 3510	569661	EPA 8270	569819
50260974006	MW-130	EPA 3510	569661	EPA 8270	569819
50260974007	MW-122	EPA 3510	569661	EPA 8270	569819
50260974008	MW-127	EPA 3510	569661	EPA 8270	569819
50260974009	MW-128	EPA 3510	569661	EPA 8270	569819
50260974010	MW-129	EPA 3510	569661	EPA 8270	569819
50260974011	MW-131	EPA 3510	569661	EPA 8270	569819
50260974012	DUP-1	EPA 3510	569661	EPA 8270	569819
50260974013	DUP-3	EPA 3510	569661	EPA 8270	569819
50260974005	MW-126	EPA 8260C SIM/5030C	167346		
50260974007	MW-122	EPA 8260C SIM/5030C	167346		
50260974008	MW-127	EPA 8260C SIM/5030C	167346		
50260974009	MW-128	EPA 8260C SIM/5030C	167346		
50260974010	MW-129	EPA 8260C SIM/5030C	167346		
50260974011	MW-131	EPA 8260C SIM/5030C	167346		
50260974013	DUP-3	EPA 8260C SIM/5030C	167346		
50260974001	MW-12	EPA 5030B/8260	569770		
50260974002	MW-123	EPA 5030B/8260	569770		
50260974003	MW-124	EPA 5030B/8260	569770		
50260974004	MW-125	EPA 5030B/8260	569770		
50260974005	MW-126	EPA 5030B/8260	569770		
50260974006	MW-130	EPA 5030B/8260	569770		
50260974007	MW-122	EPA 5030B/8260	569770		
50260974008	MW-127	EPA 5030B/8260	569770		
50260974009	MW-128	EPA 5030B/8260	569770		
50260974010	MW-129	EPA 5030B/8260	569770		
50260974011	MW-131	EPA 5030B/8260	569770		
50260974012	DUP-1	EPA 5030B/8260	569770		
50260974013	DUP-3	EPA 5030B/8260	569770		

Pace Analytical Services, LLC
5560 Corporate Exchange Ct. SE
Grand Rapids, MI 49512
(616)975-4500

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 8 Mile Ferndale - Detroit Axle
Pace Project No.: 50260974

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50260974014	**Trip Blank**	EPA 5030B/8260	569770		
50260974015	**Field Blank**	EPA 5030B/8260	569767		
50260974016	**Trip Blank**	EPA 5030B/8260	569767		
50260974017	**Field Blank**	EPA 5030B/8260	569767		
50260974007	**MW-122**	EPA 9012	570159	EPA 9012	570382
50260974008	**MW-127**	EPA 9012	570159	EPA 9012	570382
50260974009	**MW-128**	EPA 9012	570159	EPA 9012	570382
50260974010	**MW-129**	EPA 9012	570159	EPA 9012	570382
50260974011	**MW-131**	EPA 9012	570159	EPA 9012	570382
50260974013	**DUP-3**	EPA 9012	570159	EPA 9012	570382

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CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 50260974

50260974

Section A – Required Client Information:	Section B – Required Project Information:	Section C – Invoice Information:
Company: ATC Group Services - Novi	Report To: Ryann Scott	Attention: Ryann Scott
Address: 46555 Humboldt Drive	Copy To:	Company Name:
Novi, MI 48377		Address:
Email: ryann.scott@atcgs.com	Purchase Order #:	Pace Quote:
Phone: (248)863-3777 Fax:	Project Name: 8 Mile Ferndale - Detroit Axle	Pace Project Manager: brian.hall@pacelabs.com,
Requested Due Date: 5 day TAT ← Needed by 7/3/20	Project #:	Pace Profile #: 9157

Regulatory Agency	State / Location
	MI

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	SVOC/PNA by 8270	PCB by 8082	Alcohols by 8015	Metals, Total (Full MI Part 201 List)	Cyanide, Total	1,4 Dioxane by 8260 SIM	Tetraethyl Lead by 8270	Residual Chlorine (Y/N)
MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS																												
1	Mw-12	WT	G			6/23	1630		6	✓		✓	✓						✓	✓			✓						
2	Mw-123						1550		8	✓		✓	✓						✓	✓	✓		✓						
3	Mw-124						1410		6	✓		✓	✓						✓	✓			✓						
4	Mw-125						1255		11	✓		✓	✓						✓	✓	✓	✓	✓			✓			
5	Mw-126						1210		9	✓		✓	✓						✓	✓			✓		✓				
6	Mw-130					↓	1510		11	✓		✓	✓						✓	✓	✓	✓	✓			✓			
7	Mw-122					6/24	1345		10	✓		✓	✓	✓					✓	✓			✓	✓	✓				
8	Mw-127						1250		13	✓		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓				
9	Mw-128						1110		13	✓		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓				
10	Mw-129						1210		10	✓			✓	✓					✓	✓			✓	✓	✓				
11	Mw-131						1456		10	✓			✓	✓					✓	✓			✓	✓	✓				
12	Dup1					6/23	0000		6	✓		✓	✓						✓	✓			✓						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please fill triplicate volume for MS/MSD sample points as needed 1,4-Dioxane-Pace Melville, Tetraethyl Lead-Eurofins Lancaster	ATC	6/25/20	1100		6.26.20	0915	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER: Ira Adolphus					
SIGNATURE of SAMPLER:	DATE Signed: 6/25/20	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request D

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields mu

WO# : 50260974

PM: BJH **Due Date: 07/07/20**

CLIENT: GR-ATC

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ATC Group Services - Novi	Report To: Ryann Scott	Attention: Ryann Scott
Address: 46555 Humboldt Drive	Copy To:	Company Name:
Novi, MI 48377		Address:
Email: ryann.scott@atcgs.com	Purchase Order #:	Pace Quote:
Phone: (248)863-3777 Fax:	Project Name: 8 Mile Ferndale - Detroit Axle	Pace Project Manager: brian.hall@pacelabs.com,
Requested Due Date: 5 day TAT Needed by 7/3/20	Project #:	Pace Profile #: 9157

State / Location: MI

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	SVOC/PNA by 8270	PCB by 8082	Alcohols by 8015	Metals, Total (Full MI Part 201 List)	Cyanide, Total	1,4 Dioxane by 8260 SIM	Tetraethyl Lead by 8270	Residual Chlorine (Y/N)
1	Dup.3	WT	G			6/24	0000		10	✓		✓	✓	✓					✓	✓			✓	✓	✓			
2	Trip Blnk					6/23	0800		2	X			✓						✓									
3	Field Blnk					6/23	1100		2	X			✓						✓									
4	Trip Blnk					6/24	0800		2	X			✓						✓									
5	Field Blnk					6/24	1100		2	X			✓						✓									
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please fill triplicate volume for MS/MSD sample points as needed 1,4-Dioxane-Pace Melville, Tetraethyl Lead-Eurofins Lancaster	Ira Adolphson / ATC	6/25/20	1130		6/26/2020	0915	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ira Adolphson

SIGNATURE of SAMPLER: [signature] DATE Signed: 6/25/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Sample Conditions Upon Receipt Form (SCUR)

Date/Time: 6.26.20	Evaluated by: WDC	**WO# : 50260974**	
Client: ATC		PM: BJH Due Date: 07/07/20	
Project Manager: BJH	Profile ID:	CLIENT: GR-ATC	
Rush TAT Requested: YES NO	Due Date:		
Lab Notified of Rush or Short Holds: YES NO		Non Conformance Form Required: YES NO	

Samples Received Via: FedEx UPS Client Pace Courier Other: _____				Comments:
Custody Seals Present and Intact:	YES	NO	NA	
Received Sample Information Form(s): Drinking Waters Only	YES	NO	NA	
USDA Regulated Soils: (AL, AR, CA, FL, GA, ID, LA, MS, NM, NY, NC, OK, OR, SC, TN, TX, WA or Puerto Rico)	YES	NO	N/A	
Short Holds Present (< 72 Hours):	YES	NO		
Samples Received in Hold:	YES	NO		
Custody Signatures Present:	YES	NO		
Collector Signature Present:	YES	NO		
Packing Material Used:	YES	NO		
Samples Collected Today and On Ice:	YES	NO	N/A	
IR Gun #: 280 281	Digital Thermometer #:	282	283	
Ice Type: WET Bagged / WET Loose BLUE NONE	1. Cooler Temp Upon Receipt: 2.0 2.8 °C			
Ice Location: TOP BOTTOM MIDDLE DISPERSED	Temp should be 0-6°C (Initial/Corrected)			
Temp Blank Received:	YES	NO		
Containers Intact:	YES	NO		
Correct Containers:	YES	NO		
Sufficient Volume:	YES	NO		
Sample pH Acceptable: All containers needing preservation are found to be in complaince with EPA recommendation. Exceptions are VOA, coliform, LLHg, O&G, or any container with a septum cap or preserved with HCl	YES	NO	N/A	
Residual Chlorine Absent: (SVOC/Pest 625, PCB 608, Total/Amenable/Available Cyanide)	YES	NO	N/A	
VOA Headspace Acceptable (<6mm):	YES	NO	N/A	
Trip Blank Received: HCl MeOH TSP OTHER	YES	NO		
Comments:	2. Cooler Temp Upon Receipt: 1.8 2.6 °C			
	3. Cooler Temp Upon Receipt: 1.3 2.1 °C			
	4. Cooler Temp Upon Receipt: _____ °C			

Pace Analytical

Sample Receiving Non-Conformance Form (NCF)

WO#: 50260974

PM: BJH **Due Date: 07/07/20**

CLIENT: GR-ATC

	COC Integrity Issues: Check issues below and add details where appropriate			**Sample Integrity Issues:** Check issues below and add details where appropriate			
Date: 6.26.20		COC does not match samples received (missing, additional, etc.)		Custody seal(s) damaged or missing on coolers, samples, or trip blanks		*Insufficient sample volume received
Evaluated by: WDC		COC sample ID does not match sample label		Cooler or sample container broken or compromised		*Sample contains residual chlorine
Client: ATC		*COC collection date/time missing or does not match sample label		*Sample past holding time		Improper preservation
***Drinking Water Deficiency:** Samples may be invalid. Analysis must not proceed without client written permission.		*Analyses/ analytes missing or clarification needed		*Temperature not within acceptance criteria (typically 0-6°C)		*Sample contains interferences (multi-phasic, solids, color, odor, etc...)
		*Required signatures are missing		*Sample arrived frozen or partially frozen	X	Vial(s) received with improper headspace (>6mm)
*No Sample Information Form (SIF) received with sample(s)		*Residual Chlorine presence/ absence not indicated on COC		*Incorrect or improper containers received		Other: See notes below

COC					Sample Label					Sample Notes
Sample ID	Date	Time	Container Type	Quantity	Sample ID	Date	Time	Container Type	Quantity	

General Comments/ Client Instructions:

MW-123 & MW-129 each have one vial with headspace.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-5935-1
Client Project/Site: 8 Mile Ferndale - Detroit Axle

For:
Pace Analytical Services, LLC
5560 Corporate Exchange Court
Grand Rapids, Michigan 49512

Attn: Brian Hall

Marrissa Williams

Authorized for release by:
7/7/2020 4:13:01 PM

Marrissa Williams, Project Manager
(717)556-7246
marrissawilliams@eurofinsus.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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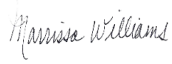

Marrissa Williams
Project Manager
7/7/2020 4:13:01 PM

Table of Contents

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-5935-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-5935-1

Receipt
The samples were received on 6/27/2020 10:28 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 0.4°C

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Client Sample ID: MW-125 — Lab Sample ID: 410-5935-1

No Detections.

Client Sample ID: MW-130 — Lab Sample ID: 410-5935-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-125

Lab Sample ID: 410-5935-1

Date Collected: 06/23/20 12:55

Matrix: Water

Date Received: 06/27/20 10:28

Method: 8270D Org lead - Organo Lead (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		4.8	0.87	ug/L		06/29/20 20:09	06/30/20 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*17 - 103*	*06/29/20 20:09*	*06/30/20 13:53*	*1*
Nitrobenzene-d5 (Surr)	*89*		*49 - 117*	*06/29/20 20:09*	*06/30/20 13:53*	*1*
p-Terphenyl-d14 (Surr)	*101*		*10 - 143*	*06/29/20 20:09*	*06/30/20 13:53*	*1*

Client Sample ID: MW-130

Lab Sample ID: 410-5935-2

Date Collected: 06/23/20 15:10

Matrix: Water

Date Received: 06/27/20 10:28

Method: 8270D Org lead - Organo Lead (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		4.8	0.86	ug/L		06/29/20 20:09	06/30/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*17 - 103*	*06/29/20 20:09*	*06/30/20 14:16*	*1*
Nitrobenzene-d5 (Surr)	*94*		*49 - 117*	*06/29/20 20:09*	*06/30/20 14:16*	*1*
p-Terphenyl-d14 (Surr)	*101*		*10 - 143*	*06/29/20 20:09*	*06/30/20 14:16*	*1*

Surrogate Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Method: 8270D Org lead - Organo Lead (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(17-103)	(49-117)	(10-143)
410-5935-1	MW-125	77	89	101
410-5935-2	MW-130	81	94	101
LCS 410-17808/2-A	Lab Control Sample	75	86	98
LCSD 410-17808/3-A	Lab Control Sample Dup	70	81	92
MB 410-17808/1-A	Method Blank	67	78	88

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D Org lead - Organo Lead (GC/MS)

Lab Sample ID: MB 410-17808/1-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		5.0	0.90	ug/L		06/29/20 20:09	06/30/20 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*17 - 103*	*06/29/20 20:09*	*06/30/20 11:46*	*1*
Nitrobenzene-d5 (Surr)	*78*		*49 - 117*	*06/29/20 20:09*	*06/30/20 11:46*	*1*
p-Terphenyl-d14 (Surr)	*88*		*10 - 143*	*06/29/20 20:09*	*06/30/20 11:46*	*1*

Lab Sample ID: LCS 410-17808/2-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetraethyl lead			100	56.4		ug/L		56	12 - 108		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*75*		*17 - 103*
Nitrobenzene-d5 (Surr)	*86*		*49 - 117*
p-Terphenyl-d14 (Surr)	*98*		*10 - 143*

Lab Sample ID: LCSD 410-17808/3-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetraethyl lead			100	49.8		ug/L		50	12 - 108	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*70*		*17 - 103*
Nitrobenzene-d5 (Surr)	*81*		*49 - 117*
p-Terphenyl-d14 (Surr)	*92*		*10 - 143*

QC Association Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

GC/MS Semi VOA

Prep Batch: 17808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-5935-1	MW-125	Total/NA	Water	3510C	
410-5935-2	MW-130	Total/NA	Water	3510C	
MB 410-17808/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-17808/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-17808/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 18099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-5935-1	MW-125	Total/NA	Water	8270D Org lead	17808
410-5935-2	MW-130	Total/NA	Water	8270D Org lead	17808
MB 410-17808/1-A	Method Blank	Total/NA	Water	8270D Org lead	17808
LCS 410-17808/2-A	Lab Control Sample	Total/NA	Water	8270D Org lead	17808
LCSD 410-17808/3-A	Lab Control Sample Dup	Total/NA	Water	8270D Org lead	17808

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Client Sample ID: MW-125

Lab Sample ID: 410-5935-1

Date Collected: 06/23/20 12:55

Matrix: Water

Date Received: 06/27/20 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			17808	06/29/20 20:09	UKL2	ELLE
Total/NA	Analysis	8270D Org lead		1	18099	06/30/20 13:53	ULM3	ELLE

Client Sample ID: MW-130

Lab Sample ID: 410-5935-2

Date Collected: 06/23/20 15:10

Matrix: Water

Date Received: 06/27/20 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			17808	06/29/20 20:09	UKL2	ELLE
Total/NA	Analysis	8270D Org lead		1	18099	06/30/20 14:16	ULM3	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Pace Analytical Services, LLC
Job ID: 410-5935-1
Project/Site: 8 Mile Ferndale - Detroit Axle

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9930	01-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270D Org lead	3510C	Water	Tetraethyl lead

Method Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Method	Method Description	Protocol	Laboratory
8270D Org lead	Organo Lead (GC/MS)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-5935-1	MW-125	Water	06/23/20 12:55	06/27/20 10:28	
410-5935-2	MW-130	Water	06/23/20 15:10	06/27/20 10:28	

Chain of Custody

PASI Indiana Laboratory

410-5935-01 Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 50260974 **Workorder Name:** 8 Mile Ferndale - Detroit Axle **Results Requested By:** 7/7/2020

Report / Invoice To	Subcontract To
Brian Hall Pace Analytical Grand Rapids 5560 Corporate Exchange Ct. SE Grand Rapids, MI 49512 Phone (616)975-4500 Email: brian.hall@pacelabs.com	Eurofins Lancaster P.O. 50260974

State of Sample Origin: MI TDL

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: tetraethyl Lead by 8270D - Eurofins	LAB USE ONLY
1	MW-125	6/23/2020 12:55	50260974004	Water	2	X	
2	MW-130	6/23/2020 15:10	50260974006	Water	2	X	
3							
4							
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	D. Riordin	6/26/20 1900		
2				
3				6/27/20 1023

Comments

Cooler Temperature on Receipt 0.4 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

TWR

410-5935-02 Chain of Custody

Pace Analytical®

Purchase Order

ship to: Pace Analytical Services
5560 Corporate Exchange Court
Grand Rapids, Michigan 49512
phone (616) 975-4500

to:
Eurofins Lancaster
Attn: Marrissa Williams
2425 New Holland Pike
Lancaster, PA 17601
717.556.7246

Purchase Date: 26 Jun 2020
P.O. Number: 50260974
P.O. Total: **$505.00**

Quantity	Size/No.	Description	Amount
2	2-1L	8270D Tetraethyl Lead	$200.00
2		5 day TAT - 25% surcharge	$50.00
2		Sample Handling	$2.50
		please email results: Brian.Hall@pacelabs.com	
		Project# 50260974	
		Rush 5 Day TAT	
		Contact: Brian Hall, Pace Analytical phone: (616) 975-4544 fax: (616) 942-7463	
		Subtotal	
		Total	**$505.00**

invoice to:
indy.ap@pacelabs.com
Pace Analytical Services
Attn: Accounts Payable
7726 Moller Road, Indianapolis, IN 46268

BY: for
Brian Hall

Original

Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 410-5935-1

Login Number: 5935
List Number: 1
Creator: Rivera-Santa, Julissa

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-5935-1
Client Project/Site: 8 Mile Ferndale - Detroit Axle

For:
Pace Analytical Services, LLC
5560 Corporate Exchange Court
Grand Rapids, Michigan 49512

Attn: Brian Hall

Marrissa Williams

Authorized for release by:
7/7/2020 4:13:01 PM

Marrissa Williams, Project Manager
(717)556-7246
marrissawilliams@eurofinsus.com

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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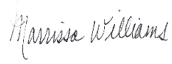

Marrissa Williams
Project Manager
7/7/2020 4:13:01 PM

Table of Contents

Definitions/Glossary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

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DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
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MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-5935-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-5935-1

Receipt
The samples were received on 6/27/2020 10:28 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 0.4°C

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Client Sample ID: MW-125 — Lab Sample ID: 410-5935-1

No Detections.

Client Sample ID: MW-130 — Lab Sample ID: 410-5935-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Client Sample ID: MW-125

Date Collected: 06/23/20 12:55
Date Received: 06/27/20 10:28

Lab Sample ID: 410-5935-1

Matrix: Water

Method: 8270D Org lead - Organo Lead (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		4.8	0.87	ug/L		06/29/20 20:09	06/30/20 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*17 - 103*	*06/29/20 20:09*	*06/30/20 13:53*	*1*
Nitrobenzene-d5 (Surr)	*89*		*49 - 117*	*06/29/20 20:09*	*06/30/20 13:53*	*1*
p-Terphenyl-d14 (Surr)	*101*		*10 - 143*	*06/29/20 20:09*	*06/30/20 13:53*	*1*

Client Sample ID: MW-130

Date Collected: 06/23/20 15:10
Date Received: 06/27/20 10:28

Lab Sample ID: 410-5935-2

Matrix: Water

Method: 8270D Org lead - Organo Lead (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		4.8	0.86	ug/L		06/29/20 20:09	06/30/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*17 - 103*	*06/29/20 20:09*	*06/30/20 14:16*	*1*
Nitrobenzene-d5 (Surr)	*94*		*49 - 117*	*06/29/20 20:09*	*06/30/20 14:16*	*1*
p-Terphenyl-d14 (Surr)	*101*		*10 - 143*	*06/29/20 20:09*	*06/30/20 14:16*	*1*

Surrogate Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Method: 8270D Org lead - Organo Lead (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	FBP (17-103)	NBZ (49-117)	TPHd14 (10-143)
410-5935-1	MW-125	77	89	101
410-5935-2	MW-130	81	94	101
LCS 410-17808/2-A	Lab Control Sample	75	86	98
LCSD 410-17808/3-A	Lab Control Sample Dup	70	81	92
MB 410-17808/1-A	Method Blank	67	78	88

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D Org lead - Organo Lead (GC/MS)

Lab Sample ID: MB 410-17808/1-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetraethyl lead	ND		5.0	0.90	ug/L		06/29/20 20:09	06/30/20 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*17 - 103*	*06/29/20 20:09*	*06/30/20 11:46*	*1*
Nitrobenzene-d5 (Surr)	*78*		*49 - 117*	*06/29/20 20:09*	*06/30/20 11:46*	*1*
p-Terphenyl-d14 (Surr)	*88*		*10 - 143*	*06/29/20 20:09*	*06/30/20 11:46*	*1*

Lab Sample ID: LCS 410-17808/2-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetraethyl lead			100	56.4		ug/L		56	12 - 108		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*75*		*17 - 103*
Nitrobenzene-d5 (Surr)	*86*		*49 - 117*
p-Terphenyl-d14 (Surr)	*98*		*10 - 143*

Lab Sample ID: LCSD 410-17808/3-A
Matrix: Water
Analysis Batch: 18099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetraethyl lead			100	49.8		ug/L		50	12 - 108	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*70*		*17 - 103*
Nitrobenzene-d5 (Surr)	*81*		*49 - 117*
p-Terphenyl-d14 (Surr)	*92*		*10 - 143*

QC Association Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

GC/MS Semi VOA

Prep Batch: 17808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-5935-1	MW-125	Total/NA	Water	3510C	
410-5935-2	MW-130	Total/NA	Water	3510C	
MB 410-17808/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-17808/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-17808/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 18099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-5935-1	MW-125	Total/NA	Water	8270D Org lead	17808
410-5935-2	MW-130	Total/NA	Water	8270D Org lead	17808
MB 410-17808/1-A	Method Blank	Total/NA	Water	8270D Org lead	17808
LCS 410-17808/2-A	Lab Control Sample	Total/NA	Water	8270D Org lead	17808
LCSD 410-17808/3-A	Lab Control Sample Dup	Total/NA	Water	8270D Org lead	17808

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Client Sample ID: MW-125

Lab Sample ID: 410-5935-1

Date Collected: 06/23/20 12:55

Matrix: Water

Date Received: 06/27/20 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			17808	06/29/20 20:09	UKL2	ELLE
Total/NA	Analysis	8270D Org lead		1	18099	06/30/20 13:53	ULM3	ELLE

Client Sample ID: MW-130

Lab Sample ID: 410-5935-2

Date Collected: 06/23/20 15:10

Matrix: Water

Date Received: 06/27/20 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			17808	06/29/20 20:09	UKL2	ELLE
Total/NA	Analysis	8270D Org lead		1	18099	06/30/20 14:16	ULM3	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Pace Analytical Services, LLC
Job ID: 410-5935-1
Project/Site: 8 Mile Ferndale - Detroit Axle

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9930	01-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270D Org lead	3510C	Water	Tetraethyl lead

Method Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Method	Method Description	Protocol	Laboratory
8270D Org lead	Organo Lead (GC/MS)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Pace Analytical Services, LLC
Project/Site: 8 Mile Ferndale - Detroit Axle

Job ID: 410-5935-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-5935-1	MW-125	Water	06/23/20 12:55	06/27/20 10:28	
410-5935-2	MW-130	Water	06/23/20 15:10	06/27/20 10:28	

Chain of Custody

PASI Indiana Laboratory

410-5935-01 Chain of Custody

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www.pacelabs.com

Workorder: 50260974 **Workorder Name:** 8 Mile Ferndale - Detroit Axle **Results Requested By:** 7/7/2020

Report / Invoice To	Subcontract To
Brian Hall Pace Analytical Grand Rapids 5560 Corporate Exchange Ct. SE Grand Rapids, MI 49512 Phone (616)975-4500 Email: brian.hall@pacelabs.com	Eurofins Lancaster P.O. 50260974

State of Sample Origin: MI TDL

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: tetraethyl Lead by 8270D - Eurofins	LAB USE ONLY
1	MW-125	6/23/2020 12:55	50260974004	Water	2	X	
2	MW-130	6/23/2020 15:10	50260974006	Water	2	X	
3							
4							
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	D. Riordin	6/26/20 1900		
2				
3				6/27/20 1023

Comments

Cooler Temperature on Receipt 0.4 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

TMR

410-5935-02 Chain of Custody

Pace Analytical®

Purchase Order

ship to: Pace Analytical Services
5560 Corporate Exchange Court
Grand Rapids, Michigan 49512
phone (616) 975-4500

to:
Eurofins Lancaster
Attn: Marrissa Williams
2425 New Holland Pike
Lancaster, PA 17601
717.556.7246

Purchase Date: 26 Jun 2020
P.O. Number: 50260974
P.O. Total: **$505.00**

Quantity	Size/No.	Description	Amount
2	2-1L	8270D Tetraethyl Lead	$200.00
2		5 day TAT - 25% surcharge	$50.00
2		Sample Handling	$2.50
		please email results: Brian.Hall@pacelabs.com	
		Project# 50260974	
		Rush 5 Day TAT	
		Contact: Brian Hall, Pace Analytical phone: (616) 975-4544 fax: (616) 942-7463	
		Subtotal	
		Total	**$505.00**

invoice to:
indy.ap@pacelabs.com
Pace Analytical Services
Attn: Accounts Payable
7726 Moller Road, Indianapolis, IN 46268

BY: for Brian Hall

Original

Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 410-5935-1

Login Number: 5935
List Number: 1
Creator: Rivera-Santa, Julissa

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Joshua Schuyler
ATC-MI
2650 Horizon Drive SE
Grand Rapids MI 49546

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Prepared Date:
May 6, 2020

Report Information:

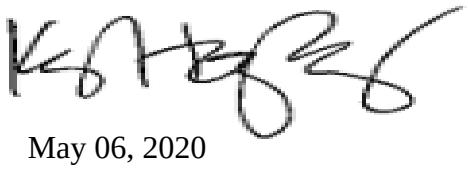
Pace Project #: 10515186
Sample Receipt Date: 04/17/2020
Client Project #: NPDAX19001 Detroit Axel
Client Sub PO #: N/A
State Cert #: 2926.01

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Kirsten Hogberg, your Pace Project Manager.

This report has been reviewed by:



May 06, 2020

Kirsten Hogberg, Project Manager
(612) 607-6407
(612) 607-6444 (fax)
kirsten.hogberg@pacelabs.com

NELAP ACCREDITED TNI LABORATORY

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on nineteen samples, one matrix spike, and a duplicate submitted by a representative of ATC-MI. The samples were analyzed for twenty-four perfluorinated compounds using an isotope dilution based on DoD QSM 5.1.1. Reporting limits were set to reporting limits.

A laboratory method blank was prepared and analyzed with each sample batch as part of our routine quality control procedures. The results show the blanks were free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material. 6:2 FTS was detected in the field blank "Field Blank B" and "Field Blank C".

Laboratory spike samples were also prepared with the sample batch using clean reference matrix that had been fortified with native standards. The recovery results were within the method limits. The RPDs (relative percent differences) between one designated spike and its duplicate were within the method limits. These spikes indicate that extraction performed as expected.

