Ohio EPA Voluntary Action Program

Limited Phase II Property Assessment

Bexley Ferndale-Mayfield Properties
960, 940, 934, 926, 920 & 929
Ferndale Place
&
914 & 924 Mayfield Place
Bexley, Ohio 43209

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 General

PANDEY Environmental, LLC (PANDEY) was authorized by its Client, the City of Bexley Community Improvement Corporation, to conduct a Limited Phase II Property Assessment for the properties located at 960, 940, 934, 926, 920 & 929 Ferndale Place, and for the properties located at 914 & 924 Mayfield Place in Bexley, Ohio 43209 (parcel IDs 020003781, 020003778, 020003494, 020003493, 020003492, 020004516, 020004518 & 020004519, hereafter referred to as the subject property). The subject property consists of eight (8) separate properties totaling approximately 1.01 acres. It should be noted that the eight (8) parcels / addresses are not contiguous, but are being assessed together in this Limited Phase II Property Assessment. The parcels are each privately owned and, thus, are not part of the same ownership group. Currently, the subject property consists of eight (8) multi-family residential buildings (one building per parcel). The property is zoned for residential use. This investigation is termed “limited” as this investigation is limited to the identification of presence or absence of contamination in the soil, groundwater, and sub-slab vapor media at the subject property. It does not serve to fully delineate the extent of vertical and horizontal contamination or to evaluate all potential exposures or potential receptors.

PANDEY personnel responsible for preparation of this report include Mr. Atul Pandey, P.E. and Mr. Nick Vallera, Project Manager. Resumes of Mr. Pandey and Mr. Vallera are presented in Appendix C of this report.

1.2 Purpose

This Limited Phase II Property Assessment was conducted subsequent to the completion of an Ohio EPA VAP Phase I Property Assessment Report (dated March 9, 2018), and a Phase II investigation (dated May 23, 2018) prepared by PANDEY for two (2) parcels located along Ferndale Place and Mayfield Place, adjacent to the parcels comprising the subject property. A Sampling and Analysis Plan was prepared by PANDEY subsequent to reviewing the findings of the VAP Phase I and Phase II reports prepared for the residential dwellings located adjacent to the subject property. Conclusions of

the previous Phase I and Phase II reports of the sites located adjacent to the subject property determined that the general area along Ferndale & Mayfield Place was formerly the location of an undocumented landfill.

1.3 Sampling Plan

The sampling plan called for the installation of eight (8) soil borings, eight (8) sub-slab vapor pins, and four (4) monitoring wells across the subject property. This included one (1) sub-slab vapor pin per residential building and at least one (1) soil boring per individual parcel comprising the whole subject property. Soil borings were to be installed to an approximate depth of eighteen (18) to twenty (20) feet below ground surface (bgs) where groundwater was anticipated to be first encountered. The four (4) monitoring wells were to be installed at the shared boundaries between the parcels comprising the subject property. Monitoring wells were planned to be installed to a final depth of approximately twenty to twenty-five feet bgs in the shallow sand & gravel aquifer bearing lithology. The sub-slab vapor pins were planned to be installed in the garden apartment (bottom floor) stairwell landing area of each of the eight (8) dwellings across the subject property.

Details regarding the location of the soil borings, monitoring wells and sub-slab vapor pins are provided in Section 4.0 of this report. Soil sample analysis included VOCs (only if screening detections were above background levels), RCRA Metals and Semi-Volatile Organic Compounds (SVOCs). Groundwater analysis included VOCs, SVOCs/PAHs and Metals. Sub-slab vapor sample analysis, soil-gas analysis and indoor air analysis included VOC analysis only (TO-15 parameters). However, each soil-gas probe and the sub-slab vapor pins were also screened using a four-gas meter for their concentrations of oxygen, carbon monoxide, hydrogen sulfide and methane (% LEL). Since the subject property was the location of a former landfill / dumping area, the concentration / potential build-up of methane and other landfill gases in the subsurface media was a potential concern. The four-gas meter was calibrated to monitor carbon monoxide, methane (in %LEL), hydrogen sulfide and oxygen levels.

1.4 Numerical Standards

Numerical standards for this Phase II Property Assessment were obtained from Ohio EPA's Voluntary Action Program rules (VAP) in OAC 3745-300-08 effective October 17, 2019. In the event that numerical standards were not available in this rule, Ohio EPA VAP Program's Chemical Information Database and Applicable Regulatory Standards (CIDARS) database was consulted. A listing of numerical standards used can be found in Table 1. This listing also includes the source of the standard, and the date the standard went into effect. Because CIDARS databases are not dated, the date of download from Ohio EPA's website is listed as the standard date. Upon download of CIDARS information, numerical standards were compared to OAC 3745-300-08 as well as previous CIDARS downloads to ensure validity of any changes. Groundwater data was compared to the VAP Federal Maximum Contaminant Level and Groundwater Unrestricted Potable Use Standards (MCL/GUPUS) standards. For sub-slab data gathered during the Phase II Property Assessment, numerical standards were compared to target sub-slab concentrations obtained from the promulgated Ohio EPA Vapor Intrusion Screening Calculator (VISL). The comparison of sub-slab and soil gas data to the VISL target concentrations are provided on Figure 6 of this Report.