Both of the injection internal standards (13C4_PFOA and 13C4_PFOS) pass for each analysis in the batch verifying that the instrument detector is working as expected. Diminished and/or elevated internal surrogate standard (IS) recoveries (outside the suggested limits) were present in the sample material, however, the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

On the matrix spike 6:2 FTS is marked "R" as the recovery is elevated from the expected levels. This deviation may be due to the presence of the affected analyte in the sample material and/or sample inhomogeneity

It should be noted that Pace Analytical has not yet completed the certification process for all analytes in this method. Therefore, the results have been marked "N2" as qualified.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Minnesota - Pet	1240
Alabama	40770	Mississippi	MN00064
Alaska - DW	MN00064	Missouri - DW	10100
Alaska - UST	17-009	Montana	CERT0092
Arizona	AZ0014	Nebraska	NE-OS-18-06
Arkansas - DW	MN00064	Nevada	MN00064
Arkansas - WW	88-0680	New Hampshire	2081
CNMI Saipan	MP0003	New Jersey (NE	MN002
California	2929	New York	11647
Colorado	MN00064	North Carolina -	27700
Connecticut	PH-0256	North Carolina -	530
EPA Region 8+	via MN 027-053	North Dakota	R-036
Florida (NELAP	E87605	Ohio - DW	41244
Georgia	959	Ohio - VAP	CL101
Guam	20-00.R	Oklahoma	9507
Hawaii	MN00064	Oregon - Primar	MN300001
Idaho	MN00064	Oregon - Secon	MN200001
Illinois	200011	Pennsylvania	68-00563
Indiana	C-MN-01	Puerto Rico	MN00064
Iowa	368	South Carolina	74003
Kansas	E-10167	Tennessee	TN02818
Kentucky - DW	90062	Texas	T104704192
Kentucky - WW	90062	Utah (NELAP)	MN00064
Louisiana - DE	84596	Vermont	VT-027053137
Louisiana - DW	MN00064	Virginia	460163
Maine	MN00064	Washington	C486
Maryland	322	West Virginia -	382
Massachusetts	M-MN064	West Virginia -	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming - UST	2926.01
Minnesota - De	via MN 027-053		

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

Pace Analytical®
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

2278246

Report No.:10515186_PFAAD_DFR

Section A Required Client Information:

Company: ATC Group Services
Address: 46555 Humboldt Dr
Ste 100 NOVI, MI 48377
Email To: joshua.schyler@atcgs.com
Phone: 248-982-5378 Fax: 248-669-5147
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Joshua.Schyler@atcgs.com
Copy To: April.Hehir@atcgs.com
Purchase Order No.: 10005
Project Name: Detroit Axel
Project Number: NPDAX19001

Section C Invoice Information:

Attention: Joshua Schyler
Company Name: ATC Group Services
Address: 46555 Humboldt Dr Ste 100 Novi, MI 48377
Pace Quote Reference: 00073650
Pace Project Manager: Kirsten Hogberg
Pace Profile #: 46707

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER EGLE

Site Location STATE: MI

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION deg F	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): PFAS ID 24	Res	Pace Project No./ Lab I.D.
1	MW-101	WT	G	4/14/20	1049			46	2	X									X		001
2	MW-102			4/14/20	1130			47	2	X									X		002
3	MW-103			4/14/20	1236			47	2	X									X		003
4	MW-104			4/14/20	1324			51	2	X									X		004
5	MW-105			4/14/20	1409			49	2	X									X		005
6	Field Blank A			4/14/20	1530			—	#1	X									X		006
7	MW-106			4/15/20	1023			50	2	X									X		007
8	DUP-1			4/15/20	0000			50	2	X									X		008
9	MW-107			4/15/20	1105			48	2	X									X	H	009
10	MW-108			4/15/20	1144			46	2	X									X		010
11	MW-109			4/15/20	1324			46	2	X									X		011
12	MW-110	↓	↓	4/15/20	1402			45	2	X									X	H	012

WO#: 10515186

10515186

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Hold samples MW-107 and MW-110 until authorized for analysis	Spencer Overbeck / ATC	4/16/20	1600	Pace	4/17/2020	745

SAMPLE CONDITIONS			
Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: Spencer Overbeck DATE Signed (MM/DD/YY): 4/16/2020

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

2278245

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ATC Group Services	Report To: Joshua.Schyler@atcgs.com	Attention: Joshua Schyler
Address: 46555 Humbolt Dr	Copy To: April.Hehir@atcgs.com	Company Name: ATC Group Services
Ste 100 Novi, MI 48377		Address: 46555 Humbolt Dr Ste 100 Novi, MI 48377
Email To: joshua.schulyer@atcgs.com	Purchase Order No.: 10005	Pace Quote Reference: 00073650
Phone: 248-952-5328 Fax: 248-669-5147	Project Name: Detroit Axel	Pace Project Manager: Kirsten Hogberg
Requested Due Date/TAT: Standard	Project Number: NPDAX19001	Pace Profile #: 40207

REGULATORY AGENCY

- [ ] NPDES
- [ ] GROUND WATER
- [ ] DRINKING WATER
- [ ] UST
- [ ] RCRA
- [x] OTHER EGLE

Site Location STATE: MI

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION deg F	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	PFAS ID24	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Field Blank B	WT	G	4/15/20	1515			–	1	X									X		013
2	MW-111	↓	↓	4/16/20	1003			45	2	X									X		014
3	DUP-2			4/16/20	0000			45	2	X									X		015
4	MW-112			4/16/20	1042			45	2	X									X		016
5	MW-113			4/16/20	1125			45	2	X									X		017
6	MW-114			4/16/20	1205			46	2	X									X		018
7	MW-115			4/16/20	1324			45	2	X									X		019
8	Field Blank C			4/16/20	1430			–	1	X									X		020
9	Trip Blank	↓	↓	4/14/20	0000			–	1	X									X		021
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
See Pg. 1 of COC	Spencer Overbeck / ATC	4/16/20	1600	[signature] Pace	4/17/2020	845	2.5 3.1	Y	Y	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 4/16/20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-C-010-rev.00, 09Nov2017

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 19Feb2020 Page 1 of 1
	Document No.: **F-MN-L-213-rev.31**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: ATC Group Services

Project #: **WO#: 10515186**

PM: KNH **Due Date: 05/08/20**

CLIENT: Cardno-MI

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Pace [ ] SpeeDee [ ] Commercial **See Exceptions** [X]

Tracking Number: 1320 7521 3311

Custody Seal on Cooler/Box Present? [X] Yes [ ] No **Seals Intact?** [X] Yes [ ] No **Biological Tissue Frozen?** [ ] Yes [ ] No [X] N/A

Packing Material: [X] Bubble Wrap [ ] Bubble Bags [ ] None [X] Other: PB **Temp Blank?** [X] Yes [ ] No

Thermometer: [ ] T1(0461) [ ] T2(1336) [X] T3(0459) [ ] T4(0254) [ ] T5(0489) **Type of Ice:** [X] Wet [ ] Blue [ ] None [ ] Dry [ ] Melted

Did Samples Originate in West Virginia? [ ] Yes [X] No **Were All Container Temps Taken?** [ ] Yes [ ] No [X] N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 2.5, 3.1 °C **Average Corrected Temp (no temp blank only):** [ ] See Exceptions ____ °C [ ] 1 Container

Correction Factor: +0.0 **Cooler Temp Corrected w/temp blank:** 2.5 3.1 °C

USDA Regulated Soil: ([X] N/A, water sample/Other:) **Date/Initials of Person Examining Contents:** GNZ 4/17/2020

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? [ ] Yes [ ] No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [ ] No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	[X] Yes	[ ] No		1.
Chain of Custody Relinquished?	[X] Yes	[ ] No		2.
Sampler Name and/or Signature on COC?	[X] Yes	[ ] No	[ ] N/A	3.
Samples Arrived within Hold Time?	[X] Yes	[ ] No		4.
Short Hold Time Analysis (<72 hr)?	[ ] Yes	[X] No		5. [ ] Fecal Coliform [ ] HPC [ ] Total Coliform/E coli [ ] BOD/cBOD [ ] Hex Chrome [ ] Turbidity [ ] Nitrate [ ] Nitrite [ ] Orthophos [ ] Other
Rush Turn Around Time Requested?	[ ] Yes	[X] No		6.
Sufficient Volume?	[X] Yes	[ ] No		7.
Correct Containers Used?	[X] Yes	[ ] No		8.
-Pace Containers Used?	[X] Yes	[ ] No		
Containers Intact?	[X] Yes	[ ] No		9.
Field Filtered Volume Received for Dissolved Tests?	[ ] Yes	[ ] No	[X] N/A	10. Is sediment visible in the dissolved container? [ ] Yes [ ] No
Is sufficient information available to reconcile the samples to the COC?	[X] Yes	[ ] No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** [ ]
Matrix: [X] Water [ ] Soil [ ] Oil [ ] Other				
All containers needing acid/base preservation have been checked?	[ ] Yes	[ ] No	[X] N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	[ ] Yes	[ ] No	[X] N/A	[ ] NaOH [ ] HNO_3 [ ] H_2SO_4 [ ] Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	[X] Yes	[ ] No	[ ] N/A	Positive for Res. Chlorine? [ ] Yes [ ] No **pH Paper Lot#** **See Exception** [ ]
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	[ ] Yes	[ ] No	[X] N/A	13. **See Exception** [ ]
Headspace in VOA Vials (greater than 6mm)?	[ ] Yes	[ ] No	[X] N/A	
Trip Blank Present?	[ ] Yes	[ ] No	[X] N/A	14.
Trip Blank Custody Seals Present?	[ ] Yes	[ ] No	[X] N/A	Pace Trip Blank Lot # (if purchased):

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** [ ] Yes [ ] No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Ashley Williams **Date:** 04/17/2020

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: GNZ (2)

Pace Analytical®	Document Name: **SCUR Exception Form**	Document Revised: 06Feb2020 Page 1 of 1
	Document No.: **F-MN-C-298-Rev.03**	Pace Analytical Services - **Minneapolis**

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp

Tracking Number/Temperature	
1320 7521 3300	3.1
" " 3311	2.5

Other Issues		
Issue Type: **Sample ID**	**Container Type**	**# of Containers**

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-101	Date Extracted	04/21/2020
Lab Sample ID	10515186001	Total Amount Extracted	238 mL
Filename	Q200422A_007	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	3.5	2.1	0.31	1	04/22/202018:27	375-22-4	N2
PFPeA	ND	2.1	0.26	1	04/22/202018:27	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	04/22/202018:27	307-24-4	N2
PFHpA	ND	2.1	0.44	1	04/22/202018:27	375-85-9	N2
PFOA	ND	2.1	0.43	1	04/22/202018:27	335-67-1	N2
PFNA	ND	2.1	0.58	1	04/22/202018:27	375-95-1	N2
PFDA	ND	2.1	0.67	1	04/22/202018:27	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/22/202018:27	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/22/202018:27	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/22/202018:27	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/22/202018:27	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/202018:27	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	04/22/202018:27	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	04/22/202018:27	2355-31-9	N2
PFBS	5.2	1.9	0.20	1	04/22/202018:27	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/202018:27	2706-91-4	N2
PFHxS	4.7	1.9	0.38	1	04/22/202018:27	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/22/202018:27	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/22/202018:27	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/22/202018:27	68259-12-1	N2
PFDS	ND	2.0	0.33	1	04/22/202018:27	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	04/22/202018:27	757124-72-4	N2
6:2FTS	ND	2.0	0.93	1	04/22/202018:27	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	04/22/202018:27	39108-34-4	N2

N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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Sample Analysis Summary

Client's Sample ID	MW-101	Date Extracted	04/21/2020
Lab Sample ID	10515186001	Total Amount Extracted	238 mL
Filename	Q200422A_007	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	19	89	50-150	Pass	565281
13C5_PFPeA	21	19	90	50-150	Pass	421593
13C5_PFHxA	21	20	95	50-150	Pass	474029
13C4_PFHpA	21	19	91	50-150	Pass	456466
13C8_PFOA	21	19	92	50-150	Pass	517270
13C9_PFNA	21	20	97	50-150	Pass	585509
13C6_PFDA	21	20	96	50-150	Pass	466469
13C7_PFUdA	21	20	97	50-150	Pass	441694
13C2_PFDoA	21	21	99	50-150	Pass	492149
13C2_PFTeDA	21	20	94	50-150	Pass	348731
d5-EtFOSAA	21	17	83	50-150	Pass	90835
d3-MeFOSAA	21	19	90	50-150	Pass	80681
13C3_PFBS	21	19	93	50-150	Pass	326560
13C3_PFHxS	21	19	92	50-150	Pass	326485
13C8_PFOS	21	19	91	50-150	Pass	378874
13C8_PFOSA	21	19	91	50-150	Pass	542146
13C2_4:2FTS	21	27	127	50-150	Pass	141705
13C2_6:2FTS	21	21	99	50-150	Pass	123094
13C2_8:2FTS	21	21	98	50-150	Pass	134349

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	610055	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	394023	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-102	Date Extracted	04/21/2020
Lab Sample ID	10515186002	Total Amount Extracted	243 mL
Filename	Q200422A_008	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	12	2.1	0.30	1	04/22/202018:54	375-22-4	N2
PFPeA	26	2.1	0.26	1	04/22/202018:54	2706-90-3	N2
PFHxA	24	2.1	0.36	1	04/22/202018:54	307-24-4	N2
PFHpA	6.6	2.1	0.44	1	04/22/202018:54	375-85-9	N2
PFOA	7.8	2.1	0.42	1	04/22/202018:54	335-67-1	N2
PFNA	ND	2.1	0.57	1	04/22/202018:54	375-95-1	N2
PFDA	ND	2.1	0.66	1	04/22/202018:54	335-76-2	N2
PFUnA	ND	2.1	0.54	1	04/22/202018:54	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/22/202018:54	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/22/202018:54	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/22/202018:54	376-06-7	N2
PFOSA	ND	2.1	0.23	1	04/22/202018:54	754-91-6	N2
N-EtFOSAA	ND	2.1	0.90	1	04/22/202018:54	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.43	1	04/22/202018:54	2355-31-9	N2
PFBS	5.2	1.8	0.20	1	04/22/202018:54	375-73-5	N2
PFPeS	2.1	1.9	0.36	1	04/22/202018:54	2706-91-4	N2
PFHxS	5.1	1.9	0.37	1	04/22/202018:54	355-46-4	N2
PFHpS	ND	2.0	0.45	1	04/22/202018:54	375-92-8	N2
PFOS	2.6	1.9	0.39	1	04/22/202018:54	1763-23-1	N2
PFNS	ND	2.0	0.45	1	04/22/202018:54	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/22/202018:54	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	04/22/202018:54	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	04/22/202018:54	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	04/22/202018:54	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-102	Date Extracted	04/21/2020
Lab Sample ID	10515186002	Total Amount Extracted	243 mL
Filename	Q200422A_008	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	18	87	50-150	Pass	593075
13C5_PFPeA	21	18	87	50-150	Pass	431434
13C5_PFHxA	21	19	90	50-150	Pass	478322
13C4_PFHpA	21	19	94	50-150	Pass	498727
13C8_PFOA	21	19	92	50-150	Pass	551895
13C9_PFNA	21	19	94	50-150	Pass	614902
13C6_PFDA	21	19	92	50-150	Pass	481879
13C7_PFUdA	21	19	93	50-150	Pass	458342
13C2_PFDoA	21	18	86	50-150	Pass	460912
13C2_PFTeDA	21	17	85	50-150	Pass	340938
d5-EtFOSAA	21	17	82	50-150	Pass	97492
d3-MeFOSAA	21	18	86	50-150	Pass	83886
13C3_PFBS	21	19	90	50-150	Pass	335983
13C3_PFHxS	21	18	89	50-150	Pass	343475
13C8_PFOS	21	18	89	50-150	Pass	404565
13C8_PFOSA	21	15	71	50-150	Pass	463033
13C2_4:2FTS	21	26	124	50-150	Pass	147393
13C2_6:2FTS	21	20	99	50-150	Pass	130694
13C2_8:2FTS	21	21	100	50-150	Pass	148170

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	647874	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	426533	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-103	Date Extracted	04/21/2020
Lab Sample ID	10515186003	Total Amount Extracted	237 mL
Filename	Q200422A_009	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	4.6	2.1	0.31	1	04/22/202019:20	375-22-4	N2
PFPeA	4.7	2.1	0.26	1	04/22/202019:20	2706-90-3	N2
PFHxA	5.6	2.1	0.37	1	04/22/202019:20	307-24-4	N2
PFHpA	3.2	2.1	0.45	1	04/22/202019:20	375-85-9	N2
PFOA	7.8	2.1	0.43	1	04/22/202019:20	335-67-1	N2
PFNA	ND	2.1	0.59	1	04/22/202019:20	375-95-1	N2
PFDA	ND	2.1	0.68	1	04/22/202019:20	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/22/202019:20	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	04/22/202019:20	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	04/22/202019:20	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	04/22/202019:20	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/202019:20	754-91-6	N2
N-EtFOSAA	ND	2.1	0.93	1	04/22/202019:20	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	04/22/202019:20	2355-31-9	N2
PFBS	3.9	1.9	0.20	1	04/22/202019:20	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/202019:20	2706-91-4	N2
PFHxS	7.0	1.9	0.38	1	04/22/202019:20	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/22/202019:20	375-92-8	N2
PFOS	13	1.9	0.39	1	04/22/202019:20	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/22/202019:20	68259-12-1	N2
PFDS	ND	2.0	0.33	1	04/22/202019:20	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	04/22/202019:20	757124-72-4	N2
6:2FTS	3.4	2.0	0.94	1	04/22/202019:20	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	04/22/202019:20	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-103	Date Extracted	04/21/2020
Lab Sample ID	10515186003	Total Amount Extracted	237 mL
Filename	Q200422A_009	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	19	91	50-150	Pass	589406
13C5_PFPeA	21	19	89	50-150	Pass	423717
13C5_PFHxA	21	19	90	50-150	Pass	459200
13C4_PFHpA	21	20	93	50-150	Pass	473377
13C8_PFOA	21	19	92	50-150	Pass	529766
13C9_PFNA	21	20	93	50-150	Pass	599851
13C6_PFDA	21	19	88	50-150	Pass	456262
13C7_PFUdA	21	20	93	50-150	Pass	449601
13C2_PFDoA	21	19	92	50-150	Pass	485394
13C2_PFTeDA	21	18	86	50-150	Pass	340486
d5-EtFOSAA	21	18	84	50-150	Pass	98096
d3-MeFOSAA	21	19	92	50-150	Pass	87920
13C3_PFBS	21	20	94	50-150	Pass	336961
13C3_PFHxS	21	19	89	50-150	Pass	334797
13C8_PFOS	21	19	89	50-150	Pass	394727
13C8_PFOSA	21	18	87	50-150	Pass	552229
13C2_4:2FTS	21	31	149	50-150	Pass	169531
13C2_6:2FTS	21	24	114	50-150	Pass	144085
13C2_8:2FTS	21	22	106	50-150	Pass	154824

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	619943	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	418647	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-104	Date Extracted	04/21/2020
Lab Sample ID	10515186004	Total Amount Extracted	244 mL
Filename	Q200422A_010	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	8.0		2.1	0.30	1	04/22/202019:47	375-22-4	N2
PFPeA	3.2		2.1	0.26	1	04/22/202019:47	2706-90-3	N2
PFHxA	4.6		2.1	0.36	1	04/22/202019:47	307-24-4	N2
PFHpA	3.4		2.1	0.43	1	04/22/202019:47	375-85-9	N2
PFOA	6.2		2.1	0.42	1	04/22/202019:47	335-67-1	N2
PFNA	ND		2.1	0.57	1	04/22/202019:47	375-95-1	N2
PFDA	ND		2.1	0.66	1	04/22/202019:47	335-76-2	N2
PFUnA	ND		2.1	0.54	1	04/22/202019:47	2058-94-8	N2
PFDoA	ND		2.1	0.39	1	04/22/202019:47	307-55-1	N2
PFTrDA	ND		2.1	0.43	1	04/22/202019:47	72629-94-8	N2
PFTeDA	ND		2.1	0.39	1	04/22/202019:47	376-06-7	N2
PFOSA	ND		2.1	0.23	1	04/22/202019:47	754-91-6	N2
N-EtFOSAA	ND		2.1	0.90	1	04/22/202019:47	2991-50-6	N2
N-MeFOSAA	ND		2.1	0.43	1	04/22/202019:47	2355-31-9	N2
PFBS	4.8		1.8	0.20	1	04/22/202019:47	375-73-5	N2
PFPeS	ND		1.9	0.36	1	04/22/202019:47	2706-91-4	N2
PFHxS	10		1.9	0.37	1	04/22/202019:47	355-46-4	N2
PFHpS	ND		1.9	0.45	1	04/22/202019:47	375-92-8	N2
PFOS	ND		1.9	0.38	1	04/22/202019:47	1763-23-1	N2
PFNS	ND		2.0	0.45	1	04/22/202019:47	68259-12-1	N2
PFDS	ND		2.0	0.32	1	04/22/202019:47	335-77-3	N2
4:2FTS	ND	D	19	5.7	10	04/23/202010:59	757124-72-4	N2
6:2FTS	ND		1.9	0.91	1	04/22/202019:47	27619-97-2	N2
8:2FTS	ND		2.0	0.75	1	04/22/202019:47	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-104	Date Extracted	04/21/2020
Lab Sample ID	10515186004	Total Amount Extracted	244 mL
Filename	Q200422A_010	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	19	93	50-150	Pass	565441
13C5_PFPeA	21	19	95	50-150	Pass	419376
13C5_PFHxA	21	20	96	50-150	Pass	455223
13C4_PFHpA	21	20	97	50-150	Pass	460536
13C8_PFOA	21	20	96	50-150	Pass	512086
13C9_PFNA	21	19	94	50-150	Pass	581049
13C6_PFDA	21	21	101	50-150	Pass	500343
13C7_PFUdA	21	19	94	50-150	Pass	438506
13C2_PFDoA	21	18	86	50-150	Pass	435210
13C2_PFTeDA	21	17	85	50-150	Pass	323489
d5-EtFOSAA	21	18	90	50-150	Pass	100700
d3-MeFOSAA	21	19	90	50-150	Pass	83131
13C3_PFBS	21	20	96	50-150	Pass	320145
13C3_PFHxS	21	19	92	50-150	Pass	335110
13C8_PFOS	21	18	90	50-150	Pass	385249
13C8_PFOSA	21	18	87	50-150	Pass	535800
13C2_4:2FTS	21	18	88	50-150	Pass	14963
13C2_6:2FTS	21	23	114	50-150	Pass	134283
13C2_8:2FTS	21	21	101	50-150	Pass	142188

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	579687	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	403051	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-104-DUP	Date Extracted	04/21/2020
Lab Sample ID	10515186004-DUP	Total Amount Extracted	239 mL
Filename	Q200422A_029	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_024
Collected	04/14/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	8.2	2.1	0.30	1	04/23/202004:12	375-22-4	N2
PFPeA	3.3	2.1	0.26	1	04/23/202004:12	2706-90-3	N2
PFHxA	4.6	2.1	0.36	1	04/23/202004:12	307-24-4	N2
PFHpA	3.6	2.1	0.44	1	04/23/202004:12	375-85-9	N2
PFOA	6.1	2.1	0.42	1	04/23/202004:12	335-67-1	N2
PFNA	ND	2.1	0.58	1	04/23/202004:12	375-95-1	N2
PFDA	ND	2.1	0.67	1	04/23/202004:12	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/23/202004:12	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/23/202004:12	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/23/202004:12	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/23/202004:12	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/23/202004:12	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	04/23/202004:12	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	04/23/202004:12	2355-31-9	N2
PFBS	4.7	1.8	0.20	1	04/23/202004:12	375-73-5	N2
PFPeS	ND	2.0	0.36	1	04/23/202004:12	2706-91-4	N2
PFHxS	10	1.9	0.37	1	04/23/202004:12	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/23/202004:12	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/23/202004:12	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/23/202004:12	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/23/202004:12	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	04/23/202004:12	757124-72-4	N2
6:2FTS	21	2.0	0.93	1	04/23/202004:12	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	04/23/202004:12	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-104-DUP	Date Extracted	04/21/2020
Lab Sample ID	10515186004-DUP	Total Amount Extracted	239 mL
Filename	Q200422A_029	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_024
Collected	04/14/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	19	91	50-150	Pass	553364
13C5_PFPeA	21	19	92	50-150	Pass	410150
13C5_PFHxA	21	20	94	50-150	Pass	450836
13C4_PFHpA	21	19	93	50-150	Pass	446321
13C8_PFOA	21	19	92	50-150	Pass	496008
13C9_PFNA	21	20	94	50-150	Pass	569618
13C6_PFDA	21	19	89	50-150	Pass	433789
13C7_PFUdA	21	21	100	50-150	Pass	458207
13C2_PFDoA	21	18	88	50-150	Pass	439024
13C2_PFTeDA	21	19	90	50-150	Pass	335599
d5-EtFOSAA	21	18	87	50-150	Pass	95876
d3-MeFOSAA	21	18	88	50-150	Pass	79179
13C3_PFBS	21	20	93	50-150	Pass	314698
13C3_PFHxS	21	18	87	50-150	Pass	310569
13C8_PFOS	21	18	88	50-150	Pass	368038
13C8_PFOSA	21	18	86	50-150	Pass	515657
13C2_4:2FTS	21	31	146	50-150	Pass	156763
13C2_6:2FTS	21	22	105	50-150	Pass	124656
13C2_8:2FTS	21	20	97	50-150	Pass	134117

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	583837	361284 - 1083852	449854 - 1349561	Pass
13C4_PFOS	395060	241967 - 725900	299472 - 898416	Pass

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-105	Date Extracted	04/21/2020
Lab Sample ID	10515186005	Total Amount Extracted	234 mL
Filename	Q200422A_011	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.31	1	04/22/2020 20:13	375-22-4	N2
PFPeA	ND	2.1	0.27	1	04/22/2020 20:13	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	04/22/2020 20:13	307-24-4	N2
PFHpA	ND	2.1	0.45	1	04/22/2020 20:13	375-85-9	N2
PFOA	4.5	2.1	0.44	1	04/22/2020 20:13	335-67-1	N2
PFNA	ND	2.1	0.59	1	04/22/2020 20:13	375-95-1	N2
PFDA	ND	2.1	0.69	1	04/22/2020 20:13	335-76-2	N2
PFUnA	ND	2.1	0.56	1	04/22/2020 20:13	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	04/22/2020 20:13	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	04/22/2020 20:13	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	04/22/2020 20:13	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/2020 20:13	754-91-6	N2
N-EtFOSAA	ND	2.1	0.94	1	04/22/2020 20:13	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	04/22/2020 20:13	2355-31-9	N2
PFBS	3.2	1.9	0.21	1	04/22/2020 20:13	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/2020 20:13	2706-91-4	N2
PFHxS	5.6	2.0	0.38	1	04/22/2020 20:13	355-46-4	N2
PFHpS	ND	2.0	0.47	1	04/22/2020 20:13	375-92-8	N2
PFOS	2.4	2.0	0.40	1	04/22/2020 20:13	1763-23-1	N2
PFNS	ND	2.1	0.47	1	04/22/2020 20:13	68259-12-1	N2
PFDS	ND	2.1	0.33	1	04/22/2020 20:13	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	04/22/2020 20:13	757124-72-4	N2
6:2FTS	ND	2.0	0.95	1	04/22/2020 20:13	27619-97-2	N2
8:2FTS	ND	2.1	0.78	1	04/22/2020 20:13	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-105	Date Extracted	04/21/2020
Lab Sample ID	10515186005	Total Amount Extracted	234 mL
Filename	Q200422A_011	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	86	50-150	Pass	571933
13C5_PFPeA	21	19	89	50-150	Pass	430320
13C5_PFHxA	21	21	96	50-150	Pass	499992
13C4_PFHpA	21	20	95	50-150	Pass	492585
13C8_PFOA	21	19	88	50-150	Pass	514246
13C9_PFNA	21	20	93	50-150	Pass	584906
13C6_PFDA	21	21	97	50-150	Pass	488707
13C7_PFUdA	21	20	93	50-150	Pass	441300
13C2_PFDoA	21	19	88	50-150	Pass	450946
13C2_PFTeDA	21	18	85	50-150	Pass	327257
d5-EtFOSAA	21	18	84	50-150	Pass	95362
d3-MeFOSAA	21	19	88	50-150	Pass	82300
13C3_PFBS	21	19	90	50-150	Pass	328461
13C3_PFHxS	21	19	91	50-150	Pass	336028
13C8_PFOS	21	19	91	50-150	Pass	393798
13C8_PFOSA	21	19	88	50-150	Pass	546592
13C2_4:2FTS	21	28	131	50-150	Pass	152286
13C2_6:2FTS	21	22	104	50-150	Pass	133905
13C2_8:2FTS	21	22	101	50-150	Pass	143933

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	631983	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	409757	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	Field Blank A	Date Extracted	04/21/2020
Lab Sample ID	10515186006	Total Amount Extracted	243 mL
Filename	Q200422A_012	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	04/22/2020 20:40	375-22-4	N2
PFPeA	ND	2.1	0.26	1	04/22/2020 20:40	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	04/22/2020 20:40	307-24-4	N2
PFHpA	ND	2.1	0.44	1	04/22/2020 20:40	375-85-9	N2
PFOA	ND	2.1	0.42	1	04/22/2020 20:40	335-67-1	N2
PFNA	ND	2.1	0.57	1	04/22/2020 20:40	375-95-1	N2
PFDA	ND	2.1	0.66	1	04/22/2020 20:40	335-76-2	N2
PFUnA	ND	2.1	0.54	1	04/22/2020 20:40	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/22/2020 20:40	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/22/2020 20:40	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/22/2020 20:40	376-06-7	N2
PFOSA	ND	2.1	0.23	1	04/22/2020 20:40	754-91-6	N2
N-EtFOSAA	ND	2.1	0.90	1	04/22/2020 20:40	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.43	1	04/22/2020 20:40	2355-31-9	N2
PFBS	ND	1.8	0.20	1	04/22/2020 20:40	375-73-5	N2
PFPeS	ND	1.9	0.36	1	04/22/2020 20:40	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	04/22/2020 20:40	355-46-4	N2
PFHpS	ND	2.0	0.45	1	04/22/2020 20:40	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/22/2020 20:40	1763-23-1	N2
PFNS	ND	2.0	0.45	1	04/22/2020 20:40	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/22/2020 20:40	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	04/22/2020 20:40	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	04/22/2020 20:40	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	04/22/2020 20:40	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank A	Date Extracted	04/21/2020
Lab Sample ID	10515186006	Total Amount Extracted	243 mL
Filename	Q200422A_012	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_003
Collected	04/14/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	87	50-150	Pass	574363
13C5_PFPeA	21	18	88	50-150	Pass	429395
13C5_PFHxA	21	19	92	50-150	Pass	480048
13C4_PFHpA	21	19	92	50-150	Pass	475857
13C8_PFOA	21	18	89	50-150	Pass	523141
13C9_PFNA	21	19	92	50-150	Pass	583710
13C6_PFDA	21	18	88	50-150	Pass	446514
13C7_PFUdA	21	19	90	50-150	Pass	431836
13C2_PFDoA	21	18	87	50-150	Pass	448838
13C2_PFTeDA	21	17	83	50-150	Pass	324241
d5-EtFOSAA	21	16	79	50-150	Pass	90983
d3-MeFOSAA	21	18	86	50-150	Pass	81098
13C3_PFBS	21	19	91	50-150	Pass	332589
13C3_PFHxS	21	19	94	50-150	Pass	349009
13C8_PFOS	21	18	90	50-150	Pass	392386
13C8_PFOSA	21	16	77	50-150	Pass	485893
13C2_4:2FTS	21	19	94	50-150	Pass	108948
13C2_6:2FTS	21	18	90	50-150	Pass	115467
13C2_8:2FTS	21	19	92	50-150	Pass	133029

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	633924	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	412717	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-106	Date Extracted	04/21/2020
Lab Sample ID	10515186007	Total Amount Extracted	237 mL
Filename	Q200422A_013	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/15/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	11	2.1	0.31	1	04/22/202021:06	375-22-4	N2
PFPeA	8.0	2.1	0.26	1	04/22/202021:06	2706-90-3	N2
PFHxA	10	2.1	0.37	1	04/22/202021:06	307-24-4	N2
PFHpA	5.4	2.1	0.45	1	04/22/202021:06	375-85-9	N2
PFOA	16	2.1	0.43	1	04/22/202021:06	335-67-1	N2
PFNA	ND	2.1	0.59	1	04/22/202021:06	375-95-1	N2
PFDA	ND	2.1	0.68	1	04/22/202021:06	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/22/202021:06	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	04/22/202021:06	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	04/22/202021:06	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	04/22/202021:06	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/202021:06	754-91-6	N2
N-EtFOSAA	ND	2.1	0.93	1	04/22/202021:06	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	04/22/202021:06	2355-31-9	N2
PFBS	5.8	1.9	0.20	1	04/22/202021:06	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/202021:06	2706-91-4	N2
PFHxS	9.5	1.9	0.38	1	04/22/202021:06	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/22/202021:06	375-92-8	N2
PFOS	ND	2.0	0.40	1	04/22/202021:06	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/22/202021:06	68259-12-1	N2
PFDS	ND	2.0	0.33	1	04/22/202021:06	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	04/22/202021:06	757124-72-4	N2
6:2FTS	ND	2.0	0.94	1	04/22/202021:06	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	04/22/202021:06	39108-34-4	N2

N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-106	Date Extracted	04/21/2020
Lab Sample ID	10515186007	Total Amount Extracted	237 mL
Filename	Q200422A_013	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_003
Collected	04/15/2020	Ending CCal	Q200422A_014
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	20	95	50-150	Pass	569260
13C5_PFPeA	21	20	92	50-150	Pass	403688
13C5_PFHxA	21	20	95	50-150	Pass	443732
13C4_PFHpA	21	20	97	50-150	Pass	452586
13C8_PFOA	21	20	95	50-150	Pass	503838
13C9_PFNA	21	18	87	50-150	Pass	534579
13C6_PFDA	21	20	96	50-150	Pass	471924
13C7_PFUdA	21	20	97	50-150	Pass	448080
13C2_PFDoA	21	20	93	50-150	Pass	468792
13C2_PFTeDA	21	18	86	50-150	Pass	322995
d5-EtFOSAA	21	18	83	50-150	Pass	92154
d3-MeFOSAA	21	19	88	50-150	Pass	80045
13C3_PFBS	21	21	99	50-150	Pass	325118
13C3_PFHxS	21	19	88	50-150	Pass	318991
13C8_PFOS	21	19	89	50-150	Pass	377469
13C8_PFOSA	21	19	88	50-150	Pass	534881
13C2_4:2FTS	21	32	150	50-150	Pass	157152
13C2_6:2FTS	21	24	115	50-150	Pass	133941
13C2_8:2FTS	21	21	98	50-150	Pass	136503

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	570500	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	399964	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-1	Date Extracted	04/21/2020
Lab Sample ID	10515186008	Total Amount Extracted	236 mL
Filename	Q200422A_015	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	12	2.1	0.31	1	04/22/2020 22:00	375-22-4	N2
PFPeA	8.4	2.1	0.26	1	04/22/2020 22:00	2706-90-3	N2
PFHxA	11	2.1	0.37	1	04/22/2020 22:00	307-24-4	N2
PFHpA	5.4	2.1	0.45	1	04/22/2020 22:00	375-85-9	N2
PFOA	18	2.1	0.43	1	04/22/2020 22:00	335-67-1	N2
PFNA	ND	2.1	0.59	1	04/22/2020 22:00	375-95-1	N2
PFDA	ND	2.1	0.68	1	04/22/2020 22:00	335-76-2	N2
PFUnA	ND	2.1	0.56	1	04/22/2020 22:00	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	04/22/2020 22:00	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	04/22/2020 22:00	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	04/22/2020 22:00	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/2020 22:00	754-91-6	N2
N-EtFOSAA	ND	2.1	0.93	1	04/22/2020 22:00	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	04/22/2020 22:00	2355-31-9	N2
PFBS	5.7	1.9	0.20	1	04/22/2020 22:00	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/2020 22:00	2706-91-4	N2
PFHxS	9.7	1.9	0.38	1	04/22/2020 22:00	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/22/2020 22:00	375-92-8	N2
PFOS	ND	2.0	0.40	1	04/22/2020 22:00	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/22/2020 22:00	68259-12-1	N2
PFDS	ND	2.0	0.33	1	04/22/2020 22:00	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	04/22/2020 22:00	757124-72-4	N2
6:2FTS	ND	2.0	0.94	1	04/22/2020 22:00	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	04/22/2020 22:00	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-1	Date Extracted	04/21/2020
Lab Sample ID	10515186008	Total Amount Extracted	236 mL
Filename	Q200422A_015	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	18	85	50-150	Pass	536806
13C5_PFPeA	21	18	83	50-150	Pass	384046
13C5_PFHxA	21	18	87	50-150	Pass	429804
13C4_PFHpA	21	19	91	50-150	Pass	448930
13C8_PFOA	21	18	87	50-150	Pass	485997
13C9_PFNA	21	20	95	50-150	Pass	570614
13C6_PFDA	21	21	98	50-150	Pass	475535
13C7_PFUdA	21	19	90	50-150	Pass	410348
13C2_PFDoA	21	18	87	50-150	Pass	430261
13C2_PFTeDA	21	17	82	50-150	Pass	303100
d5-EtFOSAA	21	17	79	50-150	Pass	86027
d3-MeFOSAA	21	19	88	50-150	Pass	78774
13C3_PFBS	21	19	89	50-150	Pass	307321
13C3_PFHxS	21	18	87	50-150	Pass	307583
13C8_PFOS	21	18	84	50-150	Pass	348422
13C8_PFOSA	21	17	81	50-150	Pass	482748
13C2_4:2FTS	21	28	131	50-150	Pass	144725
13C2_6:2FTS	21	22	105	50-150	Pass	128559
13C2_8:2FTS	21	20	95	50-150	Pass	130344

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	600980	361284 - 1083852	412227 - 1236681	Pass
13C4_PFOS	392101	241967 - 725900	267976 - 803929	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-108	Date Extracted	04/21/2020
Lab Sample ID	10515186010	Total Amount Extracted	234 mL
Filename	Q200422A_016	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	7.9	2.1	0.31	1	04/22/2020 22:26	375-22-4	N2
PFPeA	2.5	2.1	0.27	1	04/22/2020 22:26	2706-90-3	N2
PFHxA	3.3	2.1	0.37	1	04/22/2020 22:26	307-24-4	N2
PFHpA	ND	2.1	0.45	1	04/22/2020 22:26	375-85-9	N2
PFOA	5.0	2.1	0.44	1	04/22/2020 22:26	335-67-1	N2
PFNA	ND	2.1	0.59	1	04/22/2020 22:26	375-95-1	N2
PFDA	ND	2.1	0.69	1	04/22/2020 22:26	335-76-2	N2
PFUnA	ND	2.1	0.56	1	04/22/2020 22:26	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	04/22/2020 22:26	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	04/22/2020 22:26	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	04/22/2020 22:26	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/2020 22:26	754-91-6	N2
N-EtFOSAA	ND	2.1	0.94	1	04/22/2020 22:26	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	04/22/2020 22:26	2355-31-9	N2
PFBS	3.5	1.9	0.21	1	04/22/2020 22:26	375-73-5	N2
PFPeS	ND	2.0	0.37	1	04/22/2020 22:26	2706-91-4	N2
PFHxS	ND	2.0	0.38	1	04/22/2020 22:26	355-46-4	N2
PFHpS	ND	2.0	0.47	1	04/22/2020 22:26	375-92-8	N2
PFOS	ND	2.0	0.40	1	04/22/2020 22:26	1763-23-1	N2
PFNS	ND	2.1	0.47	1	04/22/2020 22:26	68259-12-1	N2
PFDS	ND	2.1	0.33	1	04/22/2020 22:26	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	04/22/2020 22:26	757124-72-4	N2
6:2FTS	ND	2.0	0.95	1	04/22/2020 22:26	27619-97-2	N2
8:2FTS	ND	2.1	0.78	1	04/22/2020 22:26	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-108	Date Extracted	04/21/2020
Lab Sample ID	10515186010	Total Amount Extracted	234 mL
Filename	Q200422A_016	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	84	50-150	Pass	609140
13C5_PFPeA	21	18	84	50-150	Pass	441566
13C5_PFHxA	21	19	87	50-150	Pass	492085
13C4_PFHpA	21	19	88	50-150	Pass	500482
13C8_PFOA	21	20	93	50-150	Pass	594337
13C9_PFNA	21	21	99	50-150	Pass	667333
13C6_PFDA	21	21	100	50-150	Pass	545426
13C7_PFUdA	21	21	97	50-150	Pass	498189
13C2_PFDoA	21	19	88	50-150	Pass	486617
13C2_PFTeDA	21	18	86	50-150	Pass	358957
d5-EtFOSAA	21	17	81	50-150	Pass	98805
d3-MeFOSAA	21	18	86	50-150	Pass	86128
13C3_PFBS	21	19	89	50-150	Pass	355519
13C3_PFHxS	21	19	89	50-150	Pass	356043
13C8_PFOS	21	19	90	50-150	Pass	419747
13C8_PFOSA	21	11	52	50-150	Pass	345521
13C2_4:2FTS	21	30	139	50-150	Pass	175581
13C2_6:2FTS	21	22	104	50-150	Pass	145945
13C2_8:2FTS	21	21	100	50-150	Pass	153027

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	690156	361284 - 1083852	412227 - 1236681	Pass
13C4_PFOS	440987	241967 - 725900	267976 - 803929	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-109	Date Extracted	04/21/2020
Lab Sample ID	10515186011	Total Amount Extracted	231 mL
Filename	Q200422A_017	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	10	2.2	0.32	1	04/22/2020 22:53	375-22-4	N2
PFPeA	17	2.2	0.27	1	04/22/2020 22:53	2706-90-3	N2
PFHxA	26	2.2	0.38	1	04/22/2020 22:53	307-24-4	N2
PFHpA	26	2.2	0.46	1	04/22/2020 22:53	375-85-9	N2
PFOA	19	2.2	0.44	1	04/22/2020 22:53	335-67-1	N2
PFNA	ND	2.2	0.60	1	04/22/2020 22:53	375-95-1	N2
PFDA	ND	2.2	0.69	1	04/22/2020 22:53	335-76-2	N2
PFUnA	ND	2.2	0.57	1	04/22/2020 22:53	2058-94-8	N2
PFDoA	ND	2.2	0.42	1	04/22/2020 22:53	307-55-1	N2
PFTrDA	ND	2.2	0.46	1	04/22/2020 22:53	72629-94-8	N2
PFTeDA	ND	2.2	0.42	1	04/22/2020 22:53	376-06-7	N2
PFOSA	ND	2.2	0.25	1	04/22/2020 22:53	754-91-6	N2
N-EtFOSAA	ND	2.2	0.95	1	04/22/2020 22:53	2991-50-6	N2
N-MeFOSAA	ND	2.2	0.46	1	04/22/2020 22:53	2355-31-9	N2
PFBS	4.3	1.9	0.21	1	04/22/2020 22:53	375-73-5	N2
PFPeS	ND	2.0	0.38	1	04/22/2020 22:53	2706-91-4	N2
PFHxS	ND	2.0	0.39	1	04/22/2020 22:53	355-46-4	N2
PFHpS	ND	2.1	0.47	1	04/22/2020 22:53	375-92-8	N2
PFOS	ND	2.0	0.40	1	04/22/2020 22:53	1763-23-1	N2
PFNS	ND	2.1	0.47	1	04/22/2020 22:53	68259-12-1	N2
PFDS	ND	2.1	0.34	1	04/22/2020 22:53	335-77-3	N2
4:2FTS	ND	2.0	0.60	1	04/22/2020 22:53	757124-72-4	N2
6:2FTS	120	2.1	0.96	1	04/22/2020 22:53	27619-97-2	N2
8:2FTS	ND	2.1	0.79	1	04/22/2020 22:53	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-109	Date Extracted	04/21/2020
Lab Sample ID	10515186011	Total Amount Extracted	231 mL
Filename	Q200422A_017	ICAL ID	200421B01
Matrix	Non_Potable_Wat	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	22	20	90	50-150	Pass	619820
13C5_PFPeA	22	19	86	50-150	Pass	432554
13C5_PFHxA	22	20	93	50-150	Pass	499845
13C4_PFHpA	22	21	98	50-150	Pass	528981
13C8_PFOA	22	21	95	50-150	Pass	575335
13C9_PFNA	22	21	98	50-150	Pass	663651
13C6_PFDA	22	22	100	50-150	Pass	542324
13C7_PFUdA	22	20	94	50-150	Pass	482808
13C2_PFDoA	22	20	94	50-150	Pass	523230
13C2_PFTeDA	22	19	87	50-150	Pass	361677
d5-EtFOSAA	22	19	87	50-150	Pass	105907
d3-MeFOSAA	22	20	93	50-150	Pass	93149
13C3_PFBS	22	20	94	50-150	Pass	356652
13C3_PFHxS	22	20	93	50-150	Pass	368952
13C8_PFOS	22	19	90	50-150	Pass	419178
13C8_PFOSA	22	15	69	50-150	Pass	465291
13C2_4:2FTS	22	31	144	50-150	Pass	173218
13C2_6:2FTS	22	23	106	50-150	Pass	141781
13C2_8:2FTS	22	22	101	50-150	Pass	155593

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	655672	361284 - 1083852	412227 - 1236681	Pass
13C4_PFOS	441104	241967 - 725900	267976 - 803929	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank B	Date Extracted	04/21/2020
Lab Sample ID	10515186013	Total Amount Extracted	241 mL
Filename	Q200422A_018	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	04/22/2020 23:19	375-22-4	N2
PFPeA	ND	2.1	0.26	1	04/22/2020 23:19	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	04/22/2020 23:19	307-24-4	N2
PFHpA	ND	2.1	0.44	1	04/22/2020 23:19	375-85-9	N2
PFOA	ND	2.1	0.42	1	04/22/2020 23:19	335-67-1	N2
PFNA	ND	2.1	0.58	1	04/22/2020 23:19	375-95-1	N2
PFDA	ND	2.1	0.67	1	04/22/2020 23:19	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/22/2020 23:19	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/22/2020 23:19	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/22/2020 23:19	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/22/2020 23:19	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/22/2020 23:19	754-91-6	N2
N-EtFOSAA	ND	2.1	0.91	1	04/22/2020 23:19	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	04/22/2020 23:19	2355-31-9	N2
PFBS	ND	1.8	0.20	1	04/22/2020 23:19	375-73-5	N2
PFPeS	ND	2.0	0.36	1	04/22/2020 23:19	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	04/22/2020 23:19	355-46-4	N2
PFHpS	ND	2.0	0.45	1	04/22/2020 23:19	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/22/2020 23:19	1763-23-1	N2
PFNS	ND	2.0	0.45	1	04/22/2020 23:19	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/22/2020 23:19	335-77-3	N2
4:2FTS	ND	1.9	0.58	1	04/22/2020 23:19	757124-72-4	N2
6:2FTS	53	2.0	0.93	1	04/22/2020 23:19	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	04/22/2020 23:19	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank B	Date Extracted	04/21/2020
Lab Sample ID	10515186013	Total Amount Extracted	241 mL
Filename	Q200422A_018	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_014
Collected	04/15/2020	Ending CCal	Q200422A_024
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	19	91	50-150	Pass	572218
13C5_PFPeA	21	19	92	50-150	Pass	423827
13C5_PFHxA	21	20	96	50-150	Pass	473719
13C4_PFHpA	21	20	96	50-150	Pass	475135
13C8_PFOA	21	19	92	50-150	Pass	514129
13C9_PFNA	21	19	92	50-150	Pass	568673
13C6_PFDA	21	19	91	50-150	Pass	450430
13C7_PFUdA	21	20	94	50-150	Pass	439206
13C2_PFDoA	21	19	92	50-150	Pass	464199
13C2_PFTeDA	21	19	90	50-150	Pass	341642
d5-EtFOSAA	21	17	84	50-150	Pass	93266
d3-MeFOSAA	21	18	87	50-150	Pass	80059
13C3_PFBS	21	20	94	50-150	Pass	326940
13C3_PFHxS	21	19	91	50-150	Pass	329733
13C8_PFOS	21	18	87	50-150	Pass	371999
13C8_PFOSA	21	15	73	50-150	Pass	445265
13C2_4:2FTS	21	20	94	50-150	Pass	104185
13C2_6:2FTS	21	19	91	50-150	Pass	111997
13C2_8:2FTS	21	19	92	50-150	Pass	129171

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	602341	361284 - 1083852	412227 - 1236681	Pass
13C4_PFOS	402279	241967 - 725900	267976 - 803929	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-111	Date Extracted	04/28/2020
Lab Sample ID	10515186014-R	Total Amount Extracted	243 mL
Filename	Q200501B_007	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	3.0	2.1	0.30	1	05/01/202017:29	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/202017:29	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	05/01/202017:29	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/202017:29	375-85-9	N2
PFOA	4.9	2.1	0.42	1	05/01/202017:29	335-67-1	N2
PFNA	ND	2.1	0.57	1	05/01/202017:29	375-95-1	N2
PFDA	ND	2.1	0.66	1	05/01/202017:29	335-76-2	N2
PFUnA	ND	2.1	0.54	1	05/01/202017:29	2058-94-8	N2
PFDoA	ND	2.1	0.39	1	05/01/202017:29	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202017:29	72629-94-8	N2
PFTeDA	ND	2.1	0.39	1	05/01/202017:29	376-06-7	N2
PFOSA	ND	2.1	0.23	1	05/01/202017:29	754-91-6	N2
N-EtFOSAA	ND	2.1	0.90	1	05/01/202017:29	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.43	1	05/01/202017:29	2355-31-9	N2
PFBS	3.5	1.8	0.20	1	05/01/202017:29	375-73-5	N2
PFPeS	ND	1.9	0.36	1	05/01/202017:29	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	05/01/202017:29	355-46-4	N2
PFHpS	ND	2.0	0.45	1	05/01/202017:29	375-92-8	N2
PFOS	ND	1.9	0.38	1	05/01/202017:29	1763-23-1	N2
PFNS	ND	2.0	0.45	1	05/01/202017:29	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/202017:29	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	05/01/202017:29	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	05/01/202017:29	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	05/01/202017:29	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-111	Date Extracted	04/28/2020
Lab Sample ID	10515186014-R	Total Amount Extracted	243 mL
Filename	Q200501B_007	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	20	99	50-150	Pass	751228
13C5_PFPeA	21	19	94	50-150	Pass	571777
13C5_PFHxA	21	20	96	50-150	Pass	639697
13C4_PFHpA	21	19	94	50-150	Pass	565216
13C8_PFOA	21	19	94	50-150	Pass	625890
13C9_PFNA	21	19	92	50-150	Pass	596331
13C6_PFDA	21	20	96	50-150	Pass	499060
13C7_PFUdA	21	19	91	50-150	Pass	436957
13C2_PFDoA	21	18	85	50-150	Pass	407817
13C2_PFTeDA	21	15	75	50-150	Pass	311905
d5-EtFOSAA	21	17	84	50-150	Pass	102255
d3-MeFOSAA	21	18	88	50-150	Pass	90300
13C3_PFBS	21	18	87	50-150	Pass	499255
13C3_PFHxS	21	20	97	50-150	Pass	498281
13C8_PFOS	21	19	93	50-150	Pass	579307
13C8_PFOSA	21	11	53	50-150	Pass	559446
13C2_4:2FTS	21	21	102	50-150	Pass	144550
13C2_6:2FTS	21	19	92	50-150	Pass	113646
13C2_8:2FTS	21	15	72	50-150	Pass	88356

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	726255	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	594537	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-2	Date Extracted	04/28/2020
Lab Sample ID	10515186015-R	Total Amount Extracted	241 mL
Filename	Q200501B_008	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	2.5	2.1	0.30	1	05/01/202017:56	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/202017:56	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	05/01/202017:56	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/202017:56	375-85-9	N2
PFOA	2.7	2.1	0.42	1	05/01/202017:56	335-67-1	N2
PFNA	ND	2.1	0.57	1	05/01/202017:56	375-95-1	N2
PFDA	ND	2.1	0.66	1	05/01/202017:56	335-76-2	N2
PFUnA	ND	2.1	0.54	1	05/01/202017:56	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/202017:56	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202017:56	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/202017:56	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202017:56	754-91-6	N2
N-EtFOSAA	ND	2.1	0.91	1	05/01/202017:56	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/202017:56	2355-31-9	N2
PFBS	3.1	1.8	0.20	1	05/01/202017:56	375-73-5	N2
PFPeS	ND	1.9	0.36	1	05/01/202017:56	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	05/01/202017:56	355-46-4	N2
PFHpS	ND	2.0	0.45	1	05/01/202017:56	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/202017:56	1763-23-1	N2
PFNS	ND	2.0	0.45	1	05/01/202017:56	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/202017:56	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	05/01/202017:56	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	05/01/202017:56	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	05/01/202017:56	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-2	Date Extracted	04/28/2020
Lab Sample ID	10515186015-R	Total Amount Extracted	241 mL
Filename	Q200501B_008	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	19	93	50-150	Pass	724074
13C5_PFPeA	21	18	87	50-150	Pass	546030
13C5_PFHxA	21	20	96	50-150	Pass	664175
13C4_PFHpA	21	19	92	50-150	Pass	572050
13C8_PFOA	21	18	87	50-150	Pass	597289
13C9_PFNA	21	18	89	50-150	Pass	592036
13C6_PFDA	21	20	94	50-150	Pass	507528
13C7_PFUdA	21	20	95	50-150	Pass	470293
13C2_PFDoA	21	17	83	50-150	Pass	409626
13C2_PFTeDA	21	16	76	50-150	Pass	326323
d5-EtFOSAA	21	16	79	50-150	Pass	98682
d3-MeFOSAA	21	17	82	50-150	Pass	86121
13C3_PFBS	21	18	87	50-150	Pass	511178
13C3_PFHxS	21	20	95	50-150	Pass	501048
13C8_PFOS	21	18	88	50-150	Pass	568122
13C8_PFOSA	21	11	54	50-150	Pass	586346
13C2_4:2FTS	21	20	95	50-150	Pass	138753
13C2_6:2FTS	21	19	90	50-150	Pass	114233
13C2_8:2FTS	21	15	70	50-150	Pass	88889

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	749507	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	612617	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-112	Date Extracted	04/28/2020
Lab Sample ID	10515186016-R	Total Amount Extracted	240 mL
Filename	Q200501B_009	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	19	2.1	0.30	1	05/01/202018:23	375-22-4	N2
PFPeA	2.7	2.1	0.26	1	05/01/202018:23	2706-90-3	N2
PFHxA	3.8	2.1	0.36	1	05/01/202018:23	307-24-4	N2
PFHpA	2.8	2.1	0.44	1	05/01/202018:23	375-85-9	N2
PFOA	42	2.1	0.42	1	05/01/202018:23	335-67-1	N2
PFNA	ND	2.1	0.58	1	05/01/202018:23	375-95-1	N2
PFDA	ND	2.1	0.67	1	05/01/202018:23	335-76-2	N2
PFUnA	ND	2.1	0.55	1	05/01/202018:23	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/202018:23	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202018:23	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/202018:23	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202018:23	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	05/01/202018:23	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/202018:23	2355-31-9	N2
PFBS	7.0	1.8	0.20	1	05/01/202018:23	375-73-5	N2
PFPeS	ND	2.0	0.36	1	05/01/202018:23	2706-91-4	N2
PFHxS	3.9	1.9	0.37	1	05/01/202018:23	355-46-4	N2
PFHpS	ND	2.0	0.46	1	05/01/202018:23	375-92-8	N2
PFOS	7.7	1.9	0.39	1	05/01/202018:23	1763-23-1	N2
PFNS	ND	2.0	0.46	1	05/01/202018:23	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/202018:23	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	05/01/202018:23	757124-72-4	N2
6:2FTS	5.5	2.0	0.93	1	05/01/202018:23	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	05/01/202018:23	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-112	Date Extracted	04/28/2020
Lab Sample ID	10515186016-R	Total Amount Extracted	240 mL
Filename	Q200501B_009	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	87	50-150	Pass	650399
13C5_PFPeA	21	17	82	50-150	Pass	489038
13C5_PFHxA	21	19	90	50-150	Pass	589882
13C4_PFHpA	21	19	93	50-150	Pass	550030
13C8_PFOA	21	18	87	50-150	Pass	565441
13C9_PFNA	21	18	84	50-150	Pass	543706
13C6_PFDA	21	21	99	50-150	Pass	510905
13C7_PFUdA	21	20	94	50-150	Pass	448053
13C2_PFDoA	21	18	85	50-150	Pass	401327
13C2_PFTeDA	21	16	78	50-150	Pass	322593
d5-EtFOSAA	21	19	93	50-150	Pass	111717
d3-MeFOSAA	21	18	85	50-150	Pass	86749
13C3_PFBS	21	18	84	50-150	Pass	470938
13C3_PFHxS	21	20	94	50-150	Pass	478624
13C8_PFOS	21	18	86	50-150	Pass	535033
13C8_PFOSA	21	6.8	33	50-150	Fail	343026
13C2_4:2FTS	21	24	115	50-150	Pass	159529
13C2_6:2FTS	21	20	94	50-150	Pass	113546
13C2_8:2FTS	21	15	72	50-150	Pass	88472

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	711986	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	591092	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-113	Date Extracted	04/28/2020
Lab Sample ID	10515186017-R	Total Amount Extracted	243 mL
Filename	Q200501B_010	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	05/01/202018:49	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/202018:49	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	05/01/202018:49	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/202018:49	375-85-9	N2
PFOA	ND	2.1	0.42	1	05/01/202018:49	335-67-1	N2
PFNA	ND	2.1	0.57	1	05/01/202018:49	375-95-1	N2
PFDA	ND	2.1	0.66	1	05/01/202018:49	335-76-2	N2
PFUnA	ND	2.1	0.54	1	05/01/202018:49	2058-94-8	N2
PFDoA	ND	2.1	0.39	1	05/01/202018:49	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202018:49	72629-94-8	N2
PFTeDA	ND	2.1	0.39	1	05/01/202018:49	376-06-7	N2
PFOSA	ND	2.1	0.23	1	05/01/202018:49	754-91-6	N2
N-EtFOSAA	ND	2.1	0.90	1	05/01/202018:49	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.43	1	05/01/202018:49	2355-31-9	N2
PFBS	ND	1.8	0.20	1	05/01/202018:49	375-73-5	N2
PFPeS	ND	1.9	0.36	1	05/01/202018:49	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	05/01/202018:49	355-46-4	N2
PFHpS	ND	2.0	0.45	1	05/01/202018:49	375-92-8	N2
PFOS	ND	1.9	0.38	1	05/01/202018:49	1763-23-1	N2
PFNS	ND	2.0	0.45	1	05/01/202018:49	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/202018:49	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	05/01/202018:49	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	05/01/202018:49	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	05/01/202018:49	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-113	Date Extracted	04/28/2020
Lab Sample ID	10515186017-R	Total Amount Extracted	243 mL
Filename	Q200501B_010	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	86	50-150	Pass	728906
13C5_PFPeA	21	17	81	50-150	Pass	552024
13C5_PFHxA	21	16	79	50-150	Pass	592009
13C4_PFHpA	21	17	85	50-150	Pass	575077
13C8_PFOA	21	16	80	50-150	Pass	595477
13C9_PFNA	21	19	93	50-150	Pass	621324
13C6_PFDA	21	20	99	50-150	Pass	533013
13C7_PFUdA	21	18	90	50-150	Pass	445308
13C2_PFDoA	21	17	84	50-150	Pass	413666
13C2_PFTeDA	21	16	80	50-150	Pass	342562
d5-EtFOSAA	21	17	85	50-150	Pass	106030
d3-MeFOSAA	21	19	91	50-150	Pass	95732
13C3_PFBS	21	16	77	50-150	Pass	495362
13C3_PFHxS	21	19	92	50-150	Pass	485998
13C8_PFOS	21	18	86	50-150	Pass	551783
13C8_PFOSA	21	14	66	50-150	Pass	722502
13C2_4:2FTS	21	19	95	50-150	Pass	150983
13C2_6:2FTS	21	17	83	50-150	Pass	115646
13C2_8:2FTS	21	15	75	50-150	Pass	95584