2.0 SITE BACKGROUND

The subject property is situated in a commercial and residential area located on the west side of Bexley, Ohio. Located at 960, 940, 934, 926, 920 & 929 Ferndale Place and 914 & 924 Mayfield Place, the subject property is comprised of eight (8) parcels totaling approximately 1.01 acres. The eight (8) addresses are not contiguous, but are being assessed together in this Limited Phase II Property Assessment Report. The subject property was developed for residential use and has served as the location of apartments / multi-family housing for approximately 60 years. According to historical documentation reviewed during a Phase I Property Assessment (dated March 9, 2018) prepared for adjacent parcels, and observations made during field activities, it appears that the subject property was the location of a former unlicensed landfill prior to being developed for residential use between 1957 and 1964. Owned by multiple private investors, the subject property is currently the location of eight (8) multi-family residential buildings.

The property belongs to a complex of multi-family residences which are situated along Ferndale Place and Mayfield Place (located adjacently west of Ferndale Place). Each residence contains a small driveway area for parking two (2) cars. Small grass yards surround each residential building. The on-site buildings along Ferndale Place and Mayfield Place are two (2) stories in height and are identical in design / age. The dwelling at 960 Ferndale Place is the only one which is single-story construction and is situated slightly different than the other seven (7) houses comprising the subject property. Each building contains two (2) residential units, a 2nd story unit (Unit B), and a basement / garden unit (Unit A). The 1st story of the buildings contains a shared landing space with a stairwell leading to Units A and B. No living space exists on the 1st floor of the buildings (with the exception of 960 Ferndale Place). The building at 960 Ferndale includes multiple units with one (1) access on the front and another access on the side of the single-story house. The buildings are in decent to slightly poor condition. Noticeable cracks along the foundations are observed running across and up the buildings. The terrain surrounding each residential building is uneven and random, which indicates evidence of movement in the ground /foundation beneath the structures. Overhead powerlines and poles are located on the around the on-property structures. The overhead lines and poles were observed to be leaning at angles indicating subsurface movement in the area.

Alum Creek is located approximately 0.12 miles west of the subject property. Mayfield Place runs along the western side of the subject property. Multi-family buildings are located along Mayfield Place adjacently west from the subject property and single-family homes are located adjacently east of the subject property along Sheridan Avenue. Adjacently north of the subject property is the Bexley Community Garden and Schneider Park (a community playground). Immediately south of the subject property are additional multi-family structures along Ferndale Place until it intersects with E. Livingston Avenue. Commercial sites line E. Livingston Avenue which is south of the subject property. Directly south of the subject property is Bexley Car Care, Making It Do, Inc. (auto repair), and Avenue Auto Repair.

PANDEY visited the site on November 4, 2019 to perform a site reconnaissance prior to beginning Phase II activities. The property consisted of eight (8) multi-residence buildings. Each building contains approximately two (2) residential units, as described earlier in this section. The residences were surrounded by identical complexes, which were built at the same time (approximately 1960). All units, with the exception of 960 Ferndale Place, appeared to be occupied.

3.0 SAMPLING PROCEDURES

PANDEY conducted subsurface investigations in November 2019. These investigations were conducted to examine the subject property for the presence of a former undocumented landfill at the subject property.

The methods and procedures described in this section apply to the sampling and analysis of all subsurface media investigated by PANDEY during the course of this Phase II Property Assessment.

Laboratory Analytical Methods

VAP-certified laboratories are required to adhere to strict QA/QC procedures that have been predetermined and approved by Ohio EPA. The VAP certified laboratory Pace Analytical Services, Inc. in Indianapolis, IN (CL # 0065) performed analysis using the following analytical methods:

- VOCs (Method 8260)
- SVOCs (Method 8270)
- RCRA Metals (Method 6010/7471)

Additionally, the VAP certified laboratory Pace Analytical Services, Inc. in Minneapolis, Minnesota (CL # 0101) performed analysis using the following analytical methods:

- VOCs (Method TO-15)

The laboratory data, affidavits, case narrative, and chain of custody forms are provided in Appendix A of this report.

The Quality Assurance (QA) and Quality Control (QC) specifications for the subject property are outlined herein. These specifications describe the QA/QC requirement set up for collecting and

analyzing samples for chemical analyses. The QA/QC procedures were used to assess the accuracy, precision, completeness, representativeness, and comparability of the analytical data.

Field Sampling and Analysis Program

The field team conducting the assessment adhered to the field sampling and analysis program detailed below. It included specific requirements outlining the procedures to be followed in relation to sample handling, packaging, and shipping. It also set guidelines for field documentation procedures.

Sample Handling, Packaging, and Shipping Requirements

Upon collection, samples were placed into their appropriate sample containers. The exterior of the sample containers were wiped clean and affixed with the proper labeling. Samples collected at the site were uniquely labeled with an alphanumeric sample identifier. Sample label information was completed using waterproof black ink. The labels contained such information as:

- Sample identification based on the sampling location;
- Time and date of collection; and,
- Parameters to be analyzed;

Groundwater samples contained the date of sample collection and the sample number for the specific well number.

The samples were packaged, put on ice in a cooler and then sealed and shipped to the Pace Indianapolis, IN laboratory. Chain of custody documentation accompanied each group of samples submitted to the lab.

Field Documentation Procedures

The field team was required to maintain a field notebook. The field notebook was used to collect information on site conditions, personnel at the site, and other pertinent information. Drilling and well

installation information were recorded on log forms. These forms are presented in Appendix B of this report.