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	815428	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	614276	343349 - 1030047	396036 - 1188109	Pass

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Pace Analytical Services, LLC
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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-114	Date Extracted	04/28/2020
Lab Sample ID	10515186018-R	Total Amount Extracted	241 mL
Filename	Q200501B_011	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	8.1		2.1	0.30	1	05/01/202019:16	375-22-4	N2
PFPeA	ND		2.1	0.26	1	05/01/202019:16	2706-90-3	N2
PFHxA	5.1		2.1	0.36	1	05/01/202019:16	307-24-4	N2
PFHpA	ND		2.1	0.44	1	05/01/202019:16	375-85-9	N2
PFOA	3.8		2.1	0.42	1	05/01/202019:16	335-67-1	N2
PFNA	ND		2.1	0.58	1	05/01/202019:16	375-95-1	N2
PFDA	ND		2.1	0.66	1	05/01/202019:16	335-76-2	N2
PFUnA	ND		2.1	0.54	1	05/01/202019:16	2058-94-8	N2
PFDoA	ND		2.1	0.40	1	05/01/202019:16	307-55-1	N2
PFTrDA	ND		2.1	0.44	1	05/01/202019:16	72629-94-8	N2
PFTeDA	ND		2.1	0.40	1	05/01/202019:16	376-06-7	N2
PFOSA	ND		2.1	0.24	1	05/01/202019:16	754-91-6	N2
N-EtFOSAA	ND		2.1	0.91	1	05/01/202019:16	2991-50-6	N2
N-MeFOSAA	ND		2.1	0.44	1	05/01/202019:16	2355-31-9	N2
PFBS	2.5		1.8	0.20	1	05/01/202019:16	375-73-5	N2
PFPeS	ND		1.9	0.36	1	05/01/202019:16	2706-91-4	N2
PFHxS	10		1.9	0.37	1	05/01/202019:16	355-46-4	N2
PFHpS	ND		2.0	0.45	1	05/01/202019:16	375-92-8	N2
PFOS	2.7		1.9	0.39	1	05/01/202019:16	1763-23-1	N2
PFNS	ND		2.0	0.45	1	05/01/202019:16	68259-12-1	N2
PFDS	ND		2.0	0.32	1	05/01/202019:16	335-77-3	N2
4:2FTS	ND	D	19	5.8	10	05/04/202012:36	757124-72-4	N2
6:2FTS	ND	D	20	9.2	10	05/04/202012:36	27619-97-2	N2
8:2FTS	ND	D	20	7.6	10	05/04/202012:36	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-114	Date Extracted	04/28/2020
Lab Sample ID	10515186018-R	Total Amount Extracted	241 mL
Filename	Q200501B_011	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	12	57	50-150	Pass	456593
13C5_PFPeA	21	13	62	50-150	Pass	401593
13C5_PFHxA	21	13	62	50-150	Pass	438912
13C4_PFHpA	21	16	76	50-150	Pass	485631
13C8_PFOA	21	18	85	50-150	Pass	600844
13C9_PFNA	21	18	85	50-150	Pass	600203
13C6_PFDA	21	19	93	50-150	Pass	527317
13C7_PFUdA	21	20	95	50-150	Pass	496191
13C2_PFDoA	21	17	82	50-150	Pass	425325
13C2_PFTeDA	21	14	69	50-150	Pass	313963
d5-EtFOSAA	21	31	148	50-150	Pass	195456
d3-MeFOSAA	21	21	102	50-150	Pass	113781
13C3_PFBS	21	16	78	50-150	Pass	470622
13C3_PFHxS	21	18	86	50-150	Pass	479700
13C8_PFOS	21	18	85	50-150	Pass	575971
13C8_PFOSA	21	15	72	50-150	Pass	823868
13C2_4:2FTS	21	22	105	50-150	Pass	19492
13C2_6:2FTS	21	19	94	50-150	Pass	15222
13C2_8:2FTS	21	16	76	50-150	Pass	12048

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	772399	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	647888	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-115	Date Extracted	04/28/2020
Lab Sample ID	10515186019-R	Total Amount Extracted	119 mL
Filename	Q200501B_012	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	4.4	4.2	0.61	1	05/01/202019:42	375-22-4	N2
PFPeA	ND	4.2	0.53	1	05/01/202019:42	2706-90-3	N2
PFHxA	ND	4.2	0.73	1	05/01/202019:42	307-24-4	N2
PFHpA	ND	4.2	0.89	1	05/01/202019:42	375-85-9	N2
PFOA	ND	4.2	0.85	1	05/01/202019:42	335-67-1	N2
PFNA	ND	4.2	1.2	1	05/01/202019:42	375-95-1	N2
PFDA	ND	4.2	1.3	1	05/01/202019:42	335-76-2	N2
PFUnA	ND	4.2	1.1	1	05/01/202019:42	2058-94-8	N2
PFDoA	ND	4.2	0.81	1	05/01/202019:42	307-55-1	N2
PFTrDA	ND	4.2	0.89	1	05/01/202019:42	72629-94-8	N2
PFTeDA	ND	4.2	0.81	1	05/01/202019:42	376-06-7	N2
PFOSA	ND	4.2	0.48	1	05/01/202019:42	754-91-6	N2
N-EtFOSAA	ND	4.2	1.8	1	05/01/202019:42	2991-50-6	N2
N-MeFOSAA	ND	4.2	0.89	1	05/01/202019:42	2355-31-9	N2
PFBS	ND	3.7	0.40	1	05/01/202019:42	375-73-5	N2
PFPeS	ND	3.9	0.73	1	05/01/202019:42	2706-91-4	N2
PFHxS	ND	3.8	0.75	1	05/01/202019:42	355-46-4	N2
PFHpS	ND	4.0	0.92	1	05/01/202019:42	375-92-8	N2
PFOS	ND	3.9	0.79	1	05/01/202019:42	1763-23-1	N2
PFNS	ND	4.0	0.92	1	05/01/202019:42	68259-12-1	N2
PFDS	ND	4.1	0.65	1	05/01/202019:42	335-77-3	N2
4:2FTS	ND	3.9	1.2	1	05/01/202019:42	757124-72-4	N2
6:2FTS	4.8	4.0	1.9	1	05/01/202019:42	27619-97-2	N2
8:2FTS	ND	4.0	1.5	1	05/01/202019:42	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-115	Date Extracted	04/28/2020
Lab Sample ID	10515186019-R	Total Amount Extracted	119 mL
Filename	Q200501B_012	ICAL ID	200501A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/16/2020	Ending CCal	Q200501B_014
Received	04/17/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	42	24	56	50-150	Pass	520074
13C5_PFPeA	42	22	54	50-150	Pass	397051
13C5_PFHxA	42	21	51	50-150	Pass	413364
13C4_PFHpA	42	22	52	50-150	Pass	379811
13C8_PFOA	42	21	49	50-150	Fail	400769
13C9_PFNA	42	27	65	50-150	Pass	442353
13C6_PFDA	42	28	67	50-150	Pass	366582
13C7_PFUdA	42	26	61	50-150	Pass	307487
13C2_PFDoA	42	28	67	50-150	Pass	333778
13C2_PFTeDA	42	25	61	50-150	Pass	263234
d5-EtFOSAA	42	27	65	50-150	Pass	82829
d3-MeFOSAA	42	26	62	50-150	Pass	66678
13C3_PFBS	42	20	47	50-150	Fail	326380
13C3_PFHxS	42	26	62	50-150	Pass	334072
13C8_PFOS	42	24	58	50-150	Pass	376513
13C8_PFOSA	42	12	29	50-150	Fail	320422
13C2_4:2FTS	42	23	56	50-150	Pass	96941
13C2_6:2FTS	42	23	54	50-150	Pass	81804
13C2_8:2FTS	42	22	53	50-150	Pass	67713

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	888672	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	622735	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	Field Blank C	Date Extracted	04/21/2020
Lab Sample ID	10515186020	Total Amount Extracted	240 mL
Filename	Q200422A_026	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_024
Collected	04/16/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	04/23/202002:52	375-22-4	N2
PFPeA	ND	2.1	0.26	1	04/23/202002:52	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	04/23/202002:52	307-24-4	N2
PFHpA	ND	2.1	0.44	1	04/23/202002:52	375-85-9	N2
PFOA	ND	2.1	0.42	1	04/23/202002:52	335-67-1	N2
PFNA	ND	2.1	0.58	1	04/23/202002:52	375-95-1	N2
PFDA	ND	2.1	0.67	1	04/23/202002:52	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/23/202002:52	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/23/202002:52	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/23/202002:52	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/23/202002:52	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/23/202002:52	754-91-6	N2
N-EtFOSAA	ND	2.1	0.91	1	04/23/202002:52	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	04/23/202002:52	2355-31-9	N2
PFBS	ND	1.8	0.20	1	04/23/202002:52	375-73-5	N2
PFPeS	ND	2.0	0.36	1	04/23/202002:52	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	04/23/202002:52	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/23/202002:52	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/23/202002:52	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/23/202002:52	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/23/202002:52	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	04/23/202002:52	757124-72-4	N2
6:2FTS	130	2.0	0.93	1	04/23/202002:52	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	04/23/202002:52	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank C	Date Extracted	04/21/2020
Lab Sample ID	10515186020	Total Amount Extracted	240 mL
Filename	Q200422A_026	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_024
Collected	04/16/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	89	50-150	Pass	552674
13C5_PFPeA	21	19	90	50-150	Pass	410154
13C5_PFHxA	21	19	90	50-150	Pass	442557
13C4_PFHpA	21	19	92	50-150	Pass	451540
13C8_PFOA	21	19	90	50-150	Pass	498508
13C9_PFNA	21	19	90	50-150	Pass	554004
13C6_PFDA	21	19	91	50-150	Pass	448435
13C7_PFUdA	21	18	87	50-150	Pass	403639
13C2_PFDoA	21	19	90	50-150	Pass	451301
13C2_PFTeDA	21	18	88	50-150	Pass	333556
d5-EtFOSAA	21	17	82	50-150	Pass	90762
d3-MeFOSAA	21	16	79	50-150	Pass	72172
13C3_PFBS	21	19	89	50-150	Pass	306080
13C3_PFHxS	21	19	92	50-150	Pass	330424
13C8_PFOS	21	17	83	50-150	Pass	351945
13C8_PFOSA	21	16	75	50-150	Pass	458655
13C2_4:2FTS	21	20	95	50-150	Pass	103434
13C2_6:2FTS	21	19	91	50-150	Pass	110134
13C2_8:2FTS	21	19	93	50-150	Pass	129389

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	596545	361284 - 1083852	449854 - 1349561	Pass
13C4_PFOS	399905	241967 - 725900	299472 - 898416	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	04/21/2020
Lab Sample ID	10515186021	Total Amount Extracted	240 mL
Filename	Q200422A_027	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_024
Collected	04/14/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	04/23/202003:19	375-22-4	N2
PFPeA	ND	2.1	0.26	1	04/23/202003:19	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	04/23/202003:19	307-24-4	N2
PFHpA	ND	2.1	0.44	1	04/23/202003:19	375-85-9	N2
PFOA	ND	2.1	0.42	1	04/23/202003:19	335-67-1	N2
PFNA	ND	2.1	0.58	1	04/23/202003:19	375-95-1	N2
PFDA	ND	2.1	0.67	1	04/23/202003:19	335-76-2	N2
PFUnA	ND	2.1	0.55	1	04/23/202003:19	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	04/23/202003:19	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	04/23/202003:19	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	04/23/202003:19	376-06-7	N2
PFOSA	ND	2.1	0.24	1	04/23/202003:19	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	04/23/202003:19	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	04/23/202003:19	2355-31-9	N2
PFBS	ND	1.8	0.20	1	04/23/202003:19	375-73-5	N2
PFPeS	ND	2.0	0.36	1	04/23/202003:19	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	04/23/202003:19	355-46-4	N2
PFHpS	ND	2.0	0.46	1	04/23/202003:19	375-92-8	N2
PFOS	ND	1.9	0.39	1	04/23/202003:19	1763-23-1	N2
PFNS	ND	2.0	0.46	1	04/23/202003:19	68259-12-1	N2
PFDS	ND	2.0	0.32	1	04/23/202003:19	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	04/23/202003:19	757124-72-4	N2
6:2FTS	21	2.0	0.93	1	04/23/202003:19	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	04/23/202003:19	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	04/21/2020
Lab Sample ID	10515186021	Total Amount Extracted	240 mL
Filename	Q200422A_027	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_024
Collected	04/14/2020	Ending CCal	QDATASET1_001
Received	04/17/2020	Method Blank Filename	Q200422A_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	18	86	50-150	Pass	575260
13C5_PFPeA	21	18	87	50-150	Pass	429479
13C5_PFHxA	21	19	89	50-150	Pass	468721
13C4_PFHpA	21	19	91	50-150	Pass	477437
13C8_PFOA	21	19	93	50-150	Pass	549918
13C9_PFNA	21	19	92	50-150	Pass	586193
13C6_PFDA	21	19	92	50-150	Pass	466716
13C7_PFUdA	21	19	93	50-150	Pass	445063
13C2_PFDoA	21	18	88	50-150	Pass	458278
13C2_PFTeDA	21	18	88	50-150	Pass	343451
d5-EtFOSAA	21	17	81	50-150	Pass	92370
d3-MeFOSAA	21	17	84	50-150	Pass	78870
13C3_PFBS	21	19	89	50-150	Pass	329715
13C3_PFHxS	21	19	90	50-150	Pass	336459
13C8_PFOS	21	18	84	50-150	Pass	370115
13C8_PFOSA	21	16	75	50-150	Pass	468158
13C2_4:2FTS	21	20	95	50-150	Pass	111813
13C2_6:2FTS	21	19	90	50-150	Pass	117148
13C2_8:2FTS	21	19	92	50-150	Pass	132724

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	642369	361284 - 1083852	449854 - 1349561	Pass
13C4_PFOS	413050	241967 - 725900	299472 - 898416	Pass

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-78845	Total Amount Extracted	250 mL
Filename	Q200422A_004	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_003
Date Extracted	04/21/2020	Ending CCal	Q200422A_014

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.29	1	04/22/202017:07	375-22-4	N2
PFPeA	ND	2.0	0.25	1	04/22/202017:07	2706-90-3	N2
PFHxA	ND	2.0	0.35	1	04/22/202017:07	307-24-4	N2
PFHpA	ND	2.0	0.42	1	04/22/202017:07	375-85-9	N2
PFOA	ND	2.0	0.41	1	04/22/202017:07	335-67-1	N2
PFNA	ND	2.0	0.55	1	04/22/202017:07	375-95-1	N2
PFDA	ND	2.0	0.64	1	04/22/202017:07	335-76-2	N2
PFUnA	ND	2.0	0.52	1	04/22/202017:07	2058-94-8	N2
PFDoA	ND	2.0	0.38	1	04/22/202017:07	307-55-1	N2
PFTrDA	ND	2.0	0.42	1	04/22/202017:07	72629-94-8	N2
PFTeDA	ND	2.0	0.38	1	04/22/202017:07	376-06-7	N2
PFOSA	ND	2.0	0.23	1	04/22/202017:07	754-91-6	N2
N-EtFOSAA	ND	2.0	0.88	1	04/22/202017:07	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.42	1	04/22/202017:07	2355-31-9	N2
PFBS	ND	1.8	0.19	1	04/22/202017:07	375-73-5	N2
PFPeS	ND	1.9	0.35	1	04/22/202017:07	2706-91-4	N2
PFHxS	ND	1.8	0.36	1	04/22/202017:07	355-46-4	N2
PFHpS	ND	1.9	0.44	1	04/22/202017:07	375-92-8	N2
PFOS	ND	1.8	0.37	1	04/22/202017:07	1763-23-1	N2
PFNS	ND	1.9	0.44	1	04/22/202017:07	68259-12-1	N2
PFDS	ND	1.9	0.31	1	04/22/202017:07	335-77-3	N2
4:2FTS	ND	1.9	0.55	1	04/22/202017:07	757124-72-4	N2
6:2FTS	ND	1.9	0.89	1	04/22/202017:07	27619-97-2	N2
8:2FTS	ND	1.9	0.73	1	04/22/202017:07	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKNL	Date Extracted	04/21/2020
Lab Sample ID	BLANK-78845	Total Amount Extracted	250 mL
Filename	Q200422A_004	ICAL ID	200421B01
Matrix	Water	Starting CCal	Q200422A_003
Collected	04/21/2020	Ending CCal	Q200422A_014
Received	04/21/2020	Method Blank Filename	Q200422A_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	17	87	50-150	Pass	576913
13C5_PFPeA	20	18	89	50-150	Pass	428430
13C5_PFHxA	20	19	94	50-150	Pass	488493
13C4_PFHpA	20	19	93	50-150	Pass	480762
13C8_PFOA	20	19	97	50-150	Pass	565807
13C9_PFNA	20	19	94	50-150	Pass	598452
13C6_PFDA	20	20	98	50-150	Pass	498175
13C7_PFUdA	20	19	97	50-150	Pass	463419
13C2_PFDoA	20	20	99	50-150	Pass	512777
13C2_PFTeDA	20	18	89	50-150	Pass	345306
d5-EtFOSAA	20	17	84	50-150	Pass	96716
d3-MeFOSAA	20	17	85	50-150	Pass	80394
13C3_PFBS	20	18	92	50-150	Pass	334158
13C3_PFHxS	20	19	95	50-150	Pass	353843
13C8_PFOS	20	19	94	50-150	Pass	411793
13C8_PFOSA	20	16	78	50-150	Pass	490192
13C2_4:2FTS	20	20	98	50-150	Pass	113513
13C2_6:2FTS	20	19	95	50-150	Pass	122549
13C2_8:2FTS	20	20	102	50-150	Pass	146699

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	631363	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	413512	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-78934	Total Amount Extracted	248 mL
Filename	Q200501B_004	ICAL ID	200501A01
Matrix	Water	Starting CCal	Q200501B_003
Date Extracted	04/28/2020	Ending CCal	Q200501B_014

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.29	1	05/01/202016:10	375-22-4	N2
PFPeA	ND	2.0	0.25	1	05/01/202016:10	2706-90-3	N2
PFHxA	ND	2.0	0.35	1	05/01/202016:10	307-24-4	N2
PFHpA	ND	2.0	0.43	1	05/01/202016:10	375-85-9	N2
PFOA	ND	2.0	0.41	1	05/01/202016:10	335-67-1	N2
PFNA	ND	2.0	0.56	1	05/01/202016:10	375-95-1	N2
PFDA	ND	2.0	0.65	1	05/01/202016:10	335-76-2	N2
PFUnA	ND	2.0	0.53	1	05/01/202016:10	2058-94-8	N2
PFDoA	ND	2.0	0.39	1	05/01/202016:10	307-55-1	N2
PFTrDA	ND	2.0	0.43	1	05/01/202016:10	72629-94-8	N2
PFTeDA	ND	2.0	0.39	1	05/01/202016:10	376-06-7	N2
PFOSA	ND	2.0	0.23	1	05/01/202016:10	754-91-6	N2
N-EtFOSAA	ND	2.0	0.89	1	05/01/202016:10	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.43	1	05/01/202016:10	2355-31-9	N2
PFBS	ND	1.8	0.19	1	05/01/202016:10	375-73-5	N2
PFPeS	ND	1.9	0.35	1	05/01/202016:10	2706-91-4	N2
PFHxS	ND	1.8	0.36	1	05/01/202016:10	355-46-4	N2
PFHpS	ND	1.9	0.44	1	05/01/202016:10	375-92-8	N2
PFOS	ND	1.9	0.38	1	05/01/202016:10	1763-23-1	N2
PFNS	ND	1.9	0.44	1	05/01/202016:10	68259-12-1	N2
PFDS	ND	2.0	0.31	1	05/01/202016:10	335-77-3	N2
4:2FTS	ND	1.9	0.56	1	05/01/202016:10	757124-72-4	N2
6:2FTS	ND	1.9	0.90	1	05/01/202016:10	27619-97-2	N2
8:2FTS	ND	1.9	0.74	1	05/01/202016:10	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKOT	Date Extracted	04/28/2020
Lab Sample ID	BLANK-78934	Total Amount Extracted	248 mL
Filename	Q200501B_004	ICAL ID	200501A01
Matrix	Water	Starting CCal	Q200501B_003
Collected	04/24/2020	Ending CCal	Q200501B_014
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	21	102	50-150	Pass	802549
13C5_PFPeA	20	20	99	50-150	Pass	619885
13C5_PFHxA	20	20	98	50-150	Pass	678991
13C4_PFHpA	20	19	93	50-150	Pass	580016
13C8_PFOA	20	17	86	50-150	Pass	593821
13C9_PFNA	20	20	98	50-150	Pass	671602
13C6_PFDA	20	19	95	50-150	Pass	524486
13C7_PFUdA	20	19	92	50-150	Pass	467248
13C2_PFDoA	20	18	91	50-150	Pass	460409
13C2_PFTeDA	20	17	83	50-150	Pass	363169
d5-EtFOSAA	20	18	87	50-150	Pass	111464
d3-MeFOSAA	20	16	80	50-150	Pass	86387
13C3_PFBS	20	19	92	50-150	Pass	543075
13C3_PFHxS	20	20	99	50-150	Pass	533071
13C8_PFOS	20	18	91	50-150	Pass	598349
13C8_PFOSA	20	14	68	50-150	Pass	765063
13C2_4:2FTS	20	14	70	50-150	Pass	103713
13C2_6:2FTS	20	18	89	50-150	Pass	114156
13C2_8:2FTS	20	14	71	50-150	Pass	92880

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	752476	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	628997	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-78846		
LCS Filename	Q200422A_005	Matrix	Water
Total Amount Extracted	250mL	Dilution	1
ICAL ID	200421B01	Extracted	04/21/2020
Start CCal Filename	Q200422A_003	Analyzed	04/22/2020 17:34
End CCal Filename	Q200422A_014	Injected By	PY
Method Blank Filename	Q200422A_004		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	20	101	70.0 - 130.0
PFPeA	20	19	97	70.0 - 130.0
PFHxA	20	19	94	70.0 - 130.0
PFHpA	20	20	102	70.0 - 130.0
PFOA	20	21	106	70.0 - 130.0
PFNA	20	18	91	70.0 - 130.0
PFDA	20	18	88	70.0 - 130.0
PFUnA	20	20	98	70.0 - 130.0
PFDoA	20	20	101	70.0 - 130.0
PFTrDA	20	20	101	70.0 - 130.0
PFTeDA	20	18	92	70.0 - 130.0
PFOSA	20	20	99	70.0 - 130.0
N-EtFOSAA	20	19	93	70.0 - 130.0
N-MeFOSAA	20	20	99	70.0 - 130.0
PFBS	18	17	97	70.0 - 130.0
PFPeS	19	18	97	70.0 - 130.0
PFHxS	18	17	96	70.0 - 130.0
PFHpS	19	18	97	70.0 - 130.0
PFOS	18	18	96	70.0 - 130.0
PFNS	19	18	95	70.0 - 130.0
PFDS	19	18	94	70.0 - 130.0
4:2FTS	19	17	92	70.0 - 130.0
6:2FTS	19	18	96	70.0 - 130.0
8:2FTS	19	18	95	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-78846
LCS Filename Q200422A_005 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	18	92	50-150	Pass	555796
13C5_PFPeA	20	18	92	50-150	Pass	410085
13C5_PFHxA	20	19	93	50-150	Pass	441964
13C4_PFHpA	20	18	92	50-150	Pass	435617
13C8_PFOA	20	18	91	50-150	Pass	486831
13C9_PFNA	20	19	94	50-150	Pass	560708
13C6_PFDA	20	20	99	50-150	Pass	472874
13C7_PFUdA	20	20	100	50-150	Pass	449723
13C2_PFDoA	20	19	97	50-150	Pass	474789
13C2_PFTeDA	20	20	98	50-150	Pass	359897
d5-EtFOSAA	20	17	87	50-150	Pass	93791
d3-MeFOSAA	20	17	84	50-150	Pass	74019
13C3_PFBS	20	19	95	50-150	Pass	319018
13C3_PFHxS	20	19	95	50-150	Pass	332417
13C8_PFOS	20	19	93	50-150	Pass	384595
13C8_PFOSA	20	16	80	50-150	Pass	471913
13C2_4:2FTS	20	20	100	50-150	Pass	106016
13C2_6:2FTS	20	19	94	50-150	Pass	110474
13C2_8:2FTS	20	19	93	50-150	Pass	125599

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	580078	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	388209	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-78935		
LCS Filename	Q200501B_005	Matrix	Water
Total Amount Extracted	250mL	Dilution	1
ICAL ID	200501A01	Extracted	04/28/2020
Start CCal Filename	Q200501B_003	Analyzed	05/01/2020 16:36
End CCal Filename	Q200501B_014	Injected By	PY
Method Blank Filename	Q200501B_004		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	19	97	70.0 - 130.0
PFPeA	20	19	97	70.0 - 130.0
PFHxA	20	19	93	70.0 - 130.0
PFHpA	20	19	93	70.0 - 130.0
PFOA	20	19	93	70.0 - 130.0
PFNA	20	18	92	70.0 - 130.0
PFDA	20	20	98	70.0 - 130.0
PFUnA	20	17	87	70.0 - 130.0
PFDoA	20	20	98	70.0 - 130.0
PFTrDA	20	17	87	70.0 - 130.0
PFTeDA	20	20	102	70.0 - 130.0
PFOSA	20	19	96	70.0 - 130.0
N-EtFOSAA	20	18	92	70.0 - 130.0
N-MeFOSAA	20	19	96	70.0 - 130.0
PFBS	18	17	95	70.0 - 130.0
PFPeS	19	17	90	70.0 - 130.0
PFHxS	18	18	96	70.0 - 130.0
PFHpS	19	20	106	70.0 - 130.0
PFOS	19	18	95	70.0 - 130.0
PFNS	19	19	99	70.0 - 130.0
PFDS	19	19	98	70.0 - 130.0
4:2FTS	19	18	95	70.0 - 130.0
6:2FTS	19	18	95	70.0 - 130.0
8:2FTS	19	18	96	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-78935
LCS Filename Q200501B_005 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	23	113	50-150	Pass	796091
13C5_PFPeA	20	21	106	50-150	Pass	596799
13C5_PFHxA	20	22	111	50-150	Pass	684513
13C4_PFHpA	20	21	105	50-150	Pass	585456
13C8_PFOA	20	19	97	50-150	Pass	596330
13C9_PFNA	20	20	100	50-150	Pass	659539
13C6_PFDA	20	19	93	50-150	Pass	491300
13C7_PFUdA	20	20	100	50-150	Pass	486253
13C2_PFDoA	20	18	90	50-150	Pass	435634
13C2_PFTeDA	20	15	76	50-150	Pass	321237
d5-EtFOSAA	20	18	92	50-150	Pass	113140
d3-MeFOSAA	20	17	87	50-150	Pass	89676
13C3_PFBS	20	21	103	50-150	Pass	544425
13C3_PFHxS	20	20	100	50-150	Pass	516654
13C8_PFOS	20	19	94	50-150	Pass	594172
13C8_PFOSA	20	16	81	50-150	Pass	868148
13C2_4:2FTS	20	15	73	50-150	Pass	96502
13C2_6:2FTS	20	16	80	50-150	Pass	91059
13C2_8:2FTS	20	15	75	50-150	Pass	93712

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	671769	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	602680	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78847		
LCSD Filename	Q200422A_006	LCS Filename	Q200422A_005
Total Amount Extracted	255mL	Matrix	Water
ICAL ID	200421B01	Dilution	1
Start CCal Filename	Q200422A_003	Extracted	04/21/2020
End CCal Filename	Q200422A_014	Analyzed	04/22/2020 18:00
Method Blank Filename	Q200422A_004	Injected By	PY

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	RPD %
PFBA	20	19	99	70.0 - 130.0	4
PFPeA	20	19	95	70.0 - 130.0	4
PFHxA	20	20	101	70.0 - 130.0	4
PFHpA	20	18	93	70.0 - 130.0	11
PFOA	20	19	95	70.0 - 130.0	13
PFNA	20	19	97	70.0 - 130.0	5
PFDA	20	21	106	70.0 - 130.0	16
PFUnA	20	18	91	70.0 - 130.0	10
PFDoA	20	20	101	70.0 - 130.0	2
PFTrDA	20	19	98	70.0 - 130.0	4
PFTeDA	20	19	96	70.0 - 130.0	3
PFOSA	20	19	98	70.0 - 130.0	3
N-EtFOSAA	20	17	85	70.0 - 130.0	11
N-MeFOSAA	20	17	88	70.0 - 130.0	14
PFBS	17	16	93	70.0 - 130.0	6
PFPeS	18	18	96	70.0 - 130.0	3
PFHxS	18	17	97	70.0 - 130.0	1
PFHpS	19	17	94	70.0 - 130.0	5
PFOS	18	17	93	70.0 - 130.0	4
PFNS	19	18	97	70.0 - 130.0	0
PFDS	19	18	96	70.0 - 130.0	0
4:2FTS	18	17	92	70.0 - 130.0	2
6:2FTS	19	18	95	70.0 - 130.0	2
8:2FTS	19	17	90	70.0 - 130.0	8

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78847	LCS Filename	Q200422A_005
LCSD Filename	Q200422A_006	Matrix	Water