3.1 November 2019 Investigation

During the November 2019 investigation, the on-site dwellings were occupied by residents who were entering or leaving their apartments. Each building across the subject property included slab-on-grade construction. Cracks were observed in multiple areas throughout the buildings, however no large penetrations of the concrete floor were observed. Windows on the inside of the residential building were closed. However, not all windows and doors were completely sealed as some windows were cracked / broken and it was observed that the doorways to all units did not properly seal / shut completely.

3.1.1 Soil Investigation

A subsurface investigation was conducted on November 4th & 5th, 2019 with the advancement of eight (8) soil bores (labeled BFM-SB1, BFM-SB2, BFM-SB3, BFM-SB4, BFM-SB5, BFM-SB6, BFM-SB7 & BFM-SB8) at the subject property. A total of two (2) soil samples were collected from each installed soil boring including one (1) sample from the zero (0) to two (2) foot soil horizon.

The procedures for the sampling of soil borings BFM-SB1 through BFM-SB8 of this investigation are discussed below. Soil samples were analyzed by Pace Analytical Services, an Ohio EPA VAP certified laboratory. Analytical data and chain of custodies are provided in Appendix A of this report. Analytical data is summarized in Table 1 and locations of the soil bores are shown in Figures 2 and 4 of this report.

Soil sampling was conducted using a Geoprobe 6620 DT direct push drilling rig with four (4) foot long continuous dual-tube sampling. The dual-tubes are disposable acetate sleeve liners.

Soil samples were collected in two (2) foot intervals and logged with respect to soil classification, color, moisture, and odor to depth ranging from zero (0) to twenty-four (24) feet below ground surface

(bgs). Soil samples were selected for laboratory analysis based on a hierarchy of field observations. The highest readings recorded during soil screening from a Mini-RAE Photo-ionization Detector (PID) were noted; if all PID results were close to background or equal then visual observations and/or olfactory indications of contamination were used to select the soil samples for analysis. If no visual observations of contamination were observed, then varying depth intervals (i.e. 2'-4', 4'-6' and 8'-10') were chosen within each area in order to obtain a representative soil analysis from each interval of the soil strata. Thus, by collecting a soil analysis from varying intervals, the entire soil strata of an area could be representatively analyzed for chemicals of concern.

Soil samples collected for laboratory analysis were placed in 4 oz. glass soil jars with Teflon lids and placed in an iced cooler. Samples selected for appropriate laboratory analysis were shipped to Pace Analytical Services, Inc., an Ohio EPA VAP certified laboratory (CL# 0065). Laboratory chain of custody documentation and analytical results are included in Appendix A of this report.

Boreholes were abandoned by filling with hydrated bentonite clay with the exception of boring locations which were converted to other sampling points (i.e. monitoring wells).

3.1.2 Groundwater Investigation

The groundwater media at the subject property was investigated by PANDEY during this investigation with the installation of four (4) permanent groundwater monitoring wells labeled BFM-MW1, BFM-MW2, BFM-MW3 & BFM-MW4. The location of these monitoring wells is depicted on Figures 3 and 5. All monitoring wells were finished with flush-mounted cement manhole covers. The results of the groundwater investigation are discussed in Section 5.4 of this report. Groundwater samples were analyzed by Pace Analytical Services, an Ohio EPA VAP certified laboratory (CL# 0065).

Analytical data and chain of custodies are provided in Appendix A of this report. Analytical data is summarized in Table 2 and the locations of the monitoring wells are also shown on Figures 3 and 5 of this report.

The construction, installation, and sampling of wells are discussed below.

A Geoprobe 6620 DT rig was utilized to install the permanent groundwater monitoring wells designated as BFM-MW1, BFM-MW2, BFM-MW3 & BFM-MW4. The wells were advanced using eight-inch hollow stem augers via a hydraulic rotary head on the rig. BFM-MW1 was installed to a depth of twenty-four (24) feet bgs, BFM-MW2 & FM-MW3 were installed to a final depth of twenty (20) feet bgs, and BFM-MW4 was installed to a depth of eighteen (18) feet bgs. However, heaving sands from the subsurface aquifer caused some shifting of the anticipated bottom depth of each well. This is noted on the monitoring well bore logs provided in Appendix B.

The monitoring wells were constructed of two-inch inside diameter PVC Schedule 40 riser pipe with jointed threading and ten feet of 0.010-inch factory slotted PVC Schedule 40 screen and end cap. The annular space around the PVC pipe was filled with sand from total depth to two feet above the screen, and the remaining annular space was backfilled with hydrated sodium bentonite chips.

Figures 3 and 5 of this report depict the monitoring well locations. The monitoring wells were finished with protective cement manhole covers.

All wells were logged for their lithology as they progressed. BFM-MW1 was screened from fourteen (14) to twenty-four (24) feet bgs, BFM-MW2 & BFM-MW3 were screened from ten (10) to twenty (20) feet bgs, and BFM-MW4 was screened from eight (8) to eighteen (18) feet bgs. The monitoring wells were screened in a brown sand & gravel lithology. The sand and gravel in this screened interval are fine to medium grained, poorly sorted, silty, and saturated with depth. The monitoring well logs are presented in Appendix B of this report.

Groundwater samples were collected from the wells BFM-MW1, BFM-MW2, BFM-MW3 & BFM-MW4 on November 6, 2019 and analyzed for the appropriate parameters. Each monitoring well sample was collected using a peristaltic pump and low flow sampling techniques. The groundwater samples were placed in an iced cooler for transport to Pace Analytical Services.