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	18	91	50-150	Pass	547688
13C5_PFPeA	20	18	92	50-150	Pass	404075
13C5_PFHxA	20	18	93	50-150	Pass	437071
13C4_PFHpA	20	19	98	50-150	Pass	457700
13C8_PFOA	20	19	96	50-150	Pass	508904
13C9_PFNA	20	18	93	50-150	Pass	555212
13C6_PFDA	20	17	89	50-150	Pass	426799
13C7_PFUdA	20	19	97	50-150	Pass	436040
13C2_PFDoA	20	18	94	50-150	Pass	460485
13C2_PFTeDA	20	18	93	50-150	Pass	338440
d5-EtFOSAA	20	16	81	50-150	Pass	87036
d3-MeFOSAA	20	17	88	50-150	Pass	77734
13C3_PFBS	20	19	95	50-150	Pass	314001
13C3_PFHxS	20	18	92	50-150	Pass	321879
13C8_PFOS	20	18	91	50-150	Pass	374268
13C8_PFOSA	20	16	83	50-150	Pass	488195
13C2_4:2FTS	20	19	96	50-150	Pass	101144
13C2_6:2FTS	20	18	93	50-150	Pass	108203
13C2_8:2FTS	20	19	96	50-150	Pass	130132

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	572151	361284 - 1083852	437712 - 1313135	Pass
13C4_PFOS	387964	241967 - 725900	281179 - 843536	Pass

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78936		
LCSD Filename	Q200501B_006	LCS Filename	Q200501B_005
Total Amount Extracted	254mL	Matrix	Water
ICAL ID	200501A01	Dilution	1
Start CCal Filename	Q200501B_003	Extracted	04/28/2020
End CCal Filename	Q200501B_014	Analyzed	05/01/2020 17:03
Method Blank Filename	Q200501B_004	Injected By	PY

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	RPD %
PFBA	20	19	95	70.0 - 130.0	4
PFPeA	20	18	93	70.0 - 130.0	6
PFHxA	20	18	93	70.0 - 130.0	2
PFHpA	20	18	90	70.0 - 130.0	5
PFOA	20	18	93	70.0 - 130.0	1
PFNA	20	19	98	70.0 - 130.0	5
PFDA	20	17	87	70.0 - 130.0	14
PFUnA	20	19	97	70.0 - 130.0	10
PFDoA	20	19	97	70.0 - 130.0	3
PFTrDA	20	18	90	70.0 - 130.0	3
PFTeDA	20	19	96	70.0 - 130.0	8
PFOSA	20	19	95	70.0 - 130.0	3
N-EtFOSAA	20	20	103	70.0 - 130.0	9
N-MeFOSAA	20	17	87	70.0 - 130.0	12
PFBS	17	17	95	70.0 - 130.0	1
PFPeS	19	17	92	70.0 - 130.0	1
PFHxS	18	16	92	70.0 - 130.0	6
PFHpS	19	18	98	70.0 - 130.0	10
PFOS	18	17	94	70.0 - 130.0	3
PFNS	19	18	98	70.0 - 130.0	3
PFDS	19	17	91	70.0 - 130.0	8
4:2FTS	18	16	89	70.0 - 130.0	8
6:2FTS	19	18	96	70.0 - 130.0	0
8:2FTS	19	18	95	70.0 - 130.0	3

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78936	LCS Filename	Q200501B_005
LCSD Filename	Q200501B_006	Matrix	Water

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	22	113	50-150	Pass	734537
13C5_PFPeA	20	21	106	50-150	Pass	551418
13C5_PFHxA	20	21	104	50-150	Pass	598320
13C4_PFHpA	20	21	106	50-150	Pass	550624
13C8_PFOA	20	18	93	50-150	Pass	532542
13C9_PFNA	20	18	89	50-150	Pass	546497
13C6_PFDA	20	17	88	50-150	Pass	432184
13C7_PFUdA	20	18	92	50-150	Pass	417329
13C2_PFDoA	20	17	84	50-150	Pass	379129
13C2_PFTeDA	20	16	79	50-150	Pass	308085
d5-EtFOSAA	20	16	81	50-150	Pass	91857
d3-MeFOSAA	20	18	89	50-150	Pass	85723
13C3_PFBS	20	19	97	50-150	Pass	474709
13C3_PFHxS	20	19	96	50-150	Pass	462654
13C8_PFOS	20	18	91	50-150	Pass	537396
13C8_PFOSA	20	15	77	50-150	Pass	765628
13C2_4:2FTS	20	15	74	50-150	Pass	90044
13C2_6:2FTS	20	16	81	50-150	Pass	85916
13C2_8:2FTS	20	14	72	50-150	Pass	82990

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	624699	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	560051	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

MS Lab Sample ID	10515186011-MS		
MS Filename	Q200422A_028	Matrix	Non_Potable_Water
Total Amount Extracted	234mL	Dilution	1
ICAL ID	200421B01	Extracted	04/21/2020
Start CCal Filename	Q200422A_024	Analyzed	04/23/2020 03:45
End CCal Filename	QDATASET1_001	Injected By	PY
Method Blank Filename	Q200422A_004		

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags
PFBA	21	10	30	92	70.0 - 130.0	
PFPeA	21	17	35	85	70.0 - 130.0	
PFHxA	21	26	43	79	70.0 - 130.0	
PFHpA	21	26	43	75	70.0 - 130.0	
PFOA	21	19	37	84	70.0 - 130.0	
PFNA	21	0	21	96	70.0 - 130.0	
PFDA	21	0	20	91	70.0 - 130.0	
PFUnA	21	0	20	95	70.0 - 130.0	
PFDoA	21	0	20	92	70.0 - 130.0	
PFTrDA	21	0	20	93	70.0 - 130.0	
PFTeDA	21	0	19	91	70.0 - 130.0	
PFOSA	21	0	20	95	70.0 - 130.0	
N-EtFOSAA	21	0	19	89	70.0 - 130.0	
N-MeFOSAA	21	0	21	97	70.0 - 130.0	
PFBS	19	4.3	22	93	70.0 - 130.0	
PFPeS	20	0	19	95	70.0 - 130.0	
PFHxS	19	0	20	104	70.0 - 130.0	
PFHpS	20	0	19	95	70.0 - 130.0	
PFOS	20	0	19	94	70.0 - 130.0	
PFNS	21	0	19	90	70.0 - 130.0	
PFDS	21	0	19	89	70.0 - 130.0	
4:2FTS	21	0	19	89	70.0 - 130.0	
6:2FTS	21	120	370	1162	70.0 - 130.0	RD
8:2FTS	21	0	20	93	70.0 - 130.0	

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags

MS Lab Sample ID 10515186011-MS
MS Filename Q200422A_028 Matrix Non_Potable_Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	18	86	50-150	Pass	558166
13C5_PFPeA	21	18	86	50-150	Pass	405741
13C5_PFHxA	21	19	90	50-150	Pass	455883
13C4_PFHpA	21	20	92	50-150	Pass	469269
13C8_PFOA	21	18	86	50-150	Pass	493241
13C9_PFNA	21	20	92	50-150	Pass	552882
13C6_PFDA	21	20	96	50-150	Pass	463412
13C7_PFUdA	21	20	95	50-150	Pass	432746
13C2_PFDoA	21	19	91	50-150	Pass	447268
13C2_PFTeDA	21	20	91	50-150	Pass	338674
d5-EtFOSAA	21	18	84	50-150	Pass	91850
d3-MeFOSAA	21	20	94	50-150	Pass	84362
13C3_PFBS	21	19	88	50-150	Pass	314558
13C3_PFHxS	21	19	89	50-150	Pass	314860
13C8_PFOS	21	18	86	50-150	Pass	360260
13C8_PFOSA	21	18	85	50-150	Pass	506826
13C2_4:2FTS	21	28	133	50-150	Pass	151523
13C2_6:2FTS	21	18	82	50-150	Pass	23756
13C2_8:2FTS	21	20	92	50-150	Pass	126644

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	619552	361284 - 1083852	449854 - 1349561	Pass
13C4_PFOS	392976	241967 - 725900	299472 - 898416	Pass

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Report Prepared for:

Joshua Schuyler
ATC-MI
2650 Horizon Drive SE
Grand Rapids MI 49546

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Prepared Date:
May 5, 2020

Report Information:

Pace Project #: 10515804
Sample Receipt Date: 04/24/2020
Client Project #: NPDAX19001 Detroit Axel
Client Sub PO #: 10005
State Cert #: 2926.01

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Kirsten Hogberg, your Pace Project Manager.

This report has been reviewed by:

May 06, 2020

Kirsten Hogberg, Project Manager
(612) 607-6407
(612) 607-6444 (fax)
kirsten.hogberg@pacelabs.com

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on six samples, a matrix spike, and a duplicate submitted by a representative of ATC-MI. The samples were analyzed for twenty-four perfluorinated compounds using an isotope dilution based on DoD QSM 5.1.1. Reporting limits were set to reporting limits.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

Laboratory spike samples and a matrix spike sample were also prepared with the sample batch using clean reference matrix or sample material that had been fortified with native standards. The recovery results were within the method limits. The RPDs (relative percent differences) between one laboratory spike and its duplicate were within the method limits. These spikes indicate that extraction performed as expected.

Both of the injection internal standards (13C4_PFOA and 13C4_PFOS) pass for each analysis in the batch verifying that the instrument detector is working as expected.

Diminished internal surrogate standard (IS) recovery (outside the suggested limits) were present in sample material, however, the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

It should be noted that Pace Analytical has not yet completed the certification process for all analytes in this method. Therefore, the results have been marked "N2" as qualified.

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Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Minnesota - Pet	1240
Alabama	40770	Mississippi	MN00064
Alaska - DW	MN00064	Missouri - DW	10100
Alaska - UST	17-009	Montana	CERT0092
Arizona	AZ0014	Nebraska	NE-OS-18-06
Arkansas - DW	MN00064	Nevada	MN00064
Arkansas - WW	88-0680	New Hampshire	2081
CNMI Saipan	MP0003	New Jersey (NE	MN002
California	2929	New York	11647
Colorado	MN00064	North Carolina -	27700
Connecticut	PH-0256	North Carolina -	530
EPA Region 8+	via MN 027-053	North Dakota	R-036
Florida (NELAP	E87605	Ohio - DW	41244
Georgia	959	Ohio - VAP	CL101
Guam	20-00.R	Oklahoma	9507
Hawaii	MN00064	Oregon - Primar	MN300001
Idaho	MN00064	Oregon - Secon	MN200001
Illinois	200011	Pennsylvania	68-00563
Indiana	C-MN-01	Puerto Rico	MN00064
Iowa	368	South Carolina	74003
Kansas	E-10167	Tennessee	TN02818
Kentucky - DW	90062	Texas	T104704192
Kentucky - WW	90062	Utah (NELAP)	MN00064
Louisiana - DE	84596	Vermont	VT-027053137
Louisiana - DW	MN00064	Virginia	460163
Maine	MN00064	Washington	C486
Maryland	322	West Virginia -	382
Massachusetts	M-MN064	West Virginia -	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming - UST	2926.01
Minnesota - De	via MN 027-053		

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

Pace Analytical®
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Report No.:10515804_PFAAD_DFR

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	Page: of
Company: ATC Group Services	Report To: joshua.schyler@atcgs.com	Attention: Joshua Schyler	2307504
Address: 46555 Humbolt Dr Ste 100 Novi, MI 48377	Copy To: april.mehir@atcgs.com	Company Name: ATC Group Services	REGULATORY AGENCY
Email To: joshua.schyler@atcgs.com	Purchase Order No.: 10065	Address: 46555 Humbolt Dr. Ste 100 Novi, MI 48377	☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
Phone: 248-982-5378 Fax: 248-669-5147	Project Name: Detroit Axel	Pace Quote Reference:	☐ UST ☐ RCRA ☑ OTHER EGLE
Requested Due Date/TAT: Standard	Project Number: NPDAX19001	Pace Project Manager: Kirsten Hogberg	Site Location STATE: MI
		Pace Profile #: 40707	

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	PFASID24	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-119	WT	G	4/23/20	1321			47.2	2	X								Y	X		001
2	MW-120	WT	G		1235			44.7	2	X								Y	X		002
3	MW-121	WT	G		1154			50.2	2	X								Y	X		003
4	DUP-1	WT	G		0000			49.7	2	X								Y	X		004
5	Trip Blank	WT	G		0800			—	1	X								Y	X		005
6	Field Blank	WT	G	↓	1545			—	1	X								Y	X		006
7																					
8																					
9																					
10																					
11																					
12																					

WO#: 10515804

10515804

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Spencer Overbeck/ATC	4/23/20	1730	[signature] Spencer	4/24/20	900	4.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Spencer Overbeck

SIGNATURE of SAMPLER: Spencer Overbeck DATE Signed (MM/DD/YY): 04/23/20

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-C-010-rev.00, 09Nov2017

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 19Feb2020 Page 1 of 1
	Document No.: **F-MN-L-213-rev.31**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: ATC Group

Project #: **WO#: 10515804**

PM: KNH **Due Date: 05/15/20**

CLIENT: Cardno-MI

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial **See Exceptions** ☐

Tracking Number: 1Z9B6 730 2170 4

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other: Pb **Temp Blank?** ☒ Yes ☐ No

Thermometer: ☐ T1(0461) ☐ T2(1336) ☒ T3(0459) ☐ T4(0254) ☐ T5(0489) **Type of Ice:** ☐ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 4.9 °C **Average Corrected Temp (no temp blank only):** ☐ See Exceptions ☐ 1 Container

Correction Factor: NA **Cooler Temp Corrected w/temp blank:** 4.9 °C

USDA Regulated Soil: (☒ N/A, water sample/Other:_____) **Date/Initials of Person Examining Contents:** SJ 4/24/20

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒ Yes	☐ No		1.
Chain of Custody Relinquished?	☒ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	3.
Samples Arrived within Hold Time?	☒ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other_____
Rush Turn Around Time Requested?	☐ Yes	☒ No		6.
Sufficient Volume?	☒ Yes	☐ No		7.
Correct Containers Used?	☒ Yes	☐ No		8.
-Pace Containers Used?	☒ Yes	☐ No		
Containers Intact?	☒ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC?	☒ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐
Matrix: ☒ Water ☐ Soil ☐ Oil ☐ Other_____				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☒ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐ Yes	☐ No	☒ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☒ N/A	13. **See Exception** ☐
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☒ N/A	
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	Pace Trip Blank Lot # (if purchased):_____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted:_____ Date/Time:_____

Comments/Resolution:_____

Project Manager Review: Kristen Hoffberg **Date:** 4/24/2020

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: SJ (2)

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Appendix B

Sample Analysis Summary

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(612) 607-1700

PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-119	Date Extracted	04/28/2020
Lab Sample ID	10515804001	Total Amount Extracted	242 mL
Filename	Q200501B_013	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/23/2020	Ending CCal	Q200501B_014
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	05/01/2020 20:09	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/2020 20:09	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	05/01/2020 20:09	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/2020 20:09	375-85-9	N2
PFOA	ND	2.1	0.42	1	05/01/2020 20:09	335-67-1	N2
PFNA	ND	2.1	0.57	1	05/01/2020 20:09	375-95-1	N2
PFDA	ND	2.1	0.66	1	05/01/2020 20:09	335-76-2	N2
PFUnA	ND	2.1	0.54	1	05/01/2020 20:09	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/2020 20:09	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/2020 20:09	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/2020 20:09	376-06-7	N2
PFOSA	ND	2.1	0.23	1	05/01/2020 20:09	754-91-6	N2
N-EtFOSAA	ND	2.1	0.91	1	05/01/2020 20:09	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/2020 20:09	2355-31-9	N2
PFBS	ND	1.8	0.20	1	05/01/2020 20:09	375-73-5	N2
PFPeS	ND	1.9	0.36	1	05/01/2020 20:09	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	05/01/2020 20:09	355-46-4	N2
PFHpS	ND	2.0	0.45	1	05/01/2020 20:09	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/2020 20:09	1763-23-1	N2
PFNS	ND	2.0	0.45	1	05/01/2020 20:09	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/2020 20:09	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	05/01/2020 20:09	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	05/01/2020 20:09	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	05/01/2020 20:09	39108-34-4	N2

N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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(612) 607-1700

PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-119	Date Extracted	04/28/2020
Lab Sample ID	10515804001	Total Amount Extracted	242 mL
Filename	Q200501B_013	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_003
Collected	04/23/2020	Ending CCal	Q200501B_014
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	28	134	50-150	Pass	762925
13C5_PFPeA	21	23	110	50-150	Pass	562445
13C5_PFHxA	21	21	102	50-150	Pass	640602
13C4_PFHpA	21	19	93	50-150	Pass	552583
13C8_PFOA	21	16	79	50-150	Pass	535057
13C9_PFNA	21	12	59	50-150	Pass	591597
13C6_PFDA	21	13	62	50-150	Pass	461233
13C7_PFUdA	21	15	71	50-150	Pass	425993
13C2_PFDoA	21	15	70	50-150	Pass	407942
13C2_PFTeDA	21	12	56	50-150	Pass	317477
d5-EtFOSAA	21	19	93	50-150	Pass	96596
d3-MeFOSAA	21	20	95	50-150	Pass	90695
13C3_PFBS	21	22	105	50-150	Pass	487758
13C3_PFHxS	21	17	81	50-150	Pass	468599
13C8_PFOS	21	17	83	50-150	Pass	529676
13C8_PFOSA	21	19	90	50-150	Pass	784363
13C2_4:2FTS	21	26	127	50-150	Pass	130365
13C2_6:2FTS	21	18	87	50-150	Pass	97821
13C2_8:2FTS	21	11	56	50-150	Pass	78244

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	711765	432972 - 1298915	483327 - 1449981	Pass
13C4_PFOS	607515	280874 - 842624	396036 - 1188109	Pass

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Pace Analytical Services, LLC
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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-120	Date Extracted	04/28/2020
Lab Sample ID	10515804002	Total Amount Extracted	234 mL
Filename	Q200501B_015	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	7.2	2.1	0.31	1	05/01/202021:02	375-22-4	N2
PFPeA	ND	2.1	0.27	1	05/01/202021:02	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	05/01/202021:02	307-24-4	N2
PFHpA	ND	2.1	0.45	1	05/01/202021:02	375-85-9	N2
PFOA	6.4	2.1	0.43	1	05/01/202021:02	335-67-1	N2
PFNA	ND	2.1	0.59	1	05/01/202021:02	375-95-1	N2
PFDA	ND	2.1	0.68	1	05/01/202021:02	335-76-2	N2
PFUnA	ND	2.1	0.56	1	05/01/202021:02	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	05/01/202021:02	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	05/01/202021:02	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	05/01/202021:02	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202021:02	754-91-6	N2
N-EtFOSAA	ND	2.1	0.94	1	05/01/202021:02	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	05/01/202021:02	2355-31-9	N2
PFBS	3.1	1.9	0.20	1	05/01/202021:02	375-73-5	N2
PFPeS	ND	2.0	0.37	1	05/01/202021:02	2706-91-4	N2
PFHxS	ND	1.9	0.38	1	05/01/202021:02	355-46-4	N2
PFHpS	ND	2.0	0.47	1	05/01/202021:02	375-92-8	N2
PFOS	ND	2.0	0.40	1	05/01/202021:02	1763-23-1	N2
PFNS	ND	2.0	0.47	1	05/01/202021:02	68259-12-1	N2
PFDS	ND	2.1	0.33	1	05/01/202021:02	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	05/01/202021:02	757124-72-4	N2
6:2FTS	ND	2.0	0.95	1	05/01/202021:02	27619-97-2	N2
8:2FTS	ND	2.0	0.78	1	05/01/202021:02	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-120	Date Extracted	04/28/2020
Lab Sample ID	10515804002	Total Amount Extracted	234 mL
Filename	Q200501B_015	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	24	113	50-150	Pass	723103
13C5_PFPeA	21	20	96	50-150	Pass	552689
13C5_PFHxA	21	19	89	50-150	Pass	623510
13C4_PFHpA	21	18	85	50-150	Pass	563149
13C8_PFOA	21	18	83	50-150	Pass	630051
13C9_PFNA	21	12	55	50-150	Pass	581897
13C6_PFDA	21	15	70	50-150	Pass	540147
13C7_PFUdA	21	13	61	50-150	Pass	386219
13C2_PFDoA	21	15	69	50-150	Pass	418247
13C2_PFTeDA	21	11	54	50-150	Pass	316176
d5-EtFOSAA	21	19	88	50-150	Pass	96176
d3-MeFOSAA	21	18	85	50-150	Pass	84210
13C3_PFBS	21	20	96	50-150	Pass	501312
13C3_PFHxS	21	17	81	50-150	Pass	485077
13C8_PFOS	21	18	84	50-150	Pass	557665
13C8_PFOSA	21	6.8	32	50-150	Fail	290740
13C2_4:2FTS	21	27	127	50-150	Pass	146407
13C2_6:2FTS	21	19	91	50-150	Pass	115317
13C2_8:2FTS	21	13	62	50-150	Pass	90988

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	799996	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	633104	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-120-DUP	Date Extracted	04/28/2020
Lab Sample ID	10515804002-DUP	Total Amount Extracted	235 mL
Filename	Q200501B_021	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	6.8	2.1	0.31	1	05/01/202023:42	375-22-4	N2
PFPeA	ND	2.1	0.27	1	05/01/202023:42	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	05/01/202023:42	307-24-4	N2
PFHpA	ND	2.1	0.45	1	05/01/202023:42	375-85-9	N2
PFOA	6.0	2.1	0.43	1	05/01/202023:42	335-67-1	N2
PFNA	ND	2.1	0.59	1	05/01/202023:42	375-95-1	N2
PFDA	ND	2.1	0.68	1	05/01/202023:42	335-76-2	N2
PFUnA	ND	2.1	0.56	1	05/01/202023:42	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	05/01/202023:42	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	05/01/202023:42	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	05/01/202023:42	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202023:42	754-91-6	N2
N-EtFOSAA	ND	2.1	0.93	1	05/01/202023:42	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	05/01/202023:42	2355-31-9	N2
PFBS	3.2	1.9	0.20	1	05/01/202023:42	375-73-5	N2
PFPeS	ND	2.0	0.37	1	05/01/202023:42	2706-91-4	N2
PFHxS	ND	1.9	0.38	1	05/01/202023:42	355-46-4	N2
PFHpS	ND	2.0	0.46	1	05/01/202023:42	375-92-8	N2
PFOS	ND	2.0	0.40	1	05/01/202023:42	1763-23-1	N2
PFNS	ND	2.0	0.46	1	05/01/202023:42	68259-12-1	N2
PFDS	ND	2.1	0.33	1	05/01/202023:42	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	05/01/202023:42	757124-72-4	N2
6:2FTS	ND	2.0	0.95	1	05/01/202023:42	27619-97-2	N2
8:2FTS	ND	2.0	0.78	1	05/01/202023:42	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-120-DUP	Date Extracted	04/28/2020
Lab Sample ID	10515804002-DUP	Total Amount Extracted	235 mL
Filename	Q200501B_021	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	25	116	50-150	Pass	740353
13C5_PFPeA	21	21	100	50-150	Pass	576542
13C5_PFHxA	21	20	95	50-150	Pass	668981
13C4_PFHpA	21	19	88	50-150	Pass	589109
13C8_PFOA	21	18	83	50-150	Pass	630339
13C9_PFNA	21	13	61	50-150	Pass	647094
13C6_PFDA	21	14	67	50-150	Pass	522874
13C7_PFUdA	21	14	64	50-150	Pass	406418
13C2_PFDoA	21	15	69	50-150	Pass	418671
13C2_PFTeDA	21	12	54	50-150	Pass	323250
d5-EtFOSAA	21	18	85	50-150	Pass	93652
d3-MeFOSAA	21	17	79	50-150	Pass	79365
13C3_PFBS	21	20	95	50-150	Pass	499327
13C3_PFHxS	21	18	87	50-150	Pass	526082
13C8_PFOS	21	18	83	50-150	Pass	553362
13C8_PFOSA	21	12	56	50-150	Pass	518114
13C2_4:2FTS	21	27	126	50-150	Pass	145949
13C2_6:2FTS	21	19	91	50-150	Pass	115683
13C2_8:2FTS	21	13	61	50-150	Pass	90792

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	802561	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	638599	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-121	Date Extracted	04/28/2020
Lab Sample ID	10515804003	Total Amount Extracted	238 mL
Filename	Q200501B_016	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	12	2.1	0.31	1	05/01/202021:29	375-22-4	N2
PFPeA	18	2.1	0.26	1	05/01/202021:29	2706-90-3	N2
PFHxA	22	2.1	0.37	1	05/01/202021:29	307-24-4	N2
PFHpA	12	2.1	0.44	1	05/01/202021:29	375-85-9	N2
PFOA	32	2.1	0.43	1	05/01/202021:29	335-67-1	N2
PFNA	ND	2.1	0.58	1	05/01/202021:29	375-95-1	N2
PFDA	ND	2.1	0.67	1	05/01/202021:29	335-76-2	N2
PFUnA	ND	2.1	0.55	1	05/01/202021:29	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/202021:29	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202021:29	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/202021:29	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202021:29	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	05/01/202021:29	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/202021:29	2355-31-9	N2
PFBS	3.9	1.9	0.20	1	05/01/202021:29	375-73-5	N2
PFPeS	ND	2.0	0.37	1	05/01/202021:29	2706-91-4	N2
PFHxS	5.9	1.9	0.38	1	05/01/202021:29	355-46-4	N2
PFHpS	ND	2.0	0.46	1	05/01/202021:29	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/202021:29	1763-23-1	N2
PFNS	ND	2.0	0.46	1	05/01/202021:29	68259-12-1	N2
PFDS	ND	2.0	0.33	1	05/01/202021:29	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	05/01/202021:29	757124-72-4	N2
6:2FTS	3.3	2.0	0.93	1	05/01/202021:29	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	05/01/202021:29	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-121	Date Extracted	04/28/2020
Lab Sample ID	10515804003	Total Amount Extracted	238 mL
Filename	Q200501B_016	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	25	121	50-150	Pass	769358
13C5_PFPeA	21	21	102	50-150	Pass	588684
13C5_PFHxA	21	19	91	50-150	Pass	638805
13C4_PFHpA	21	19	90	50-150	Pass	600653
13C8_PFOA	21	17	82	50-150	Pass	625031
13C9_PFNA	21	13	61	50-150	Pass	633947
13C6_PFDA	21	15	70	50-150	Pass	533768
13C7_PFUdA	21	15	74	50-150	Pass	454172
13C2_PFDoA	21	17	79	50-150	Pass	472363
13C2_PFTeDA	21	13	62	50-150	Pass	357892
d5-EtFOSAA	21	20	97	50-150	Pass	103424
d3-MeFOSAA	21	20	94	50-150	Pass	91548
13C3_PFBS	21	21	99	50-150	Pass	518366
13C3_PFHxS	21	18	87	50-150	Pass	514070
13C8_PFOS	21	18	86	50-150	Pass	561726
13C8_PFOSA	21	18	84	50-150	Pass	753687
13C2_4:2FTS	21	28	136	50-150	Pass	156412
13C2_6:2FTS	21	18	84	50-150	Pass	106437
13C2_8:2FTS	21	13	60	50-150	Pass	86905

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	798894	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	621424	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-1	Date Extracted	04/28/2020
Lab Sample ID	10515804004	Total Amount Extracted	238 mL
Filename	Q200501B_017	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	7.0	2.1	0.31	1	05/01/202021:55	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/202021:55	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	05/01/202021:55	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/202021:55	375-85-9	N2
PFOA	5.9	2.1	0.43	1	05/01/202021:55	335-67-1	N2
PFNA	ND	2.1	0.58	1	05/01/202021:55	375-95-1	N2
PFDA	ND	2.1	0.67	1	05/01/202021:55	335-76-2	N2
PFUnA	ND	2.1	0.55	1	05/01/202021:55	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/202021:55	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202021:55	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/202021:55	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/202021:55	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	05/01/202021:55	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/202021:55	2355-31-9	N2
PFBS	2.8	1.9	0.20	1	05/01/202021:55	375-73-5	N2
PFPeS	ND	2.0	0.37	1	05/01/202021:55	2706-91-4	N2
PFHxS	ND	1.9	0.38	1	05/01/202021:55	355-46-4	N2
PFHpS	ND	2.0	0.46	1	05/01/202021:55	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/202021:55	1763-23-1	N2
PFNS	ND	2.0	0.46	1	05/01/202021:55	68259-12-1	N2
PFDS	ND	2.0	0.33	1	05/01/202021:55	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	05/01/202021:55	757124-72-4	N2
6:2FTS	ND	2.0	0.93	1	05/01/202021:55	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	05/01/202021:55	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup-1	Date Extracted	04/28/2020
Lab Sample ID	10515804004	Total Amount Extracted	238 mL
Filename	Q200501B_017	ICAL ID	200428A01
Matrix	Non_Potable_Wat	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	23	110	50-150	Pass	749283
13C5_PFPeA	21	20	96	50-150	Pass	588988
13C5_PFHxA	21	18	85	50-150	Pass	637177
13C4_PFHpA	21	17	80	50-150	Pass	564890
13C8_PFOA	21	16	77	50-150	Pass	629007
13C9_PFNA	21	13	63	50-150	Pass	674071
13C6_PFDA	21	14	67	50-150	Pass	529939
13C7_PFUdA	21	14	68	50-150	Pass	437429
13C2_PFDoA	21	14	65	50-150	Pass	401149
13C2_PFTeDA	21	11	54	50-150	Pass	328199
d5-EtFOSAA	21	20	94	50-150	Pass	104711
d3-MeFOSAA	21	18	85	50-150	Pass	86081
13C3_PFBS	21	19	91	50-150	Pass	507423
13C3_PFHxS	21	17	81	50-150	Pass	496086
13C8_PFOS	21	18	85	50-150	Pass	577932
13C8_PFOSA	21	8.7	42	50-150	Fail	387479
13C2_4:2FTS	21	26	122	50-150	Pass	150250
13C2_6:2FTS	21	17	79	50-150	Pass	107114
13C2_8:2FTS	21	13	62	50-150	Pass	92407