Sampling forms are included in Appendix B of this report.

3.1.3 Soil Gas Investigation

The Sampling and Analysis Plan (discussed in Section 1.4) did not call for the sampling of the soil gas media during this investigation. Rather, the investigation was to include one (1) sub-slab vapor pin in each on-site dwelling across the subject property. However, after two (2) unsuccessful attempts were made to enter and install a vapor pin at the residence located at 960 Ferndale Place, it was decided that a soil gas probe would be installed around the exterior of the dwelling instead. This soil gas probe, labeled 960 Ferndale Place-SG1, was co-located with boring BFM-SB8 on the western portion of the parcel. No other soil gas probes were installed during this investigation. The location of the soil gas probe is depicted on Figures 3 and 6. The results of the soil gas investigation are discussed in Section 5.4 of this report along with results from the sub-slab vapor sampling performed across the rest of the subject property. The soil gas sample was analyzed by Pace Analytical Services, an Ohio EPA VAP certified laboratory (CL# 0101).

Analytical data and chain of custodies are provided in Appendix A of this report. Analytical data is summarized in Table 3 and the locations of the air and soil gas probes are also shown on Figures 3 and 6 of this report.

A Geoprobe 6620 DT rig was utilized to install the soil gas probe 960 Ferndale Place-SG-1. The probe was advanced using 2.25 inch rods by direct-push method. The probe was advanced to a total depth of between six (6) to eight (8) feet below ground surface (bgs). The soil gas probe was constructed of ¼" poly tubing with the bottom foot of the tubing being perforated to act as a screen in the designated sampling interval.

The depth chosen to set the soil gas probe on-site was determined by setting it in the shallowest, dry soil horizon. According to Ohio EPA Technical Guidance, soil gas probes cannot be installed at depths shallower than five (5) feet bgs in order to prevent the risk of "short-circuiting" with ambient air. Thus, the six (6) to eight (8) foot soil horizon was chosen to set the soil gas probe.

For the soil gas probe installed, sand was added from the bottom of the screen to one foot above the top of the perforations, and the remaining annular space was backfilled with hydrated granulated sodium bentonite. Figures 3 and 6 of this report present the soil gas probe location, along with locations of the sub-slab vapor pins installed at the other dwellings (described in Section 4.1.4). A

stopcock was placed on the top of the tubing at the surface, which was placed under a safety cone after installation. The probe was logged for its lithology as it progressed. The soil gas probe log for this probe are presented in Appendix B of this report.

A peristaltic pump was used to purge the tubing prior to sampling to ensure that no water was collected in screened interval of the soil gas probe. A four gas meter was used to measure oxygen, carbon monoxide, hydrogen sulfide and LEL (methane) parameters for approximately sixty (60) seconds prior to beginning the soil gas sampling and weather parameters were documented on the sampling form. Soil gas samples were collected from the probes and analyzed for TO-15 parameters. The soil gas probe was sampled using a 6 liter summa canister with a one-hour regulator attached at a vacuum rate not exceeding 200 ml/min. The air and soil gas sample was shipped to the Pace Analytical Services Minneapolis (CL# 101) laboratory for analysis of TO-15 parameters.

Sampling forms are included in Appendix B of this report.

3.1.4 Sub-Slab Vapor Investigation

The sub-slab vapor media at the subject property was investigated by PANDEY during this investigation with the installation of seven (7) sub-slab vapor pins. Each pin was labeled based on the address of the corresponding location (i.e. “960 Ferndale Pl.-SV1”). The location of the sub-slab vapor pins is depicted on Figures 3 and 6. The results of the indoor air and sub-slab investigation are discussed in Section 5.4 of this report. Sub-slab vapor samples were analyzed by Pace Analytical Services, an Ohio EPA VAP certified laboratory (CL# 0101).

Analytical data and chain of custodies are provided in Appendix A of this report. Analytical data is summarized in Table 3, and the locations of the sub-slab probes are also shown on Figures 3 and 6 of this report.

Sub-slab vapor collection points were installed to a depth just below the base of the concrete slab using a hammer drill. A 0.25-inch brass fitting was cemented into the probe location. Vapor sampling was conducted after a period of at least 24 hours to allow for recovery of subsurface vapors.

Figures 3 and 6 of this report depict the sub-slab pin locations. A rubber seal was placed on the top of each vapor pin, which was placed under a protective flush-mounted plastic cover after installation. The vapor pins were logged for their screened readings as they were installed utilizing a PID and four-gas meter. A peristaltic pump was used to purge the vapor points following installation to ensure that no water was collected in the sub-slab probe area. The sub-slab installation logs for these points are presented in Appendix B of this report.

A four gas meter was used to measure oxygen, carbon dioxide, hydrogen sulfide and methane (%LEL) parameters for approximately sixty (60) seconds prior to the sub-slab sampling, and a photoionization detector (PID) was used to screen the points as well prior to beginning sampling. It was observed that the oxygen content did not decrease below atmospheric levels during the sampling event. Normally, this would indicate that the vapor pin was not installed with a proper seal. However, a leak test determined that the pins were properly installed and that the observed concentration of sub-slab parameters (including oxygen) were likely the result of a void space underneath the building slab. As described earlier in this report, the subject property has a very uneven terrain and the building foundations and walls show visual signs of subsurface movement / settling. It is likely that subsurface settling and shifting has created a void space under the concrete building slabs of the apartment buildings. This is not uncommon in landfill sites and is not considered to be a quality control issue for the sub-slab vapor sample collection, as the vapors collected from the sub-slab media are representative of what vapors may be intruding to indoor air of the on-site residential buildings.