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	853192	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	647510	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	04/28/2020
Lab Sample ID	10515804005	Total Amount Extracted	238 mL
Filename	Q200501B_018	ICAL ID	200428A01
Matrix	Water	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.31	1	05/01/2020 22:22	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/2020 22:22	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	05/01/2020 22:22	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/2020 22:22	375-85-9	N2
PFOA	ND	2.1	0.43	1	05/01/2020 22:22	335-67-1	N2
PFNA	ND	2.1	0.58	1	05/01/2020 22:22	375-95-1	N2
PFDA	ND	2.1	0.67	1	05/01/2020 22:22	335-76-2	N2
PFUnA	ND	2.1	0.55	1	05/01/2020 22:22	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/2020 22:22	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/2020 22:22	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/2020 22:22	376-06-7	N2
PFOSA	ND	2.1	0.24	1	05/01/2020 22:22	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	05/01/2020 22:22	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	05/01/2020 22:22	2355-31-9	N2
PFBS	ND	1.9	0.20	1	05/01/2020 22:22	375-73-5	N2
PFPeS	ND	2.0	0.37	1	05/01/2020 22:22	2706-91-4	N2
PFHxS	ND	1.9	0.38	1	05/01/2020 22:22	355-46-4	N2
PFHpS	ND	2.0	0.46	1	05/01/2020 22:22	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/2020 22:22	1763-23-1	N2
PFNS	ND	2.0	0.46	1	05/01/2020 22:22	68259-12-1	N2
PFDS	ND	2.0	0.33	1	05/01/2020 22:22	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	05/01/2020 22:22	757124-72-4	N2
6:2FTS	ND	2.0	0.94	1	05/01/2020 22:22	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	05/01/2020 22:22	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	04/28/2020
Lab Sample ID	10515804005	Total Amount Extracted	238 mL
Filename	Q200501B_018	ICAL ID	200428A01
Matrix	Water	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	25	121	50-150	Pass	752481
13C5_PFPeA	21	21	101	50-150	Pass	567510
13C5_PFHxA	21	19	93	50-150	Pass	633635
13C4_PFHpA	21	18	85	50-150	Pass	549646
13C8_PFOA	21	17	80	50-150	Pass	594316
13C9_PFNA	21	12	57	50-150	Pass	582408
13C6_PFDA	21	13	64	50-150	Pass	477853
13C7_PFUdA	21	15	73	50-150	Pass	442572
13C2_PFDoA	21	16	76	50-150	Pass	444604
13C2_PFTeDA	21	12	59	50-150	Pass	337607
d5-EtFOSAA	21	19	92	50-150	Pass	96405
d3-MeFOSAA	21	18	84	50-150	Pass	80851
13C3_PFBS	21	20	94	50-150	Pass	479602
13C3_PFHxS	21	17	81	50-150	Pass	472188
13C8_PFOS	21	18	85	50-150	Pass	544406
13C8_PFOSA	21	16	77	50-150	Pass	678788
13C2_4:2FTS	21	15	74	50-150	Pass	82770
13C2_6:2FTS	21	16	74	50-150	Pass	91453
13C2_8:2FTS	21	11	53	50-150	Pass	75694

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	777689	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	613274	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank	Date Extracted	04/28/2020
Lab Sample ID	10515804006	Total Amount Extracted	243 mL
Filename	Q200501B_019	ICAL ID	200428A01
Matrix	Water	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.30	1	05/01/202022:49	375-22-4	N2
PFPeA	ND	2.1	0.26	1	05/01/202022:49	2706-90-3	N2
PFHxA	ND	2.1	0.36	1	05/01/202022:49	307-24-4	N2
PFHpA	ND	2.1	0.44	1	05/01/202022:49	375-85-9	N2
PFOA	ND	2.1	0.42	1	05/01/202022:49	335-67-1	N2
PFNA	ND	2.1	0.57	1	05/01/202022:49	375-95-1	N2
PFDA	ND	2.1	0.66	1	05/01/202022:49	335-76-2	N2
PFUnA	ND	2.1	0.54	1	05/01/202022:49	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	05/01/202022:49	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	05/01/202022:49	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	05/01/202022:49	376-06-7	N2
PFOSA	ND	2.1	0.23	1	05/01/202022:49	754-91-6	N2
N-EtFOSAA	ND	2.1	0.90	1	05/01/202022:49	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.43	1	05/01/202022:49	2355-31-9	N2
PFBS	ND	1.8	0.20	1	05/01/202022:49	375-73-5	N2
PFPeS	ND	1.9	0.36	1	05/01/202022:49	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	05/01/202022:49	355-46-4	N2
PFHpS	ND	2.0	0.45	1	05/01/202022:49	375-92-8	N2
PFOS	ND	1.9	0.39	1	05/01/202022:49	1763-23-1	N2
PFNS	ND	2.0	0.45	1	05/01/202022:49	68259-12-1	N2
PFDS	ND	2.0	0.32	1	05/01/202022:49	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	05/01/202022:49	757124-72-4	N2
6:2FTS	ND	2.0	0.92	1	05/01/202022:49	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	05/01/202022:49	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank	Date Extracted	04/28/2020
Lab Sample ID	10515804006	Total Amount Extracted	243 mL
Filename	Q200501B_019	ICAL ID	200428A01
Matrix	Water	Starting CCal	Q200501B_014
Collected	04/23/2020	Ending CCal	Q200501B_025
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	27	129	50-150	Pass	740336
13C5_PFPeA	21	22	106	50-150	Pass	548207
13C5_PFHxA	21	20	95	50-150	Pass	602539
13C4_PFHpA	21	18	86	50-150	Pass	513242
13C8_PFOA	21	17	83	50-150	Pass	568070
13C9_PFNA	21	11	55	50-150	Pass	561419
13C6_PFDA	21	14	68	50-150	Pass	516992
13C7_PFUdA	21	14	66	50-150	Pass	408970
13C2_PFDoA	21	14	70	50-150	Pass	415432
13C2_PFTeDA	21	12	56	50-150	Pass	323223
d5-EtFOSAA	21	19	92	50-150	Pass	98040
d3-MeFOSAA	21	17	82	50-150	Pass	80101
13C3_PFBS	21	21	103	50-150	Pass	480584
13C3_PFHxS	21	17	82	50-150	Pass	479112
13C8_PFOS	21	17	84	50-150	Pass	543363
13C8_PFOSA	21	17	81	50-150	Pass	725237
13C2_4:2FTS	21	17	84	50-150	Pass	87310
13C2_6:2FTS	21	15	75	50-150	Pass	84675
13C2_8:2FTS	21	12	56	50-150	Pass	80444

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	717246	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	619971	280874 - 842624	331227 - 993681	Pass

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-78934	Total Amount Extracted	248 mL
Filename	Q200501B_004	ICAL ID	200501A01
Matrix	Water	Starting CCal	Q200501B_003
Date Extracted	04/28/2020	Ending CCal	Q200501B_014

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.29	1	05/01/202016:10	375-22-4	N2
PFPeA	ND	2.0	0.25	1	05/01/202016:10	2706-90-3	N2
PFHxA	ND	2.0	0.35	1	05/01/202016:10	307-24-4	N2
PFHpA	ND	2.0	0.43	1	05/01/202016:10	375-85-9	N2
PFOA	ND	2.0	0.41	1	05/01/202016:10	335-67-1	N2
PFNA	ND	2.0	0.56	1	05/01/202016:10	375-95-1	N2
PFDA	ND	2.0	0.65	1	05/01/202016:10	335-76-2	N2
PFUnA	ND	2.0	0.53	1	05/01/202016:10	2058-94-8	N2
PFDoA	ND	2.0	0.39	1	05/01/202016:10	307-55-1	N2
PFTrDA	ND	2.0	0.43	1	05/01/202016:10	72629-94-8	N2
PFTeDA	ND	2.0	0.39	1	05/01/202016:10	376-06-7	N2
PFOSA	ND	2.0	0.23	1	05/01/202016:10	754-91-6	N2
N-EtFOSAA	ND	2.0	0.89	1	05/01/202016:10	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.43	1	05/01/202016:10	2355-31-9	N2
PFBS	ND	1.8	0.19	1	05/01/202016:10	375-73-5	N2
PFPeS	ND	1.9	0.35	1	05/01/202016:10	2706-91-4	N2
PFHxS	ND	1.8	0.36	1	05/01/202016:10	355-46-4	N2
PFHpS	ND	1.9	0.44	1	05/01/202016:10	375-92-8	N2
PFOS	ND	1.9	0.38	1	05/01/202016:10	1763-23-1	N2
PFNS	ND	1.9	0.44	1	05/01/202016:10	68259-12-1	N2
PFDS	ND	2.0	0.31	1	05/01/202016:10	335-77-3	N2
4:2FTS	ND	1.9	0.56	1	05/01/202016:10	757124-72-4	N2
6:2FTS	ND	1.9	0.90	1	05/01/202016:10	27619-97-2	N2
8:2FTS	ND	1.9	0.74	1	05/01/202016:10	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKOT	Date Extracted	04/28/2020
Lab Sample ID	BLANK-78934	Total Amount Extracted	248 mL
Filename	Q200501B_004	ICAL ID	200501A01
Matrix	Water	Starting CCal	Q200501B_003
Collected	04/24/2020	Ending CCal	Q200501B_014
Received	04/24/2020	Method Blank Filename	Q200501B_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	21	102	50-150	Pass	802549
13C5_PFPeA	20	20	99	50-150	Pass	619885
13C5_PFHxA	20	20	98	50-150	Pass	678991
13C4_PFHpA	20	19	93	50-150	Pass	580016
13C8_PFOA	20	17	86	50-150	Pass	593821
13C9_PFNA	20	20	98	50-150	Pass	671602
13C6_PFDA	20	19	95	50-150	Pass	524486
13C7_PFUdA	20	19	92	50-150	Pass	467248
13C2_PFDoA	20	18	91	50-150	Pass	460409
13C2_PFTeDA	20	17	83	50-150	Pass	363169
d5-EtFOSAA	20	18	87	50-150	Pass	111464
d3-MeFOSAA	20	16	80	50-150	Pass	86387
13C3_PFBS	20	19	92	50-150	Pass	543075
13C3_PFHxS	20	20	99	50-150	Pass	533071
13C8_PFOS	20	18	91	50-150	Pass	598349
13C8_PFOSA	20	14	68	50-150	Pass	765063
13C2_4:2FTS	20	14	70	50-150	Pass	103713
13C2_6:2FTS	20	18	89	50-150	Pass	114156
13C2_8:2FTS	20	14	71	50-150	Pass	92880

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	752476	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	628997	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-78935		
LCS Filename	Q200501B_005	Matrix	Water
Total Amount Extracted	250mL	Dilution	1
ICAL ID	200501A01	Extracted	04/28/2020
Start CCal Filename	Q200501B_003	Analyzed	05/01/2020 16:36
End CCal Filename	Q200501B_014	Injected By	PY
Method Blank Filename	Q200501B_004		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	19	97	70.0 - 130.0
PFPeA	20	19	97	70.0 - 130.0
PFHxA	20	19	93	70.0 - 130.0
PFHpA	20	19	93	70.0 - 130.0
PFOA	20	19	93	70.0 - 130.0
PFNA	20	18	92	70.0 - 130.0
PFDA	20	20	98	70.0 - 130.0
PFUnA	20	17	87	70.0 - 130.0
PFDoA	20	20	98	70.0 - 130.0
PFTrDA	20	17	87	70.0 - 130.0
PFTeDA	20	20	102	70.0 - 130.0
PFOSA	20	19	96	70.0 - 130.0
N-EtFOSAA	20	18	92	70.0 - 130.0
N-MeFOSAA	20	19	96	70.0 - 130.0
PFBS	18	17	95	70.0 - 130.0
PFPeS	19	17	90	70.0 - 130.0
PFHxS	18	18	96	70.0 - 130.0
PFHpS	19	20	106	70.0 - 130.0
PFOS	19	18	95	70.0 - 130.0
PFNS	19	19	99	70.0 - 130.0
PFDS	19	19	98	70.0 - 130.0
4:2FTS	19	18	95	70.0 - 130.0
6:2FTS	19	18	95	70.0 - 130.0
8:2FTS	19	18	96	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-78935
LCS Filename Q200501B_005 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	23	113	50-150	Pass	796091
13C5_PFPeA	20	21	106	50-150	Pass	596799
13C5_PFHxA	20	22	111	50-150	Pass	684513
13C4_PFHpA	20	21	105	50-150	Pass	585456
13C8_PFOA	20	19	97	50-150	Pass	596330
13C9_PFNA	20	20	100	50-150	Pass	659539
13C6_PFDA	20	19	93	50-150	Pass	491300
13C7_PFUdA	20	20	100	50-150	Pass	486253
13C2_PFDoA	20	18	90	50-150	Pass	435634
13C2_PFTeDA	20	15	76	50-150	Pass	321237
d5-EtFOSAA	20	18	92	50-150	Pass	113140
d3-MeFOSAA	20	17	87	50-150	Pass	89676
13C3_PFBS	20	21	103	50-150	Pass	544425
13C3_PFHxS	20	20	100	50-150	Pass	516654
13C8_PFOS	20	19	94	50-150	Pass	594172
13C8_PFOSA	20	16	81	50-150	Pass	868148
13C2_4:2FTS	20	15	73	50-150	Pass	96502
13C2_6:2FTS	20	16	80	50-150	Pass	91059
13C2_8:2FTS	20	15	75	50-150	Pass	93712

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	671769	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	602680	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78936		
LCSD Filename	Q200501B_006	LCS Filename	Q200501B_005
Total Amount Extracted	254mL	Matrix	Water
ICAL ID	200501A01	Dilution	1
Start CCal Filename	Q200501B_003	Extracted	04/28/2020
End CCal Filename	Q200501B_014	Analyzed	05/01/2020 17:03
Method Blank Filename	Q200501B_004	Injected By	PY

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	RPD %
PFBA	20	19	95	70.0 - 130.0	4
PFPeA	20	18	93	70.0 - 130.0	6
PFHxA	20	18	93	70.0 - 130.0	2
PFHpA	20	18	90	70.0 - 130.0	5
PFOA	20	18	93	70.0 - 130.0	1
PFNA	20	19	98	70.0 - 130.0	5
PFDA	20	17	87	70.0 - 130.0	14
PFUnA	20	19	97	70.0 - 130.0	10
PFDoA	20	19	97	70.0 - 130.0	3
PFTrDA	20	18	90	70.0 - 130.0	3
PFTeDA	20	19	96	70.0 - 130.0	8
PFOSA	20	19	95	70.0 - 130.0	3
N-EtFOSAA	20	20	103	70.0 - 130.0	9
N-MeFOSAA	20	17	87	70.0 - 130.0	12
PFBS	17	17	95	70.0 - 130.0	1
PFPeS	19	17	92	70.0 - 130.0	1
PFHxS	18	16	92	70.0 - 130.0	6
PFHpS	19	18	98	70.0 - 130.0	10
PFOS	18	17	94	70.0 - 130.0	3
PFNS	19	18	98	70.0 - 130.0	3
PFDS	19	17	91	70.0 - 130.0	8
4:2FTS	18	16	89	70.0 - 130.0	8
6:2FTS	19	18	96	70.0 - 130.0	0
8:2FTS	19	18	95	70.0 - 130.0	3

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-78936	LCS Filename	Q200501B_005
LCSD Filename	Q200501B_006	Matrix	Water

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	22	113	50-150	Pass	734537
13C5_PFPeA	20	21	106	50-150	Pass	551418
13C5_PFHxA	20	21	104	50-150	Pass	598320
13C4_PFHpA	20	21	106	50-150	Pass	550624
13C8_PFOA	20	18	93	50-150	Pass	532542
13C9_PFNA	20	18	89	50-150	Pass	546497
13C6_PFDA	20	17	88	50-150	Pass	432184
13C7_PFUdA	20	18	92	50-150	Pass	417329
13C2_PFDoA	20	17	84	50-150	Pass	379129
13C2_PFTeDA	20	16	79	50-150	Pass	308085
d5-EtFOSAA	20	16	81	50-150	Pass	91857
d3-MeFOSAA	20	18	89	50-150	Pass	85723
13C3_PFBS	20	19	97	50-150	Pass	474709
13C3_PFHxS	20	19	96	50-150	Pass	462654
13C8_PFOS	20	18	91	50-150	Pass	537396
13C8_PFOSA	20	15	77	50-150	Pass	765628
13C2_4:2FTS	20	15	74	50-150	Pass	90044
13C2_6:2FTS	20	16	81	50-150	Pass	85916
13C2_8:2FTS	20	14	72	50-150	Pass	82990

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	624699	394529 - 1183586	483327 - 1449981	Pass
13C4_PFOS	560051	343349 - 1030047	396036 - 1188109	Pass

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

MS Lab Sample ID	10515804001-MS		
MS Filename	Q200501B_020	Matrix	Non_Potable_Water
Total Amount Extracted	245mL	Dilution	1
ICAL ID	200428A01	Extracted	04/28/2020
Start CCal Filename	Q200501B_014	Analyzed	05/01/2020 23:15
End CCal Filename	Q200501B_025	Injected By	PY
Method Blank Filename	Q200501B_004		

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags
PFBA	20	0	18	89	70.0 - 130.0	
PFPeA	20	0	18	90	70.0 - 130.0	
PFHxA	20	0	20	96	70.0 - 130.0	
PFHpA	20	0	19	93	70.0 - 130.0	
PFOA	20	0	18	90	70.0 - 130.0	
PFNA	20	0	21	101	70.0 - 130.0	
PFDA	20	0	16	77	70.0 - 130.0	
PFUnA	20	0	18	90	70.0 - 130.0	
PFDoA	20	0	18	90	70.0 - 130.0	
PFTrDA	20	0	16	80	70.0 - 130.0	
PFTeDA	20	0	18	87	70.0 - 130.0	
PFOSA	20	0	19	93	70.0 - 130.0	
N-EtFOSAA	20	0	19	92	70.0 - 130.0	
N-MeFOSAA	20	0	18	87	70.0 - 130.0	
PFBS	18	0	17	94	70.0 - 130.0	
PFPeS	19	0	17	90	70.0 - 130.0	
PFHxS	19	0	17	92	70.0 - 130.0	
PFHpS	19	0	18	92	70.0 - 130.0	
PFOS	19	0	18	96	70.0 - 130.0	
PFNS	20	0	19	99	70.0 - 130.0	
PFDS	20	0	20	103	70.0 - 130.0	
4:2FTS	19	0	16	85	70.0 - 130.0	
6:2FTS	19	0	21	109	70.0 - 130.0	
8:2FTS	20	0	18	92	70.0 - 130.0	

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags

MS Lab Sample ID 10515804001-MS
MS Filename Q200501B_020 Matrix Non_Potable_Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	25	121	50-150	Pass	766113
13C5_PFPeA	20	21	102	50-150	Pass	584069
13C5_PFHxA	20	17	83	50-150	Pass	584427
13C4_PFHpA	20	17	83	50-150	Pass	549848
13C8_PFOA	20	16	77	50-150	Pass	583763
13C9_PFNA	20	11	55	50-150	Pass	587062
13C6_PFDA	20	14	70	50-150	Pass	547012
13C7_PFUdA	20	14	68	50-150	Pass	427600
13C2_PFDoA	20	14	67	50-150	Pass	405760
13C2_PFTeDA	20	12	57	50-150	Pass	339141
d5-EtFOSAA	20	19	91	50-150	Pass	99728
d3-MeFOSAA	20	18	89	50-150	Pass	89476
13C3_PFBS	20	20	96	50-150	Pass	497486
13C3_PFHxS	20	17	81	50-150	Pass	488062
13C8_PFOS	20	17	82	50-150	Pass	544996
13C8_PFOSA	20	17	82	50-150	Pass	755802
13C2_4:2FTS	20	23	113	50-150	Pass	130001
13C2_6:2FTS	20	14	69	50-150	Pass	87091
13C2_8:2FTS	20	12	58	50-150	Pass	85995

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	796957	432972 - 1298915	409987 - 1229962	Pass
13C4_PFOS	637747	280874 - 842624	331227 - 993681	Pass

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Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Ryann Scott
ATC-MI
46555 Humboldt Drive Suite 100
Novi MI 48377

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Prepared Date:
July 19, 2020

Report Information:

Pace Project #: 10522940
Sample Receipt Date: 06/26/2020
Client Project #: NPDAX19001
Client Sub PO #: N/A
State Cert #: 2926.01

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Kirsten Hogberg, your Pace Project Manager.

This report has been reviewed by:

July 20, 2020

Ashley Williams, Project Manager
(612) 346-8158
(612) 607-6444 (fax)
ashley.williams@pacelabs.com

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on eleven samples submitted by a representative of Cardno-MI. The samples were analyzed for twenty-four perfluorinated compounds using an isotope dilution based on DoD QSM 5.1.1. Reporting limits were set to quantification limits.

Laboratory method blanks were prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blanks were free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

Laboratory spike samples sample were also prepared with the sample batch using clean reference matrix that had been fortified with native standards. The recovery results were within the method limits. The RPDs (relative percent differences) between one laboratory spike and its duplicate were within the method limits. These spikes indicate that extraction performed as expected. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from that analysis will be provided upon request.

Both of the injection internal standards (13C4_PFOA and 13C4_PFOS) pass for each analysis in the batch verifying that the instrument detector is working as expected.

Results for selected analytes were taken from secondary dilutions of the sample extracts in order to bring the results within the calibration range or to reduce the impact of matrix effects. The affected values were flagged "D" on the results tables.

It should be noted that Pace Analytical has not yet completed the certification process for all analytes in this method. Therefore, the results have been marked "N2" as qualified.

Pace Analytical Services, LLC
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Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Minnesota - De	via MN-ELAP
Alabama	40770	Minnesota - Pet	1240
Alaska - DW	MN00064	Mississippi	MN00064
Alaska - UST	17-009	Missouri - DW	10100
Arizona	AZ0014	Montana	CERT0092
Arkansas - DW	MN00064	Nebraska	NE-OS-18-06
Arkansas - WW	19-039-0 (88-06	Nevada	MN000642020-
CNMI Saipan	MP0003	New Hampshire	208120-B (2081
California	2929	New Jersey (NE	NLC 190003 (M
Colorado	MN00064	New York	11647
Connecticut	PH-0256	North Carolina -	27700
EPA Region 8+	via MN 027-053	North Carolina -	530
Florida (NELAP	E87605	North Dakota	R-036
Georgia	959	Ohio - DW	41244
Guam	20-001R	Ohio - VAP	CL101
Hawaii	MN00064	Oklahoma	2019-041 (9507
Idaho	MN00064	Oregon - Primar	MN300001-012
Illinois	004575 (20001	Oregon - Secon	MN200001-013
Indiana	C-MN-01	Pennsylvania	018 (68-00563)
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003001 (740
Kentucky - DW	90062	Tennessee	TN02818
Kentucky - WW	90062	Texas	T104704192
Louisiana - DE	03086 (84596)	Utah (NELAP)	MN000642019-
Louisiana - DH	LA006	Vermont	VT-027053137
Louisiana - DW	MN00064	Virginia	10570 (460163)
Maine	2019018 (238)(	Washington	C486-20 (C486)
Maryland	322	West Virginia -	382
Massachusetts	M-MN064	West Virginia -	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	1857409	Wyoming - UST	2926.01

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Report No.:10522940_PFAAID_DFR

Section A — Required Client Information:
Company: ATC Group Services
Address: 46555 Humboldt Dr. Ste 100, Nov, MI 48377
Email To: [redacted] ryann.scott@atcgs.com
Phone: 248-563-3777 Fax: n/a
Requested Due Date/TAT: Standard

Section B — Required Project Information:
Report To: ryann.scott@atcgs.com
Copy To:
Purchase Order No.:
Project Name: Detroit Axle
Project Number: NPDAX19001

Section C — Invoice Information:
Attention: Ryann Scott
Company Name: ATC Group Services
Address: 46555 Humboldt Dr. #100 Novi, MI
Pace Quote Reference:
Pace Project Manager: Kirsten Hogberg
Pace Profile #: 40707

REGULATORY AGENCY: NPDES, GROUND WATER, DRINKING WATER, UST, RCRA, OTHER EGLE
Site Location STATE: MI

Requested Analysis Filtered (Y/N)

Section D — Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

WO#: 10522940

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: PFAS TD24	Resi	Pace Project No./ Lab I.D.
1	MW-116	WT	G			6/24	1559		2	X							X			001
2	MW-117						0943		1	X							X			002
3	MW-118						1010			X							X			003
4	MW-122						1345			X							X			004
5	MW-127						1250			X							X			005
6	MW-128						1110			X							X			006
7	MW-129						1210			X							X			007
8	MW-131						1456			X							X			008
9	Dup 3						0000			X							X			009
10	Trip Blank						0800		1	X							X			010
11	Field Blank						1100		1	X							X			011
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ira Adolphus/ATC	6/25/20	1130	pace	6/26/20	0850	1.9	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Ira Adolphus
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/25/20

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 27Mar2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.00**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: ATC

Project #: **WO# : 10522940**

PM: KNH **Due Date: 07/20/20**

CLIENT: Cardno-MI

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Pace [ ] SpeeDee [ ] Commercial **See Exceptions** [ ]

Tracking Number: 1U56 22W1 6908

Custody Seal on Cooler/Box Present? [ ] Yes [X] No **Seals Intact?** [ ] Yes [X] No **Biological Tissue Frozen?** [ ] Yes [ ] No [X] N/A

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [ ] None [X] Other: PB **Temp Blank?** [X] Yes [ ] No

Thermometer: [ ] T1(0461) [ ] T2(1336) [X] T3(0459) [ ] T4(0254) [ ] T5(0489) **Type of Ice:** [X] Wet [ ] Blue [ ] None [ ] Dry [ ] Melted

Did Samples Originate in West Virginia? [ ] Yes [X] No **Were All Container Temps Taken?** [ ] Yes [ ] No [X] N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 1.9 °C **Average Corrected Temp (no temp blank only):** [ ] See Exceptions

Correction Factor: +0.4 **Cooler Temp Corrected w/temp blank :** 1.9 °C ____ °C [ ] 1 Container

USDA Regulated Soil: ([X] N/A, water sample/Other:_____) **Date/Initials of Person Examining Contents:** 6/26/20

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? [ ] Yes [ ] No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [ ] No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	[X] Yes	[ ] No		1.
Chain of Custody Relinquished?	[X] Yes	[ ] No		2.
Sampler Name and/or Signature on COC?	[X] Yes	[ ] No	[ ] N/A	3.
Samples Arrived within Hold Time?	[X] Yes	[ ] No		4.
Short Hold Time Analysis (<72 hr)?	[ ] Yes	[X] No		5. [ ] Fecal Coliform [ ] HPC [ ] Total Coliform/E coli [ ] BOD/cBOD [ ] Hex Chrome [ ] Turbidity [ ] Nitrate [ ] Nitrite [ ] Orthophos [ ] Other_____
Rush Turn Around Time Requested?	[ ] Yes	[X] No		6.
Sufficient Volume?	[X] Yes	[ ] No		7.
Correct Containers Used?	[X] Yes	[ ] No		8.
-Pace Containers Used?	[X] Yes	[ ] No		
Containers Intact?	[X] Yes	[ ] No		9.
Field Filtered Volume Received for Dissolved Tests?	[ ] Yes	[ ] No	[X] N/A	10. Is sediment visible in the dissolved container? [ ] Yes [ ] No
Is sufficient information available to reconcile the samples to the COC?	[X] Yes	[ ] No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** [ ]
Matrix: [X] Water [ ] Soil [ ] Oil [ ] Other_____				
All containers needing acid/base preservation have been checked?	[ ] Yes	[ ] No	[X] N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	[ ] Yes	[ ] No	[X] N/A	[ ] NaOH [ ] HNO_3 [ ] H_2SO_4 [ ] Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	[ ] Yes	[ ] No	[X] N/A	Positive for Res. Chlorine? [ ] Yes [ ] No **pH Paper Lot#** **See Exception** [ ]
				Res. Chlorine / 0-6 Roll / 0-6 Strip / 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	[ ] Yes	[ ] No	[X] N/A	13. **See Exception** [ ]
Headspace in VOA Vials (greater than 6mm)?	[ ] Yes	[ ] No	[X] N/A	
Trip Blank Present?	[ ] Yes	[ ] No	[X] N/A	14.
Trip Blank Custody Seals Present?	[ ] Yes	[ ] No	[X] N/A	Pace Trip Blank Lot # (if purchased):_____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** [ ] Yes [ ] No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Kristen Hoffberg **Date:** 6/26/2020

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

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Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Appendix B