Indoor air and weather parameters were documented on the sampling forms. Sub-slab samples were collected from the vapor pins and analyzed for TO-15 parameters. All sub-slab vapors were collected as time-integrated (8-hour) samples using a 6-liter summa canister with a pre-calibrated flow regulators provided by Pace Analytical. The sub-slab samples were shipped to the Pace Analytical Services Minneapolis (CL# 101) laboratory for analysis of TO-15 parameters.

Attempts were made to further screen each sub-slab vapor pin using the four-gas meter and PID over the course of several weeks in order to monitor for any on-going detections of common landfill parameters / gases that can be harmful to human health, such as hydrogen sulfide and methane. However, due to lack of access to the on-site buildings across the subject property, the additional

screenings could not be performed. It should be noted that although the additional screenings could not be performed, that none of the sub-slab vapor pin locations showed detections of potential landfill gases during the vapor sampling event, as documented on the sampling forms provided in Appendix B.

4.0 PHASE II FINDINGS

4.1 Regional Geology and Hydrogeology

A review of the Soil Survey of Franklin County was conducted utilizing the USDA Natural Resources Conservation Service website (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx). According to the Soil Survey, the subject property is located in an urban land complex. Specifically, 64.1% of the subject property Bennington-Urban Land Complex, and approximately 35.9% is Cardington-Urban Land Complex. This indicates that nearly 100% of the predominant soil type has been disturbed and covered with an impervious layer consisting of buildings, streets, sidewalks and other structures.

The "Groundwater Resources Map of Franklin County" (James S. Schmidt, 1952) indicates that the subject property is located in an area in which "Very limited and often quite shallow glacial deposits of sand and gravel overlying shale bedrock of eroded ancestral drainage channel. Potential yields may not exceed 5 gallons per minute at depths of 15 to 35 feet."

Based upon USGS topographical maps, shallow groundwater flow is expected to follow the ground level slope of surface elevations towards the nearest open body of water or intermittent stream. The groundwater flow was expected to be west to southwest based on topography towards Alum Creek, located approximately 0.12 miles west of the property. It should be noted that the groundwater flow direction to the west towards Alum Creek had been confirmed by PANDEY during previous investigations performed in the immediate vicinity of the subject property.

PANDEY also reviewed the well logs of water wells installed near the subject property as maintained by Ohio Department of Natural Resources, Division of Water. According to these records, there are no oil / gas well permits identified within one (1) mile of the subject property. Also according to ODNR records, an approximate total of eighteen (18) registered water wells were within 0.5 miles of the subject property. These wells range in depth from approximately 15 to 300 feet deep in formations of sand & gravel, clay, fill, shale and limestone bedrock. It appears that a shallow groundwater zone exists at approximately 17 to 20 feet below ground surface (bgs) within sand and gravel near the

subject property. The majority of the ODNR well logs are related to monitoring wells that are being used for environmental monitoring of the groundwater media in the area. No ODNR wells currently exist on the subject property itself. ODNR well log documentation is included in Appendix D of this report.

4.2 Property-Specific Geology and Hydrogeology

According to USGS topographic maps, the subject property is located approximately 759 feet above mean sea level. Elevations dip and are uneven across the subject property. The dips and inconsistent elevation changes observed across the site are evidence of subsurface settling and movement. The nearest surface water feature is Alum Creek, located approximately 0.12 miles west of the subject property. Bore logs showing specific soil descriptions are contained in Appendix B of this report.

A potentiometric surface map was not generated during this investigation due to the limited number of wells installed during the on-site investigation. However, based on information gathered during previous environmental and groundwater investigations performed along the Ferndale-Mayfield Place corridor (on properties located adjacent to the subject property), it is confirmed that groundwater is indeed flowing to the west towards Alum Creek.

4.3 QA/QC Data Review

No control issues or discrepancies were noted which would have had the potential to impact the findings of this report.

All groundwater analyses were evaluated to ensure that laboratory method detection limits (MDLs) were not higher than the MCL/GUPUS standards as presented in Appendix F of this report.

There were multiple instances where the MDLs or reporting limits for bis(2-chloro-1-methylethyl)et, bis(2-chloroethyl) ether, p-Chloroaniline, 2,6-dinitrotoluene, 2,4-dinitrotoluene, nitrobenzene, N-nitroso-di-N-propylamine and 1,1,2,2-Tetrachloroethane were higher than their respective GUPUS, as listed in Appendix F.

There were four (4) instances where the reporting limits (10 ppb) for bis(2-chloro-1-methylethyl)et and bis(2-chloroethyl)ether exceeded the MDL of 2.7 ppb which was higher than the applicable VAP GUPUS limit of 0.12 ppb. According to the Agency for Toxic Substances and Disease Registry (http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=159):

> "Bis(2-chloroethyl) ether is a colorless, nonflammable liquid with a strong unpleasant odor. It dissolves easily in water, and some of it will slowly evaporate to the air. It does not occur naturally. Bis(2-chloroethyl) ether is made in factories, and most of it is used to make pesticides. Some of it is used as a solvent, cleaner, component of paint and varnish, rust inhibitor, or as a chemical intermediate to make other chemicals."

There were four (4) instances where the reporting limits (10 ppb) for 2,6-dinitrotoluene and 2,4-dinitrotoluene exceeded the MDL of 1.8 ppb which was higher than the applicable VAP GUPUS limit of 0.42 ppb. According to the Agency for Toxic Substances and Disease Registry (http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=165):

> "Both 2,4-DNT and 2,6-DNT are pale yellow solids with a slight odor. They are two of the six forms of the chemical called dinitrotoluene (DNT). DNT is not a natural substance. It is made by mixing toluene with nitric acid. DNT is usually used to make flexible polyurethane foams used in the bedding and furniture industries. DNT is also used to produce explosives, ammunition, and dyes. It is also used in the air bags of automobiles."

There were four (4) instances where the reporting limits (5 ppb) for nitrobenzene exceeded the MDL of 2.4 ppb which was higher than the applicable VAP GUPUS limit of 1.2 ppb. According to the Agency for Toxic Substances and Disease Registry (http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=95):

> "Nitrobenzene is an industrial chemical. It is an oily yellow liquid with an almond-like odor. It dissolves only slightly in water and will evaporate to air. It is produced in large quantities for use in industry. Most of the nitrobenzene produced in the United States is

> used to manufacture a chemical called aniline. Nitrobenzene is also used to produce lubricating oils such as those used in motors and machinery. A small amount of nitrobenzene is used in the manufacture of dyes, drugs, pesticides, and synthetic rubber."

There were four (4) instances where the reporting limits (50 ppb) for N-nitrosodi-n-propylamine exceeded the MDL of 3.6 ppb which was higher than the applicable VAP GUPUS limit of 0.093 ppb. According to the Agency for Toxic Substances and Disease Registry (http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=211):

> "n-Nitrosodi-n-propylamine is a chemical produced by industry in small amounts for research. It is a yellow liquid at room temperature. Small amounts of n-nitrosodi-n-propylamine are produced as a side reaction during some manufacturing processes, as a contaminant in some weed killers, and during the manufacture of some rubber products."

There were four (4) instances where the reporting limits (5 ppb) for 1,1,2,2-Tetrachlorethane exceeded the MDL of 2.5 ppb which was higher than the applicable VAP GUPUS limit of 0.66 ppb. According to the Agency for Toxic Substances and Disease Registry (https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=156):

> "1,1,2,2-Tetrachloroethane is a manufactured, colorless, dense liquid that does not burn easily. It is volatile and has a sweet odor. In the past, it was used in large amounts to produce other chemicals, as an industrial solvent to clean and degrease metals, and as an ingredient in paints and pesticides. Commercial production of 1,1,2,2-tetrachloroethane for these uses has stopped in the United States. It presently is used only as a chemical intermediate in the production of other chemicals.

Bis(2-chloro-1-methylethyl)et Bis(2-chloroethyl)ether, p-Chloroaniline, 2,6-dinitrotoluene, 2,4-dinitrotoluene, Nitrobenzene, N-nitrosodi-n-propylamine, and 1,1,2,2-Tetrachloroethane were not chemicals of concern at the subject property, but were included in a larger laboratory analytical suite. Additionally, there were no detections above the reporting limits (RL) in any of the 16 soil samples analyzed for these compounds on the subject property during the November 2019 investigation, in

which case the VAP Generic Direct Contact Soil Standard (GDCSS) was higher than the RL. As such, there is no reason to anticipate the presence of any of these listed chemicals of concern in groundwater, and reporting limits are considered acceptable for these compounds.

None of the soil samples analyzed resulted in parameters with MDLs above the applicable Ohio VAP Generic Direct Contact Soil Standards.

All sub-slab and soil gas analyses were evaluated to ensure that laboratory MDLs were not higher than the applicable Ohio EPA VISL Target Sub-Slab and Exterior Soil Gas Screening Levels. None of the sub-slab vapor or soil gas samples analyzed resulted in parameters with MDLs above the applicable EPA VISL target screening level for residential land use (as shown on Figure 6).

A trip blank was submitted to Pace Analytical with the groundwater samples on November 6, 2019 for analysis of VOCs. Results showed no detections of any chemicals.

4.4 Identification and Evaluation of Chemicals of Concern

Various chemicals of concern have been identified in the soil, groundwater, soil gas, sub-slab and indoor air media at the subject property during the November 2019 Limited Phase II Property Assessment. The following discusses the detections of these chemicals on an identified area basis. Locations of soil, groundwater, sub-slab and soil gas sample locations are shown on Figures 2 through 6 and analytical results are presented on Tables 1 through 3 of this report. References to soil standards in the following discussion are to the Ohio VAP Generic Direct Contact Soil Standards for residential / unrestricted land use.

On-Site Soils

The soils across the site were investigated by PANDEY during site investigations conducted on November 4, 2019 through the advancement of eight (8) soil borings labeled BFM-SB1, BFM-SB2, BFM-SB3, BFM-SB4, BFM-SB5, BFM-SB6, BFM-SB7 and BFM-SB8. The borings were installed at a rate of one (1) boring per parcel comprising the subject property, as shown on Figure 2.