Sample Analysis Summary

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-116	Date Extracted	07/09/2020
Lab Sample ID	10522940001-R	Total Amount Extracted	123 mL
Filename	Q200713C_053	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	6.2		4.1	0.59	1	07/14/202017:49	375-22-4	N2
PFPeA	ND		4.1	0.51	1	07/14/202017:49	2706-90-3	N2
PFHxA	4.1		4.1	0.71	1	07/14/202017:49	307-24-4	N2
PFHpA	ND		4.1	0.86	1	07/14/202017:49	375-85-9	N2
PFOA	5.6		4.1	0.83	1	07/14/202017:49	335-67-1	N2
PFNA	ND		4.1	1.1	1	07/14/202017:49	375-95-1	N2
PFDA	ND		4.1	1.3	1	07/14/202017:49	335-76-2	N2
PFUnA	ND		4.1	1.1	1	07/14/202017:49	2058-94-8	N2
PFDoA	ND		4.1	0.78	1	07/14/202017:49	307-55-1	N2
PFTrDA	ND		4.1	0.86	1	07/14/202017:49	72629-94-8	N2
PFTeDA	ND		4.1	0.78	1	07/14/202017:49	376-06-7	N2
PFOSA	ND		4.1	0.46	1	07/14/202017:49	754-91-6	N2
N-EtFOSAA	ND		4.1	1.8	1	07/14/202017:49	2991-50-6	N2
N-MeFOSAA	ND		4.1	0.86	1	07/14/202017:49	2355-31-9	N2
PFBS	ND		3.6	0.39	1	07/14/202017:49	375-73-5	N2
PFPeS	ND		3.8	0.71	1	07/14/202017:49	2706-91-4	N2
PFHxS	ND		3.7	0.73	1	07/14/202017:49	355-46-4	N2
PFHpS	ND		3.9	0.89	1	07/14/202017:49	375-92-8	N2
PFOS	ND		3.8	0.76	1	07/14/202017:49	1763-23-1	N2
PFNS	ND		3.9	0.89	1	07/14/202017:49	68259-12-1	N2
PFDS	ND		3.9	0.63	1	07/14/202017:49	335-77-3	N2
4:2FTS	ND	D	38	11	10	07/15/202023:23	757124-72-4	N2
6:2FTS	74	D	39	18	10	07/15/202023:23	27619-97-2	N2
8:2FTS	ND	D	39	15	10	07/15/202023:23	39108-34-4	N2

N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-116	Date Extracted	07/09/2020
Lab Sample ID	10522940001-R	Total Amount Extracted	123 mL
Filename	Q200713C_053	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	41	31	77	50-150	Pass	1012829
13C5_PFPeA	41	32	79	50-150	Pass	760891
13C5_PFHxA	41	32	78	50-150	Pass	754233
13C4_PFHpA	41	36	88	50-150	Pass	741216
13C8_PFOA	41	40	98	50-150	Pass	926485
13C9_PFNA	41	42	102	50-150	Pass	955097
13C6_PFDA	41	43	105	50-150	Pass	828674
13C7_PFUdA	41	39	96	50-150	Pass	717144
13C2_PFDoA	41	39	97	50-150	Pass	706727
13C2_PFTeDA	41	36	90	50-150	Pass	519885
d5-EtFOSAA	41	39	96	50-150	Pass	185068
d3-MeFOSAA	41	25	61	50-150	Pass	100163
13C3_PFBS	41	37	90	50-150	Pass	674640
13C3_PFHxS	41	38	93	50-150	Pass	627825
13C8_PFOS	41	38	93	50-150	Pass	791485
13C8_PFOSA	41	34	83	50-150	Pass	1290922
13C2_4:2FTS	41	51	126	50-150	Pass	22365
13C2_6:2FTS	41	41	101	50-150	Pass	17774
13C2_8:2FTS	41	39	95	50-150	Pass	18862

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1213770	574385 - 1723154	605532 - 1816597	Pass
13C4_PFOS	972506	464830 - 1394490	490487 - 1471462	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-117	Date Extracted	07/09/2020
Lab Sample ID	10522940002-R	Total Amount Extracted	234 mL
Filename	Q200713C_052	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	5.0	2.1	0.31	1	07/14/202017:22	375-22-4	N2
PFPeA	4.3	2.1	0.27	1	07/14/202017:22	2706-90-3	N2
PFHxA	4.4	2.1	0.37	1	07/14/202017:22	307-24-4	N2
PFHpA	3.4	2.1	0.45	1	07/14/202017:22	375-85-9	N2
PFOA	6.1	2.1	0.44	1	07/14/202017:22	335-67-1	N2
PFNA	ND	2.1	0.59	1	07/14/202017:22	375-95-1	N2
PFDA	ND	2.1	0.69	1	07/14/202017:22	335-76-2	N2
PFUnA	ND	2.1	0.56	1	07/14/202017:22	2058-94-8	N2
PFDoA	ND	2.1	0.41	1	07/14/202017:22	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	07/14/202017:22	72629-94-8	N2
PFTeDA	ND	2.1	0.41	1	07/14/202017:22	376-06-7	N2
PFOSA	ND	2.1	0.24	1	07/14/202017:22	754-91-6	N2
N-EtFOSAA	ND	2.1	0.94	1	07/14/202017:22	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.45	1	07/14/202017:22	2355-31-9	N2
PFBS	10	1.9	0.21	1	07/14/202017:22	375-73-5	N2
PFPeS	ND	2.0	0.37	1	07/14/202017:22	2706-91-4	N2
PFHxS	3.5	2.0	0.38	1	07/14/202017:22	355-46-4	N2
PFHpS	ND	2.0	0.47	1	07/14/202017:22	375-92-8	N2
PFOS	ND	2.0	0.40	1	07/14/202017:22	1763-23-1	N2
PFNS	ND	2.1	0.47	1	07/14/202017:22	68259-12-1	N2
PFDS	ND	2.1	0.33	1	07/14/202017:22	335-77-3	N2
4:2FTS	ND	2.0	0.59	1	07/14/202017:22	757124-72-4	N2
6:2FTS	33	2.0	0.95	1	07/14/202017:22	27619-97-2	N2
8:2FTS	ND	2.1	0.78	1	07/14/202017:22	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-117	Date Extracted	07/09/2020
Lab Sample ID	10522940002-R	Total Amount Extracted	234 mL
Filename	Q200713C_052	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	16	77	50-150	Pass	997822
13C5_PFPeA	21	18	84	50-150	Pass	785359
13C5_PFHxA	21	19	87	50-150	Pass	828035
13C4_PFHpA	21	20	92	50-150	Pass	760665
13C8_PFOA	21	20	93	50-150	Pass	866604
13C9_PFNA	21	21	97	50-150	Pass	825522
13C6_PFDA	21	21	96	50-150	Pass	694432
13C7_PFUdA	21	20	94	50-150	Pass	639731
13C2_PFDoA	21	19	91	50-150	Pass	605690
13C2_PFTeDA	21	17	78	50-150	Pass	412069
d5-EtFOSAA	21	18	84	50-150	Pass	146641
d3-MeFOSAA	21	20	91	50-150	Pass	137348
13C3_PFBS	21	18	86	50-150	Pass	634997
13C3_PFHxS	21	20	92	50-150	Pass	565064
13C8_PFOS	21	20	94	50-150	Pass	730247
13C8_PFOSA	21	19	89	50-150	Pass	1265911
13C2_4:2FTS	21	27	125	50-150	Pass	222468
13C2_6:2FTS	21	22	102	50-150	Pass	180258
13C2_8:2FTS	21	18	86	50-150	Pass	164053

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1191427	574385 - 1723154	605532 - 1816597	Pass
13C4_PFOS	886893	464830 - 1394490	490487 - 1471462	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-118	Date Extracted	07/09/2020
Lab Sample ID	10522940003-R	Total Amount Extracted	239 mL
Filename	Q200713C_051	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	5.5	2.1	0.31	1	07/14/202016:56	375-22-4	N2
PFPeA	2.3	2.1	0.26	1	07/14/202016:56	2706-90-3	N2
PFHxA	2.4	2.1	0.36	1	07/14/202016:56	307-24-4	N2
PFHpA	ND	2.1	0.44	1	07/14/202016:56	375-85-9	N2
PFOA	5.8	2.1	0.43	1	07/14/202016:56	335-67-1	N2
PFNA	ND	2.1	0.58	1	07/14/202016:56	375-95-1	N2
PFDA	ND	2.1	0.67	1	07/14/202016:56	335-76-2	N2
PFUnA	ND	2.1	0.55	1	07/14/202016:56	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	07/14/202016:56	307-55-1	N2
PFTrDA	ND	2.1	0.44	1	07/14/202016:56	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	07/14/202016:56	376-06-7	N2
PFOSA	ND	2.1	0.24	1	07/14/202016:56	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	07/14/202016:56	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	07/14/202016:56	2355-31-9	N2
PFBS	5.7	1.9	0.20	1	07/14/202016:56	375-73-5	N2
PFPeS	ND	2.0	0.36	1	07/14/202016:56	2706-91-4	N2
PFHxS	4.2	1.9	0.37	1	07/14/202016:56	355-46-4	N2
PFHpS	ND	2.0	0.46	1	07/14/202016:56	375-92-8	N2
PFOS	ND	1.9	0.39	1	07/14/202016:56	1763-23-1	N2
PFNS	ND	2.0	0.46	1	07/14/202016:56	68259-12-1	N2
PFDS	ND	2.0	0.32	1	07/14/202016:56	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	07/14/202016:56	757124-72-4	N2
6:2FTS	13	2.0	0.93	1	07/14/202016:56	27619-97-2	N2
8:2FTS	ND	2.0	0.76	1	07/14/202016:56	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-118	Date Extracted	07/09/2020
Lab Sample ID	10522940003-R	Total Amount Extracted	239 mL
Filename	Q200713C_051	ICAL ID	200713B01
Matrix	Non_Potable_Wat	Starting CCal	Q200713C_049
Collected	06/24/2020	Ending CCal	Q200713C_057
Received	06/26/2020	Method Blank Filename	Q200713C_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	21	19	90	50-150	Pass	1134464
13C5_PFPeA	21	19	91	50-150	Pass	836738
13C5_PFHxA	21	19	90	50-150	Pass	841787
13C4_PFHpA	21	20	94	50-150	Pass	757662
13C8_PFOA	21	19	92	50-150	Pass	833390
13C9_PFNA	21	20	94	50-150	Pass	829170
13C6_PFDA	21	20	94	50-150	Pass	701453
13C7_PFUdA	21	19	90	50-150	Pass	630898
13C2_PFDoA	21	18	84	50-150	Pass	582402
13C2_PFTeDA	21	16	78	50-150	Pass	429874
d5-EtFOSAA	21	17	79	50-150	Pass	144474
d3-MeFOSAA	21	19	91	50-150	Pass	142163
13C3_PFBS	21	19	90	50-150	Pass	646249
13C3_PFHxS	21	20	94	50-150	Pass	599574
13C8_PFOS	21	19	90	50-150	Pass	722502
13C8_PFOSA	21	15	73	50-150	Pass	1079801
13C2_4:2FTS	21	24	112	50-150	Pass	195255
13C2_6:2FTS	21	20	95	50-150	Pass	165236
13C2_8:2FTS	21	18	86	50-150	Pass	169857

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1163195	574385 - 1723154	605532 - 1816597	Pass
13C4_PFOS	920151	464830 - 1394490	490487 - 1471462	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-122	Date Extracted	07/07/2020
Lab Sample ID	10522940004	Total Amount Extracted	111 mL
Filename	Q200708C_008	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	6.8	4.5	0.66	1	07/08/2020 23:55	375-22-4	N2
PFPeA	9.9	4.5	0.57	1	07/08/2020 23:55	2706-90-3	N2
PFHxA	11	4.5	0.79	1	07/08/2020 23:55	307-24-4	N2
PFHpA	8.7	4.5	0.96	1	07/08/2020 23:55	375-85-9	N2
PFOA	22	4.5	0.92	1	07/08/2020 23:55	335-67-1	N2
PFNA	ND	4.5	1.3	1	07/08/2020 23:55	375-95-1	N2
PFDA	ND	4.5	1.4	1	07/08/2020 23:55	335-76-2	N2
PFUnA	ND	4.5	1.2	1	07/08/2020 23:55	2058-94-8	N2
PFDoA	ND	4.5	0.87	1	07/08/2020 23:55	307-55-1	N2
PFTrDA	ND	4.5	0.96	1	07/08/2020 23:55	72629-94-8	N2
PFTeDA	ND	4.5	0.87	1	07/08/2020 23:55	376-06-7	N2
PFOSA	ND	4.5	0.51	1	07/08/2020 23:55	754-91-6	N2
N-EtFOSAA	ND	4.5	2.0	1	07/08/2020 23:55	2991-50-6	N2
N-MeFOSAA	ND	4.5	0.95	1	07/08/2020 23:55	2355-31-9	N2
PFBS	4.1	4.0	0.43	1	07/08/2020 23:55	375-73-5	N2
PFPeS	ND	4.2	0.79	1	07/08/2020 23:55	2706-91-4	N2
PFHxS	4.2	4.1	0.81	1	07/08/2020 23:55	355-46-4	N2
PFHpS	ND	4.3	0.99	1	07/08/2020 23:55	375-92-8	N2
PFOS	ND	4.2	0.85	1	07/08/2020 23:55	1763-23-1	N2
PFNS	ND	4.3	0.99	1	07/08/2020 23:55	68259-12-1	N2
PFDS	ND	4.4	0.70	1	07/08/2020 23:55	335-77-3	N2
4:2FTS	ND	4.2	1.3	1	07/08/2020 23:55	757124-72-4	N2
6:2FTS	15	4.3	2.0	1	07/08/2020 23:55	27619-97-2	N2
8:2FTS	ND	4.3	1.7	1	07/08/2020 23:55	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-122	Date Extracted	07/07/2020
Lab Sample ID	10522940004	Total Amount Extracted	111 mL
Filename	Q200708C_008	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	45	40	88	50-150	Pass	1137046
13C5_PFPeA	45	42	93	50-150	Pass	854596
13C5_PFHxA	45	44	97	50-150	Pass	868672
13C4_PFHpA	45	43	95	50-150	Pass	751256
13C8_PFOA	45	44	98	50-150	Pass	808721
13C9_PFNA	45	51	112	50-150	Pass	792848
13C6_PFDA	45	56	124	50-150	Pass	722487
13C7_PFUdA	45	57	125	50-150	Pass	617969
13C2_PFDoA	45	64	141	50-150	Pass	708799
13C2_PFTeDA	45	51	114	50-150	Pass	429172
d5-EtFOSAA	45	43	95	50-150	Pass	149860
d3-MeFOSAA	45	45	100	50-150	Pass	123608
13C3_PFBS	45	41	90	50-150	Pass	664582
13C3_PFHxS	45	44	98	50-150	Pass	586590
13C8_PFOS	45	45	100	50-150	Pass	731817
13C8_PFOSA	45	53	117	50-150	Pass	1285710
13C2_4:2FTS	45	63	139	50-150	Pass	198292
13C2_6:2FTS	45	53	116	50-150	Pass	170125
13C2_8:2FTS	45	58	128	50-150	Pass	176090

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	985307	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	769774	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-127	Date Extracted	07/07/2020
Lab Sample ID	10522940005	Total Amount Extracted	108 mL
Filename	Q200708C_009	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	6.2	4.6	0.68	1	07/09/202000:21	375-22-4	N2
PFPeA	ND	4.6	0.58	1	07/09/202000:21	2706-90-3	N2
PFHxA	7.8	4.6	0.81	1	07/09/202000:21	307-24-4	N2
PFHpA	6.5	4.6	0.98	1	07/09/202000:21	375-85-9	N2
PFOA	27	4.6	0.94	1	07/09/202000:21	335-67-1	N2
PFNA	ND	4.6	1.3	1	07/09/202000:21	375-95-1	N2
PFDA	ND	4.6	1.5	1	07/09/202000:21	335-76-2	N2
PFUnA	ND	4.6	1.2	1	07/09/202000:21	2058-94-8	N2
PFDoA	ND	4.6	0.89	1	07/09/202000:21	307-55-1	N2
PFTrDA	ND	4.6	0.98	1	07/09/202000:21	72629-94-8	N2
PFTeDA	ND	4.6	0.89	1	07/09/202000:21	376-06-7	N2
PFOSA	ND	4.6	0.53	1	07/09/202000:21	754-91-6	N2
N-EtFOSAA	ND	4.6	2.0	1	07/09/202000:21	2991-50-6	N2
N-MeFOSAA	ND	4.6	0.98	1	07/09/202000:21	2355-31-9	N2
PFBS	ND	4.1	0.45	1	07/09/202000:21	375-73-5	N2
PFPeS	ND	4.4	0.81	1	07/09/202000:21	2706-91-4	N2
PFHxS	8.4	4.2	0.83	1	07/09/202000:21	355-46-4	N2
PFHpS	ND	4.4	1.0	1	07/09/202000:21	375-92-8	N2
PFOS	18	4.3	0.87	1	07/09/202000:21	1763-23-1	N2
PFNS	ND	4.5	1.0	1	07/09/202000:21	68259-12-1	N2
PFDS	ND	4.5	0.72	1	07/09/202000:21	335-77-3	N2
4:2FTS	ND	4.3	1.3	1	07/09/202000:21	757124-72-4	N2
6:2FTS	6.6	4.4	2.1	1	07/09/202000:21	27619-97-2	N2
8:2FTS	ND	4.5	1.7	1	07/09/202000:21	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-127	Date Extracted	07/07/2020
Lab Sample ID	10522940005	Total Amount Extracted	108 mL
Filename	Q200708C_009	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	46	45	97	50-150	Pass	1134235
13C5_PFPeA	46	48	104	50-150	Pass	857424
13C5_PFHxA	46	47	100	50-150	Pass	812678
13C4_PFHpA	46	49	106	50-150	Pass	753091
13C8_PFOA	46	48	104	50-150	Pass	774709
13C9_PFNA	46	59	127	50-150	Pass	831193
13C6_PFDA	46	53	115	50-150	Pass	616656
13C7_PFUdA	46	57	122	50-150	Pass	555596
13C2_PFDoA	46	69	149	50-150	Pass	686538
13C2_PFTeDA	46	58	126	50-150	Pass	438281
d5-EtFOSAA	46	45	96	50-150	Pass	138908
d3-MeFOSAA	46	48	103	50-150	Pass	116396
13C3_PFBS	46	45	97	50-150	Pass	645244
13C3_PFHxS	46	50	107	50-150	Pass	591446
13C8_PFOS	46	49	105	50-150	Pass	710053
13C8_PFOSA	46	60	130	50-150	Pass	1317765
13C2_4:2FTS	46	65	140	50-150	Pass	180468
13C2_6:2FTS	46	59	127	50-150	Pass	167077
13C2_8:2FTS	46	59	127	50-150	Pass	161832

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	888909	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	709142	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-128	Date Extracted	07/07/2020
Lab Sample ID	10522940006	Total Amount Extracted	245 mL
Filename	Q200708C_010	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	13		2.0	0.30	1	07/09/202000:48	375-22-4	N2
PFPeA	19		2.0	0.26	1	07/09/202000:48	2706-90-3	N2
PFHxA	24		2.0	0.36	1	07/09/202000:48	307-24-4	N2
PFHpA	19		2.0	0.43	1	07/09/202000:48	375-85-9	N2
PFOA	40		2.0	0.42	1	07/09/202000:48	335-67-1	N2
PFNA	6.6		2.0	0.57	1	07/09/202000:48	375-95-1	N2
PFDA	ND		2.0	0.66	1	07/09/202000:48	335-76-2	N2
PFUnA	ND		2.0	0.54	1	07/09/202000:48	2058-94-8	N2
PFDoA	ND		2.0	0.39	1	07/09/202000:48	307-55-1	N2
PFTrDA	ND		2.0	0.43	1	07/09/202000:48	72629-94-8	N2
PFTeDA	ND		2.0	0.39	1	07/09/202000:48	376-06-7	N2
PFOSA	ND		2.0	0.23	1	07/09/202000:48	754-91-6	N2
N-EtFOSAA	ND		2.0	0.90	1	07/09/202000:48	2991-50-6	N2
N-MeFOSAA	ND		2.0	0.43	1	07/09/202000:48	2355-31-9	N2
PFBS	4.0		1.8	0.20	1	07/09/202000:48	375-73-5	N2
PFPeS	ND		1.9	0.36	1	07/09/202000:48	2706-91-4	N2
PFHxS	8.7		1.9	0.37	1	07/09/202000:48	355-46-4	N2
PFHpS	2.0		1.9	0.45	1	07/09/202000:48	375-92-8	N2
PFOS	58		1.9	0.38	1	07/09/202000:48	1763-23-1	N2
PFNS	ND		2.0	0.45	1	07/09/202000:48	68259-12-1	N2
PFDS	ND		2.0	0.32	1	07/09/202000:48	335-77-3	N2
4:2FTS	ND	D	19	5.7	10	07/10/202012:13	757124-72-4	N2
6:2FTS	ND	D	19	9.1	10	07/10/202012:13	27619-97-2	N2
8:2FTS	ND		2.0	0.75	1	07/09/202000:48	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-128	Date Extracted	07/07/2020
Lab Sample ID	10522940006	Total Amount Extracted	245 mL
Filename	Q200708C_010	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	17	82	50-150	Pass	1008151
13C5_PFPeA	20	17	84	50-150	Pass	729427
13C5_PFHxA	20	17	84	50-150	Pass	722304
13C4_PFHpA	20	19	91	50-150	Pass	684129
13C8_PFOA	20	22	107	50-150	Pass	846616
13C9_PFNA	20	25	122	50-150	Pass	864479
13C6_PFDA	20	24	120	50-150	Pass	697433
13C7_PFUdA	20	25	124	50-150	Pass	611567
13C2_PFDoA	20	27	132	50-150	Pass	659918
13C2_PFTeDA	20	21	104	50-150	Pass	394333
d5-EtFOSAA	20	18	90	50-150	Pass	140562
d3-MeFOSAA	20	21	102	50-150	Pass	125110
13C3_PFBS	20	19	91	50-150	Pass	643372
13C3_PFHxS	20	20	97	50-150	Pass	584597
13C8_PFOS	20	19	92	50-150	Pass	673640
13C8_PFOSA	20	12	60	50-150	Pass	659152
13C2_4:2FTS	20	23	114	50-150	Pass	16116
13C2_6:2FTS	20	23	111	50-150	Pass	16017
13C2_8:2FTS	20	31	149	50-150	Pass	205951

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	940915	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	769408	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-129	Date Extracted	07/07/2020
Lab Sample ID	10522940007	Total Amount Extracted	110 mL
Filename	Q200708C_011	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	15		4.5	0.66	1	07/09/202001:14	375-22-4	N2
PFPeA	26		4.5	0.57	1	07/09/202001:14	2706-90-3	N2
PFHxA	33		4.5	0.79	1	07/09/202001:14	307-24-4	N2
PFHpA	20		4.5	0.96	1	07/09/202001:14	375-85-9	N2
PFOA	80		4.5	0.93	1	07/09/202001:14	335-67-1	N2
PFNA	9.8		4.5	1.3	1	07/09/202001:14	375-95-1	N2
PFDA	ND		4.5	1.5	1	07/09/202001:14	335-76-2	N2
PFUnA	ND		4.5	1.2	1	07/09/202001:14	2058-94-8	N2
PFDoA	ND		4.5	0.87	1	07/09/202001:14	307-55-1	N2
PFTrDA	ND		4.5	0.96	1	07/09/202001:14	72629-94-8	N2
PFTeDA	ND		4.5	0.87	1	07/09/202001:14	376-06-7	N2
PFOSA	ND		4.5	0.52	1	07/09/202001:14	754-91-6	N2
N-EtFOSAA	ND		4.5	2.0	1	07/09/202001:14	2991-50-6	N2
N-MeFOSAA	ND		4.5	0.96	1	07/09/202001:14	2355-31-9	N2
PFBS	ND		4.0	0.44	1	07/09/202001:14	375-73-5	N2
PFPeS	ND		4.3	0.79	1	07/09/202001:14	2706-91-4	N2
PFHxS	9.0		4.2	0.81	1	07/09/202001:14	355-46-4	N2
PFHpS	ND		4.3	0.99	1	07/09/202001:14	375-92-8	N2
PFOS	96		4.2	0.85	1	07/09/202001:14	1763-23-1	N2
PFNS	ND		4.4	0.99	1	07/09/202001:14	68259-12-1	N2
PFDS	ND		4.4	0.71	1	07/09/202001:14	335-77-3	N2
4:2FTS	ND	D	43	13	10	07/10/202012:40	757124-72-4	N2
6:2FTS	ND	D	43	20	10	07/10/202012:40	27619-97-2	N2
8:2FTS	ND		4.4	1.7	1	07/09/202001:14	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-129	Date Extracted	07/07/2020
Lab Sample ID	10522940007	Total Amount Extracted	110 mL
Filename	Q200708C_011	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	45	38	83	50-150	Pass	1047880
13C5_PFPeA	45	38	84	50-150	Pass	748176
13C5_PFHxA	45	38	83	50-150	Pass	725175
13C4_PFHpA	45	41	91	50-150	Pass	700410
13C8_PFOA	45	45	99	50-150	Pass	802000
13C9_PFNA	45	53	116	50-150	Pass	804715
13C6_PFDA	45	57	124	50-150	Pass	708438
13C7_PFUdA	45	56	122	50-150	Pass	587225
13C2_PFDoA	45	59	130	50-150	Pass	638084
13C2_PFTeDA	45	51	112	50-150	Pass	414098
d5-EtFOSAA	45	44	96	50-150	Pass	146518
d3-MeFOSAA	45	50	110	50-150	Pass	131818
13C3_PFBS	45	40	88	50-150	Pass	633661
13C3_PFHxS	45	45	99	50-150	Pass	578307
13C8_PFOS	45	45	99	50-150	Pass	707859
13C8_PFOSA	45	54	118	50-150	Pass	1267387
13C2_4:2FTS	45	55	120	50-150	Pass	15934
13C2_6:2FTS	45	51	113	50-150	Pass	15295
13C2_8:2FTS	45	67	147	50-150	Pass	197663

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	962226	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	751417	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	MW-131	Date Extracted	07/07/2020
Lab Sample ID	10522940008	Total Amount Extracted	111 mL
Filename	Q200708C_012	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	10.0		4.5	0.66	1	07/09/202001:41	375-22-4	N2
PFPeA	11		4.5	0.56	1	07/09/202001:41	2706-90-3	N2
PFHxA	14		4.5	0.78	1	07/09/202001:41	307-24-4	N2
PFHpA	10		4.5	0.95	1	07/09/202001:41	375-85-9	N2
PFOA	33		4.5	0.91	1	07/09/202001:41	335-67-1	N2
PFNA	5.4		4.5	1.2	1	07/09/202001:41	375-95-1	N2
PFDA	ND		4.5	1.4	1	07/09/202001:41	335-76-2	N2
PFUnA	ND		4.5	1.2	1	07/09/202001:41	2058-94-8	N2
PFDoA	ND		4.5	0.86	1	07/09/202001:41	307-55-1	N2
PFTrDA	ND		4.5	0.95	1	07/09/202001:41	72629-94-8	N2
PFTeDA	ND		4.5	0.86	1	07/09/202001:41	376-06-7	N2
PFOSA	ND		4.5	0.51	1	07/09/202001:41	754-91-6	N2
N-EtFOSAA	ND		4.5	2.0	1	07/09/202001:41	2991-50-6	N2
N-MeFOSAA	ND		4.5	0.95	1	07/09/202001:41	2355-31-9	N2
PFBS	4.4		4.0	0.43	1	07/09/202001:41	375-73-5	N2
PFPeS	ND		4.2	0.78	1	07/09/202001:41	2706-91-4	N2
PFHxS	6.3		4.1	0.80	1	07/09/202001:41	355-46-4	N2
PFHpS	ND		4.3	0.98	1	07/09/202001:41	375-92-8	N2
PFOS	68		4.1	0.84	1	07/09/202001:41	1763-23-1	N2
PFNS	ND		4.3	0.98	1	07/09/202001:41	68259-12-1	N2
PFDS	8.7		4.3	0.70	1	07/09/202001:41	335-77-3	N2
4:2FTS	ND	D	42	12	10	07/10/202013:06	757124-72-4	N2
6:2FTS	11		4.3	2.0	1	07/09/202001:41	27619-97-2	N2
8:2FTS	ND		4.3	1.6	1	07/09/202001:41	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	MW-131	Date Extracted	07/07/2020
Lab Sample ID	10522940008	Total Amount Extracted	111 mL
Filename	Q200708C_012	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_002
Collected	06/24/2020	Ending CCal	Q200708C_013
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	45	39	87	50-150	Pass	1075176
13C5_PFPeA	45	40	90	50-150	Pass	788477
13C5_PFHxA	45	42	94	50-150	Pass	808910
13C4_PFHpA	45	43	95	50-150	Pass	720179
13C8_PFOA	45	44	98	50-150	Pass	775804
13C9_PFNA	45	49	110	50-150	Pass	764083
13C6_PFDA	45	57	128	50-150	Pass	731142
13C7_PFUdA	45	56	124	50-150	Pass	600693
13C2_PFDoA	45	55	122	50-150	Pass	600343
13C2_PFTeDA	45	46	103	50-150	Pass	380697
d5-EtFOSAA	45	37	83	50-150	Pass	127897
d3-MeFOSAA	45	48	107	50-150	Pass	129589
13C3_PFBS	45	40	88	50-150	Pass	622931
13C3_PFHxS	45	43	96	50-150	Pass	562176
13C8_PFOS	45	43	96	50-150	Pass	688491
13C8_PFOSA	45	52	116	50-150	Pass	1251908
13C2_4:2FTS	45	46	103	50-150	Pass	14790
13C2_6:2FTS	45	54	120	50-150	Pass	168757
13C2_8:2FTS	45	54	120	50-150	Pass	161508