The soil borings were installed to a depth of approximately sixteen (16) to twenty (20) feet bgs. Two (2) soil samples were collected from each installed soil boring across the subject property, including the collection of soil from the 0'-2' soil horizon at each location. A total of sixteen (16) soil samples were submitted for laboratory analysis. The soil samples selected for laboratory analysis were based upon visual observations and olfactory indications of contamination and readings from a MiniRAE 2000 Photoionization Detector (PID) as recorded on the soil boring logs provided in Appendix B of this report. Soil samples were submitted from the 0-2' soil horizon from borings BFM-SB1 through BFM-SB8. Additionally, soil samples were submitted from the 2-4' soil horizon from boring BFM-SB3, BFM-SB4 and BFM-SB6, the 8-10' soil horizon from boring BFM-SB1 and BFM-SB8, and the 4-6' soil horizon from BFM-SB2, BFM-SB5 and BFM-SB7. Samples collected from all borings were analyzed for SVOCs and RCRA Metals. None of the samples were submitted for laboratory analysis of VOCs based on the lack of detections observed during screenings of the soils with a PID in the field. All screening results were near or at background levels and, thus, were not submitted for analysis of VOCs. Various fill materials including glass fragments, ceramic, clay tile, bricks, and cinders were observed at various depths ranging from 0' to approximately 10' bgs across the subject property. This is consistent with observations noted in previous investigations performed on adjacent properties, described in Section 1.3. The fill materials confirm that the subject property is located on a former landfill area.

Laboratory analysis of all soil samples detected chemicals above laboratory reporting limits including metals (particularly Arsenic, Chromium and Lead) and Semi-Volatile Organic Compounds, particularly Poly-Aromatic Hydrocarbons (PAHs) such as Benzo(a)pyrene. Multiple detections of Arsenic, Chromium and Lead were detected in exceedance of the applicable VAP Generic Direct Contact Soil Standard (GDCSS) for residential /unrestricted land use. Additionally, multiple detections of PAHs including (but not limited to) Benz(a)anthracene, Benzo(a)pyrene, and Benzo(b)fluoranthene were detected in of the applicable VAP GDCSS for residential /unrestricted land use. However, all other detections of Metals and SVOCs were below the applicable VAP soil standards.

On-Site Sub-Slab and Soil Gas Sampling

The historical presence of a landfill on the subject property, along with the history of active dumping occurring on adjacent properties presented a potential of subsurface vapor media impact from petroleum and hazardous substances. Chemicals of concern in this area included VOCs (TO-15 parameters), hydrogen sulfide, and methane gases.

This area was investigated by PANDEY during site investigations conducted on November 6th & 7th, 2019 through the installation of seven (7) sub-slab vapor pins and one (1) soil gas probe.

The sub-slab vapor pins were installed on the subject property on November 5, 2019 in order to investigate potential soil vapor or landfill gas contamination beneath the on-site buildings. The sub-slab vapor pins were installed in the concrete slab of the bottom floor landing of each on-site apartment building. The sub-slab samples collected from these probes on November 6-7, 2019 were submitted for laboratory analysis of TO-15 parameters (VOCs). Additionally, each sub-slab vapor pin was screened using the four-gas meter and PID over the course of a few weeks to monitor parameters including volatiles (VOCs), hydrogen sulfide, oxygen, methane (%LEL) and carbon monoxide. It should be noted that after installing the sub-slab vapor pin at 926 Ferndale Place, access could not be regained to perform the sampling. As a result, no sample was collected from this building. However, based on results of the sub-slab vapor samples collected from buildings on either side of this location, the lack of a sample from 926 Ferndale Place is not considered a data gap.

Laboratory analysis of the six (6) collected sub-slab vapor points detected multiple chemicals above laboratory reporting limits, including Benzene, 1,2,4-Trimethylbenzene, Toluene and Xylenes in each sample. However, no chemicals of concern were detected in exceedance of their applicable target sub-slab screening level as designated in the Ohio EPA Promulgated Vapor Intrusion Screening Level Calculator (VISL) for unrestricted or residential land use.

Laboratory analysis of the single soil gas probe installed and screened in the 6’-8’ soil horizon in the front yard for the building located at 960 Ferndale Place detected multiple chemicals above laboratory reporting limits, including Ethylbenzene and Xylenes. However, no chemicals of concern were

detected in exceedance of their applicable target exterior soil gas screening level as designated in the Ohio EPA Promulgated Vapor Intrusion Screening Level Calculator (VISL) for unrestricted or residential land use.

The results of vapor sampling across the property indicate that the sub-slab vapor media underlying the on-site buildings show a minor impact of petroleum compounds (in the form of Xylenes) most likely related to former landfill / dumping activities. However, the impact is minor and none of the detected chemicals of concern were detected above their applicable screening levels. Additionally, it should be noted that methane gas was not observed above its action threshold of 5% LEL (which would indicate a potential hazard to human health) during the screening event performed across the soil gas probe and sub-slab pins prior to sampling in November, 2019. The screenings of all accessed buildings across the property were 0% LEL for Methane and 0 ppm for Hydrogen Sulfide. This information is summarized on Figure 7 and on Table 4.

Site-Wide Groundwater

This area was investigated by PANDEY during site investigations conducted on November 6, 2019 through the installation of four (4) permanent monitoring wells labeled BFM-MW1, BFM-MW2, BFM-MW3 & BFM-MW4. The wells were installed to a final depth of approximately twenty (20) to twenty-four (24) feet bgs, respectively, in a brown sand & gravel water-bearing lithology.