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	944561	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	754190	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup 2	Date Extracted	07/07/2020
Lab Sample ID	10522940009	Total Amount Extracted	108 mL
Filename	Q200708C_014	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	5.2	4.6	0.68	1	07/09/202002:34	375-22-4	N2
PFPeA	ND	4.6	0.58	1	07/09/202002:34	2706-90-3	N2
PFHxA	ND	4.6	0.81	1	07/09/202002:34	307-24-4	N2
PFHpA	ND	4.6	0.98	1	07/09/202002:34	375-85-9	N2
PFOA	6.7	4.6	0.94	1	07/09/202002:34	335-67-1	N2
PFNA	ND	4.6	1.3	1	07/09/202002:34	375-95-1	N2
PFDA	ND	4.6	1.5	1	07/09/202002:34	335-76-2	N2
PFUnA	ND	4.6	1.2	1	07/09/202002:34	2058-94-8	N2
PFDoA	ND	4.6	0.89	1	07/09/202002:34	307-55-1	N2
PFTrDA	ND	4.6	0.98	1	07/09/202002:34	72629-94-8	N2
PFTeDA	ND	4.6	0.89	1	07/09/202002:34	376-06-7	N2
PFOSA	ND	4.6	0.53	1	07/09/202002:34	754-91-6	N2
N-EtFOSAA	ND	4.6	2.0	1	07/09/202002:34	2991-50-6	N2
N-MeFOSAA	ND	4.6	0.98	1	07/09/202002:34	2355-31-9	N2
PFBS	5.4	4.1	0.45	1	07/09/202002:34	375-73-5	N2
PFPeS	ND	4.4	0.81	1	07/09/202002:34	2706-91-4	N2
PFHxS	ND	4.2	0.83	1	07/09/202002:34	355-46-4	N2
PFHpS	ND	4.4	1.0	1	07/09/202002:34	375-92-8	N2
PFOS	ND	4.3	0.87	1	07/09/202002:34	1763-23-1	N2
PFNS	ND	4.5	1.0	1	07/09/202002:34	68259-12-1	N2
PFDS	ND	4.5	0.72	1	07/09/202002:34	335-77-3	N2
4:2FTS	ND	4.3	1.3	1	07/09/202002:34	757124-72-4	N2
6:2FTS	12	4.4	2.1	1	07/09/202002:34	27619-97-2	N2
8:2FTS	ND	4.5	1.7	1	07/09/202002:34	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Dup 2	Date Extracted	07/07/2020
Lab Sample ID	10522940009	Total Amount Extracted	108 mL
Filename	Q200708C_014	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	46	42	90	50-150	Pass	1087318
13C5_PFPeA	46	45	96	50-150	Pass	820806
13C5_PFHxA	46	45	97	50-150	Pass	810177
13C4_PFHpA	46	46	98	50-150	Pass	722031
13C8_PFOA	46	47	102	50-150	Pass	788847
13C9_PFNA	46	52	112	50-150	Pass	777860
13C6_PFDA	46	50	107	50-150	Pass	612910
13C7_PFUdA	46	53	115	50-150	Pass	555956
13C2_PFDoA	46	58	126	50-150	Pass	618181
13C2_PFTeDA	46	48	103	50-150	Pass	382501
d5-EtFOSAA	46	37	80	50-150	Pass	122109
d3-MeFOSAA	46	45	98	50-150	Pass	117760
13C3_PFBS	46	42	91	50-150	Pass	628747
13C3_PFHxS	46	45	98	50-150	Pass	575264
13C8_PFOS	46	45	97	50-150	Pass	700114
13C8_PFOSA	46	44	94	50-150	Pass	1014914
13C2_4:2FTS	46	54	117	50-150	Pass	156255
13C2_6:2FTS	46	50	107	50-150	Pass	146851
13C2_8:2FTS	46	48	103	50-150	Pass	138979

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	919937	544794 - 1634382	626939 - 1880816	Pass
13C4_PFOS	753285	479924 - 1439772	500521 - 1501562	Pass

N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	07/07/2020
Lab Sample ID	10522940010	Total Amount Extracted	245 mL
Filename	Q200708C_015	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.30	1	07/09/202003:01	375-22-4	N2
PFPeA	ND	2.0	0.26	1	07/09/202003:01	2706-90-3	N2
PFHxA	ND	2.0	0.36	1	07/09/202003:01	307-24-4	N2
PFHpA	ND	2.0	0.43	1	07/09/202003:01	375-85-9	N2
PFOA	ND	2.0	0.42	1	07/09/202003:01	335-67-1	N2
PFNA	ND	2.0	0.57	1	07/09/202003:01	375-95-1	N2
PFDA	ND	2.0	0.66	1	07/09/202003:01	335-76-2	N2
PFUnA	ND	2.0	0.54	1	07/09/202003:01	2058-94-8	N2
PFDoA	ND	2.0	0.39	1	07/09/202003:01	307-55-1	N2
PFTrDA	ND	2.0	0.43	1	07/09/202003:01	72629-94-8	N2
PFTeDA	ND	2.0	0.39	1	07/09/202003:01	376-06-7	N2
PFOSA	ND	2.0	0.23	1	07/09/202003:01	754-91-6	N2
N-EtFOSAA	ND	2.0	0.90	1	07/09/202003:01	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.43	1	07/09/202003:01	2355-31-9	N2
PFBS	ND	1.8	0.20	1	07/09/202003:01	375-73-5	N2
PFPeS	ND	1.9	0.36	1	07/09/202003:01	2706-91-4	N2
PFHxS	ND	1.9	0.37	1	07/09/202003:01	355-46-4	N2
PFHpS	ND	1.9	0.45	1	07/09/202003:01	375-92-8	N2
PFOS	ND	1.9	0.38	1	07/09/202003:01	1763-23-1	N2
PFNS	ND	2.0	0.45	1	07/09/202003:01	68259-12-1	N2
PFDS	ND	2.0	0.32	1	07/09/202003:01	335-77-3	N2
4:2FTS	ND	1.9	0.57	1	07/09/202003:01	757124-72-4	N2
6:2FTS	ND	1.9	0.91	1	07/09/202003:01	27619-97-2	N2
8:2FTS	ND	2.0	0.75	1	07/09/202003:01	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Trip Blank	Date Extracted	07/07/2020
Lab Sample ID	10522940010	Total Amount Extracted	245 mL
Filename	Q200708C_015	ICAL ID	200626A01
Matrix	Non_Potable_Wat	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	18	88	50-150	Pass	1128197
13C5_PFPeA	20	19	93	50-150	Pass	844975
13C5_PFHxA	20	20	97	50-150	Pass	864069
13C4_PFHpA	20	20	96	50-150	Pass	751855
13C8_PFOA	20	20	99	50-150	Pass	813535
13C9_PFNA	20	23	112	50-150	Pass	794360
13C6_PFDA	20	23	111	50-150	Pass	646902
13C7_PFUdA	20	27	131	50-150	Pass	644539
13C2_PFDoA	20	26	129	50-150	Pass	644684
13C2_PFTeDA	20	22	108	50-150	Pass	408957
d5-EtFOSAA	20	16	81	50-150	Pass	126407
d3-MeFOSAA	20	19	91	50-150	Pass	112532
13C3_PFBS	20	19	93	50-150	Pass	683766
13C3_PFHxS	20	21	102	50-150	Pass	609379
13C8_PFOS	20	20	100	50-150	Pass	732210
13C8_PFOSA	20	25	121	50-150	Pass	1328917
13C2_4:2FTS	20	22	107	50-150	Pass	152395
13C2_6:2FTS	20	20	100	50-150	Pass	145207
13C2_8:2FTS	20	22	110	50-150	Pass	150942

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	981871	544794 - 1634382	626939 - 1880816	Pass
13C4_PFOS	769148	479924 - 1439772	500521 - 1501562	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank	Date Extracted	07/07/2020
Lab Sample ID	10522940011	Total Amount Extracted	237 mL
Filename	Q200708C_016	ICAL ID	200626A01
Matrix	Water	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.31	1	07/09/202003:27	375-22-4	N2
PFPeA	ND	2.1	0.26	1	07/09/202003:27	2706-90-3	N2
PFHxA	ND	2.1	0.37	1	07/09/202003:27	307-24-4	N2
PFHpA	ND	2.1	0.45	1	07/09/202003:27	375-85-9	N2
PFOA	ND	2.1	0.43	1	07/09/202003:27	335-67-1	N2
PFNA	ND	2.1	0.58	1	07/09/202003:27	375-95-1	N2
PFDA	ND	2.1	0.68	1	07/09/202003:27	335-76-2	N2
PFUnA	ND	2.1	0.55	1	07/09/202003:27	2058-94-8	N2
PFDoA	ND	2.1	0.40	1	07/09/202003:27	307-55-1	N2
PFTrDA	ND	2.1	0.45	1	07/09/202003:27	72629-94-8	N2
PFTeDA	ND	2.1	0.40	1	07/09/202003:27	376-06-7	N2
PFOSA	ND	2.1	0.24	1	07/09/202003:27	754-91-6	N2
N-EtFOSAA	ND	2.1	0.92	1	07/09/202003:27	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.44	1	07/09/202003:27	2355-31-9	N2
PFBS	ND	1.9	0.20	1	07/09/202003:27	375-73-5	N2
PFPeS	ND	2.0	0.37	1	07/09/202003:27	2706-91-4	N2
PFHxS	ND	1.9	0.38	1	07/09/202003:27	355-46-4	N2
PFHpS	ND	2.0	0.46	1	07/09/202003:27	375-92-8	N2
PFOS	ND	1.9	0.39	1	07/09/202003:27	1763-23-1	N2
PFNS	ND	2.0	0.46	1	07/09/202003:27	68259-12-1	N2
PFDS	ND	2.0	0.33	1	07/09/202003:27	335-77-3	N2
4:2FTS	ND	2.0	0.58	1	07/09/202003:27	757124-72-4	N2
6:2FTS	ND	2.0	0.94	1	07/09/202003:27	27619-97-2	N2
8:2FTS	ND	2.0	0.77	1	07/09/202003:27	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Blank	Date Extracted	07/07/2020
Lab Sample ID	10522940011	Total Amount Extracted	237 mL
Filename	Q200708C_016	ICAL ID	200626A01
Matrix	Water	Starting CCal	Q200708C_013
Collected	06/24/2020	Ending CCal	Q200708C_022
Received	06/26/2020	Method Blank Filename	Q200708C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	18	83	50-150	Pass	1119707
13C5_PFPeA	21	19	88	50-150	Pass	836875
13C5_PFHxA	21	18	86	50-150	Pass	804273
13C4_PFHpA	21	20	94	50-150	Pass	774229
13C8_PFOA	21	21	98	50-150	Pass	839137
13C9_PFNA	21	25	117	50-150	Pass	854334
13C6_PFDA	21	23	107	50-150	Pass	642248
13C7_PFUdA	21	22	105	50-150	Pass	532332
13C2_PFDoA	21	28	131	50-150	Pass	675731
13C2_PFTeDA	21	23	107	50-150	Pass	415789
d5-EtFOSAA	21	17	79	50-150	Pass	127592
d3-MeFOSAA	21	19	92	50-150	Pass	116435
13C3_PFBS	21	19	89	50-150	Pass	679595
13C3_PFHxS	21	21	98	50-150	Pass	606278
13C8_PFOS	21	20	94	50-150	Pass	708645
13C8_PFOSA	21	25	117	50-150	Pass	1320163
13C2_4:2FTS	21	21	99	50-150	Pass	146906
13C2_6:2FTS	21	21	100	50-150	Pass	152626
13C2_8:2FTS	21	22	105	50-150	Pass	148792

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1025013	544794 - 1634382	626939 - 1880816	Pass
13C4_PFOS	792108	479924 - 1439772	500521 - 1501562	Pass

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-80627	Total Amount Extracted	254 mL
Filename	Q200708C_004	ICAL ID	200626A01
Matrix	Water	Starting CCal	Q200708C_002
Date Extracted	07/07/2020	Ending CCal	Q200708C_013

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.29	1	07/08/2020 22:08	375-22-4	N2
PFPeA	ND	2.0	0.25	1	07/08/2020 22:08	2706-90-3	N2
PFHxA	ND	2.0	0.34	1	07/08/2020 22:08	307-24-4	N2
PFHpA	ND	2.0	0.42	1	07/08/2020 22:08	375-85-9	N2
PFOA	ND	2.0	0.40	1	07/08/2020 22:08	335-67-1	N2
PFNA	ND	2.0	0.55	1	07/08/2020 22:08	375-95-1	N2
PFDA	ND	2.0	0.63	1	07/08/2020 22:08	335-76-2	N2
PFUnA	ND	2.0	0.52	1	07/08/2020 22:08	2058-94-8	N2
PFDoA	ND	2.0	0.38	1	07/08/2020 22:08	307-55-1	N2
PFTrDA	ND	2.0	0.42	1	07/08/2020 22:08	72629-94-8	N2
PFTeDA	ND	2.0	0.38	1	07/08/2020 22:08	376-06-7	N2
PFOSA	ND	2.0	0.22	1	07/08/2020 22:08	754-91-6	N2
N-EtFOSAA	ND	2.0	0.86	1	07/08/2020 22:08	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.41	1	07/08/2020 22:08	2355-31-9	N2
PFBS	ND	1.7	0.19	1	07/08/2020 22:08	375-73-5	N2
PFPeS	ND	1.8	0.34	1	07/08/2020 22:08	2706-91-4	N2
PFHxS	ND	1.8	0.35	1	07/08/2020 22:08	355-46-4	N2
PFHpS	ND	1.9	0.43	1	07/08/2020 22:08	375-92-8	N2
PFOS	ND	1.8	0.37	1	07/08/2020 22:08	1763-23-1	N2
PFNS	ND	1.9	0.43	1	07/08/2020 22:08	68259-12-1	N2
PFDS	ND	1.9	0.30	1	07/08/2020 22:08	335-77-3	N2
4:2FTS	ND	1.8	0.55	1	07/08/2020 22:08	757124-72-4	N2
6:2FTS	ND	1.9	0.88	1	07/08/2020 22:08	27619-97-2	N2
8:2FTS	ND	1.9	0.72	1	07/08/2020 22:08	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKLY	Date Extracted	07/07/2020
Lab Sample ID	BLANK-80627	Total Amount Extracted	254 mL
Filename	Q200708C_004	ICAL ID	200626A01
Matrix	Water	Starting CCal	Q200708C_002
Collected	07/01/2020	Ending CCal	Q200708C_013
Received	07/01/2020	Method Blank Filename	

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	17	88	50-150	Pass	1027122
13C5_PFPeA	20	18	92	50-150	Pass	766467
13C5_PFHxA	20	18	91	50-150	Pass	741968
13C4_PFHpA	20	19	96	50-150	Pass	686170
13C8_PFOA	20	21	105	50-150	Pass	789633
13C9_PFNA	20	22	113	50-150	Pass	735494
13C6_PFDA	20	21	108	50-150	Pass	581164
13C7_PFUdA	20	23	118	50-150	Pass	533241
13C2_PFDoA	20	25	125	50-150	Pass	574884
13C2_PFTeDA	20	20	103	50-150	Pass	357214
d5-EtFOSAA	20	14	73	50-150	Pass	105921
d3-MeFOSAA	20	18	91	50-150	Pass	103359
13C3_PFBS	20	18	89	50-150	Pass	598379
13C3_PFHxS	20	19	98	50-150	Pass	538758
13C8_PFOS	20	18	93	50-150	Pass	625262
13C8_PFOSA	20	22	112	50-150	Pass	1132375
13C2_4:2FTS	20	20	100	50-150	Pass	130368
13C2_6:2FTS	20	20	103	50-150	Pass	136726
13C2_8:2FTS	20	23	116	50-150	Pass	147137

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	894369	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	707534	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-80702	Total Amount Extracted	250 mL
Filename	Q200713C_004	ICAL ID	200713B01
Matrix	Water	Starting CCal	Q200713C_002
Date Extracted	07/09/2020	Ending CCal	Q200713C_014

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.29	1	07/13/2020 20:06	375-22-4	N2
PFPeA	ND	2.0	0.25	1	07/13/2020 20:06	2706-90-3	N2
PFHxA	ND	2.0	0.35	1	07/13/2020 20:06	307-24-4	N2
PFHpA	ND	2.0	0.42	1	07/13/2020 20:06	375-85-9	N2
PFOA	ND	2.0	0.41	1	07/13/2020 20:06	335-67-1	N2
PFNA	ND	2.0	0.56	1	07/13/2020 20:06	375-95-1	N2
PFDA	ND	2.0	0.64	1	07/13/2020 20:06	335-76-2	N2
PFUnA	ND	2.0	0.53	1	07/13/2020 20:06	2058-94-8	N2
PFDoA	ND	2.0	0.38	1	07/13/2020 20:06	307-55-1	N2
PFTrDA	ND	2.0	0.42	1	07/13/2020 20:06	72629-94-8	N2
PFTeDA	ND	2.0	0.38	1	07/13/2020 20:06	376-06-7	N2
PFOSA	ND	2.0	0.23	1	07/13/2020 20:06	754-91-6	N2
N-EtFOSAA	ND	2.0	0.88	1	07/13/2020 20:06	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.42	1	07/13/2020 20:06	2355-31-9	N2
PFBS	ND	1.8	0.19	1	07/13/2020 20:06	375-73-5	N2
PFPeS	ND	1.9	0.35	1	07/13/2020 20:06	2706-91-4	N2
PFHxS	ND	1.8	0.36	1	07/13/2020 20:06	355-46-4	N2
PFHpS	ND	1.9	0.44	1	07/13/2020 20:06	375-92-8	N2
PFOS	ND	1.8	0.37	1	07/13/2020 20:06	1763-23-1	N2
PFNS	ND	1.9	0.44	1	07/13/2020 20:06	68259-12-1	N2
PFDS	ND	1.9	0.31	1	07/13/2020 20:06	335-77-3	N2
4:2FTS	ND	1.9	0.56	1	07/13/2020 20:06	757124-72-4	N2
6:2FTS	ND	1.9	0.89	1	07/13/2020 20:06	27619-97-2	N2
8:2FTS	ND	1.9	0.73	1	07/13/2020 20:06	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKMY	Date Extracted	07/09/2020
Lab Sample ID	BLANK-80702	Total Amount Extracted	250 mL
Filename	Q200713C_004	ICAL ID	200713B01
Matrix	Water	Starting CCal	Q200713C_002
Collected	07/08/2020	Ending CCal	Q200713C_014
Received	07/08/2020	Method Blank Filename	Q200713C_004

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	95	50-150	Pass	1143748
13C5_PFPeA	20	20	98	50-150	Pass	855278
13C5_PFHxA	20	20	98	50-150	Pass	872113
13C4_PFHpA	20	20	98	50-150	Pass	750053
13C8_PFOA	20	20	100	50-150	Pass	863317
13C9_PFNA	20	20	100	50-150	Pass	852547
13C6_PFDA	20	19	95	50-150	Pass	685392
13C7_PFUdA	20	20	98	50-150	Pass	661948
13C2_PFDoA	20	19	97	50-150	Pass	646015
13C2_PFTeDA	20	19	94	50-150	Pass	495105
d5-EtFOSAA	20	18	90	50-150	Pass	157975
d3-MeFOSAA	20	19	95	50-150	Pass	143254
13C3_PFBS	20	19	97	50-150	Pass	661263
13C3_PFHxS	20	20	98	50-150	Pass	598478
13C8_PFOS	20	19	95	50-150	Pass	735749
13C8_PFOSA	20	18	91	50-150	Pass	1290718
13C2_4:2FTS	20	19	93	50-150	Pass	154573
13C2_6:2FTS	20	20	102	50-150	Pass	167940
13C2_8:2FTS	20	19	92	50-150	Pass	175581

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1109052	574385 - 1723154	606424 - 1819272	Pass
13C4_PFOS	885786	464830 - 1394490	485138 - 1455414	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-80628		
LCS Filename	Q200708C_005	Matrix	Water
Total Amount Extracted	246mL	Dilution	1
ICAL ID	200626A01	Extracted	07/07/2020
Start CCal Filename	Q200708C_002	Analyzed	07/08/2020 22:35
End CCal Filename	Q200708C_013	Injected By	PY1
Method Blank Filename	Q200708C_004		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	22	109	70.0 - 130.0
PFPeA	20	22	111	70.0 - 130.0
PFHxA	20	21	105	70.0 - 130.0
PFHpA	20	23	112	70.0 - 130.0
PFOA	20	20	100	70.0 - 130.0
PFNA	20	23	112	70.0 - 130.0
PFDA	20	23	114	70.0 - 130.0
PFUnA	20	23	113	70.0 - 130.0
PFDoA	20	21	102	70.0 - 130.0
PFTrDA	20	18	90	70.0 - 130.0
PFTeDA	20	20	100	70.0 - 130.0
PFOSA	20	21	105	70.0 - 130.0
N-EtFOSAA	20	24	120	70.0 - 130.0
N-MeFOSAA	20	20	101	70.0 - 130.0
PFBS	18	19	106	70.0 - 130.0
PFPeS	19	22	116	70.0 - 130.0
PFHxS	18	20	107	70.0 - 130.0
PFHpS	19	22	115	70.0 - 130.0
PFOS	19	21	112	70.0 - 130.0
PFNS	19	21	107	70.0 - 130.0
PFDS	20	21	106	70.0 - 130.0
4:2FTS	19	21	112	70.0 - 130.0
6:2FTS	19	21	112	70.0 - 130.0
8:2FTS	19	21	110	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-80628
LCS Filename Q200708C_005 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	95	50-150	Pass	1070000
13C5_PFPeA	20	20	97	50-150	Pass	774598
13C5_PFHxA	20	21	103	50-150	Pass	800995
13C4_PFHpA	20	20	99	50-150	Pass	680317
13C8_PFOA	20	22	108	50-150	Pass	774576
13C9_PFNA	20	23	114	50-150	Pass	736644
13C6_PFDA	20	22	109	50-150	Pass	581776
13C7_PFUdA	20	23	113	50-150	Pass	509041
13C2_PFDoA	20	25	122	50-150	Pass	561974
13C2_PFTeDA	20	22	109	50-150	Pass	375770
d5-EtFOSAA	20	16	81	50-150	Pass	116673
d3-MeFOSAA	20	21	103	50-150	Pass	116543
13C3_PFBS	20	20	98	50-150	Pass	625851
13C3_PFHxS	20	20	99	50-150	Pass	544216
13C8_PFOS	20	20	97	50-150	Pass	650472
13C8_PFOSA	20	25	121	50-150	Pass	1217473
13C2_4:2FTS	20	22	110	50-150	Pass	136376
13C2_6:2FTS	20	22	111	50-150	Pass	140780
13C2_8:2FTS	20	23	113	50-150	Pass	142176

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	856624	544794 - 1634382	556927 - 1670781	Pass
13C4_PFOS	705594	479924 - 1439772	455898 - 1367694	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-80703		
LCS Filename	Q200713C_005	Matrix	Water
Total Amount Extracted	247mL	Dilution	1
ICAL ID	200713B01	Extracted	07/09/2020
Start CCal Filename	Q200713C_002	Analyzed	07/13/2020 20:32
End CCal Filename	Q200713C_014	Injected By	NH
Method Blank Filename	Q200713C_004		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	23	114	70.0 - 130.0
PFPeA	20	23	114	70.0 - 130.0
PFHxA	20	24	120	70.0 - 130.0
PFHpA	20	24	119	70.0 - 130.0
PFOA	20	23	116	70.0 - 130.0
PFNA	20	22	109	70.0 - 130.0
PFDA	20	24	117	70.0 - 130.0
PFUnA	20	23	116	70.0 - 130.0
PFDoA	20	22	109	70.0 - 130.0
PFTrDA	20	22	108	70.0 - 130.0
PFTeDA	20	23	114	70.0 - 130.0
PFOSA	20	23	115	70.0 - 130.0
N-EtFOSAA	20	23	114	70.0 - 130.0
N-MeFOSAA	20	23	114	70.0 - 130.0
PFBS	18	20	114	70.0 - 130.0
PFPeS	19	22	116	70.0 - 130.0
PFHxS	18	21	113	70.0 - 130.0
PFHpS	19	24	123	70.0 - 130.0
PFOS	19	21	115	70.0 - 130.0
PFNS	19	22	112	70.0 - 130.0
PFDS	19	22	113	70.0 - 130.0
4:2FTS	19	21	109	70.0 - 130.0
6:2FTS	19	22	113	70.0 - 130.0
8:2FTS	19	23	119	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-80703
LCS Filename Q200713C_005 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	96	50-150	Pass	1091674
13C5_PFPeA	20	20	97	50-150	Pass	798910
13C5_PFHxA	20	20	97	50-150	Pass	816169
13C4_PFHpA	20	19	93	50-150	Pass	670871
13C8_PFOA	20	20	98	50-150	Pass	803758
13C9_PFNA	20	21	104	50-150	Pass	807885
13C6_PFDA	20	19	92	50-150	Pass	607270
13C7_PFUdA	20	19	94	50-150	Pass	583630
13C2_PFDoA	20	19	95	50-150	Pass	574307
13C2_PFTeDA	20	19	92	50-150	Pass	446581
d5-EtFOSAA	20	19	93	50-150	Pass	147908
d3-MeFOSAA	20	20	97	50-150	Pass	132751
13C3_PFBS	20	20	98	50-150	Pass	630506
13C3_PFHxS	20	20	101	50-150	Pass	563617
13C8_PFOS	20	19	93	50-150	Pass	655717
13C8_PFOSA	20	19	93	50-150	Pass	1198676
13C2_4:2FTS	20	20	99	50-150	Pass	154973
13C2_6:2FTS	20	20	101	50-150	Pass	157562
13C2_8:2FTS	20	19	93	50-150	Pass	160874

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1047647	574385 - 1723154	606424 - 1819272	Pass
13C4_PFOS	808875	464830 - 1394490	485138 - 1455414	Pass

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-80704		
LCSD Filename	Q200713C_006	LCS Filename	Q200713C_005
Total Amount Extracted	248mL	Matrix	Water
ICAL ID	200713B01	Dilution	1
Start CCal Filename	Q200713C_002	Extracted	07/09/2020
End CCal Filename	Q200713C_014	Analyzed	07/13/2020 20:59
Method Blank Filename	Q200713C_004	Injected By	NH

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	RPD %
PFBA	20	24	117	70.0 - 130.0	2
PFPeA	20	23	114	70.0 - 130.0	0
PFHxA	20	23	115	70.0 - 130.0	4
PFHpA	20	23	116	70.0 - 130.0	3
PFOA	20	23	115	70.0 - 130.0	2
PFNA	20	22	108	70.0 - 130.0	1
PFDA	20	24	119	70.0 - 130.0	2
PFUnA	20	22	110	70.0 - 130.0	6
PFDoA	20	23	112	70.0 - 130.0	3
PFTrDA	20	21	103	70.0 - 130.0	4
PFTeDA	20	23	115	70.0 - 130.0	0
PFOSA	20	24	119	70.0 - 130.0	3
N-EtFOSAA	20	22	111	70.0 - 130.0	3
N-MeFOSAA	20	23	114	70.0 - 130.0	1
PFBS	18	20	114	70.0 - 130.0	0
PFPeS	19	22	115	70.0 - 130.0	1
PFHxS	18	22	118	70.0 - 130.0	4
PFHpS	19	22	116	70.0 - 130.0	6
PFOS	19	21	110	70.0 - 130.0	4
PFNS	19	21	109	70.0 - 130.0	3
PFDS	19	21	108	70.0 - 130.0	5
4:2FTS	19	22	115	70.0 - 130.0	6
6:2FTS	19	21	111	70.0 - 130.0	2
8:2FTS	19	23	117	70.0 - 130.0	3

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PFAS by Isotope DilutionLaboratory Control Sample Duplicate (LCSD)

LCSD Lab Sample ID	LCSD-80704	LCS Filename	Q200713C_005
LCSD Filename	Q200713C_006	Matrix	Water

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	19	95	50-150	Pass	1128790
13C5_PFPeA	20	19	96	50-150	Pass	832999
13C5_PFHxA	20	19	95	50-150	Pass	837892
13C4_PFHpA	20	20	97	50-150	Pass	740098
13C8_PFOA	20	20	97	50-150	Pass	830687
13C9_PFNA	20	21	103	50-150	Pass	856650
13C6_PFDA	20	20	99	50-150	Pass	697282
13C7_PFUdA	20	19	95	50-150	Pass	630523
13C2_PFDoA	20	19	95	50-150	Pass	615101
13C2_PFTeDA	20	18	90	50-150	Pass	466084
d5-EtFOSAA	20	18	90	50-150	Pass	154791
d3-MeFOSAA	20	18	91	50-150	Pass	133790
13C3_PFBS	20	19	96	50-150	Pass	649161
13C3_PFHxS	20	19	96	50-150	Pass	576014
13C8_PFOS	20	19	96	50-150	Pass	725717
13C8_PFOSA	20	18	91	50-150	Pass	1271526
13C2_4:2FTS	20	19	95	50-150	Pass	155902
13C2_6:2FTS	20	20	101	50-150	Pass	164690
13C2_8:2FTS	20	20	97	50-150	Pass	180597

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1097457	574385 - 1723154	606424 - 1819272	Pass
13C4_PFOS	868360	464830 - 1394490	485138 - 1455414	Pass