The groundwater monitoring wells were installed on the subject property on November 5, 2019 in order to investigate potential groundwater contamination. BFM-MW1 was installed near the intersecting boundary of 929 Ferndale Place, 914 & 924 Mayfield Place. BFM-MW2 was installed between 920 & 926 Ferndale Place, BFM-MW3 was installed between 934 & 940 Ferndale Place and BFM-MW4 was installed at 960 Ferndale Place. Locations of the monitoring wells is shown on Figure 2. The groundwater samples collected from these wells on November 6, 2019 were submitted for laboratory analysis of Metals, SVOCs and VOCs.

Laboratory analysis of BFM-MW1, BFM-MW2, BFM-MW3 & BFM-MW4 detected Barium above laboratory reporting limits. The highest detection of Barium was 173 ug/L which is below the

applicable VAP Generic Unrestricted Potable Use Standard (GUPUS) of 2,000 ug/L. No other detections of metals in the monitoring wells were observed. No detections of SVOCs or VOCs were observed in either groundwater sample.

The results of groundwater sampling across the property indicate that the groundwater underlying the property has not been impacted by historical landfill / dumping operations.

5.0 CONCLUSIONS

This Limited Phase II Property Assessment was conducted to identify the presence or absence of subsurface contamination, primarily from the impact of Metals, VOCs, SVOCs and landfill gases. Analysis and interpretation of data gathered as part of this property assessment has led to the following conclusions:

- Multiple detections of chemicals of concern were reported in soil samples. Detections of RCRA Metals (Arsenic, Chromium and Lead) were observed above applicable VAP Generic Direct Contact Soil Standards (GDCSS) for residential / unrestricted land use in borings BFM-SB1, BFM-SB2, BFM-SB3, BFM-SB4, BFM-SB5, BFM-SB6, BFM-SB7 and BFM-SB8. Additionally, detections of Poly-Aromatic Hydrocarbons (PAHs) were observed above the applicable VAP GDCSS for residential land use in borings BFM-SB1, BFM-SB2, BFMSB4, BFM-SB6 and BFM-SB8. PAHs exceeding the applicable standards in these borings include (but are not limited to) Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene, and Naphthalene. The majority of the observed exceedances of metals and PAHs in the soil media were detected in the top 0'-2' soil horizon across the subject property.
- Groundwater samples were collected from four (4) on-site monitoring wells labeled BFM-MW1, BFM-MW2, BFM-MW3 and BFM-MW4 and were submitted for analysis of Metals, Semi-Volatile Organic Compounds (SVOCs) and Volatile Organic Compounds (VOCs). No SVOCs or VOCs were detected above laboratory reporting limits in either sample. Multiple metals including Barium were detected in the groundwater media. However, all detections of Barium were observed at levels below the applicable VAP Generic Unrestricted Potable Use Standard of 2,000 ppb.
- Sub-slab samples collected from several vapor pins installed in each residential dwelling across the subject property exhibited detections of multiple VOCs, including Benzene, 1,2,4-Trimethylbenzene, Toluene and Xylenes, above laboratory reporting limits. However, all detections were below the acceptable sub-slab concentration limits as obtained from the Ohio EPA promulgated Vapor Intrusion Screening Level (VISL) Calculator for unrestricted or residential land use. Results of the sub-slab sampling event indicate that the vapor / sub-slab

media beneath each of the on-site buildings' concrete floor has a slight impact from petroleum compounds. However, concentrations of these compounds are well below target screening levels.

- Soil gas probes were installed to an approximate depth of eight (8) feet below ground surface (bgs). One (1) soil gas probe was installed around the exterior of 960 Ferndale Place since access was not granted to enter the building to install a sub-slab vapor pin. The soil gas sample collected from this address exhibited detections of multiple VOCs, including Ethylbenzene and Xylenes, above laboratory reporting limits. However, all detections were below the acceptable exterior soil gas target concentration limits as obtained from the Ohio EPA promulgated Vapor Intrusion Screening Level (VISL) Calculator for unrestricted or residential land use. Results of the soil gas sampling event indicate that the subsurface soil gas media around the property located at 960 Ferndale Place has not been impacted by former landfill activities.
- Screening levels were collected from the single soil gas probe and sub-slab vapor pins across the property prior to performing the November 2019 sampling event. The screening event was performed in order to monitor the presence of potentially harmful landfill gases at the subsurface vapor sampling locations installed across the subject property and in the on-site buildings. A four-gas meter utilized to record levels of oxygen, carbon monoxide, hydrogen sulfide and methane (%LEL) along with a Photoionization Detector (PID) calibrated to 100 ppm isobutylene were used to screen the sampling points during these events. Results of the screening event determined that no concentrations of harmful landfill gases such as hydrogen sulfide or methane were observed above their respective action thresholds of 0.1 ppm and 5% LEL which would indicate an alarm or potential impact to human health for the on-site occupants.

Based on this Limited Phase II Property Assessment, levels of Lead, Arsenic, Chromium, Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene, and Naphthalene exceed their corresponding VAP single chemical direct contact standards for residential or unrestricted land use in on-site soils. It is our opinion that the eight (8) parcels comprising the subject property are located on a former undocumented landfill area. This judgment is based on visual site observations as well as after review of laboratory analytical data.

6.0 STATEMENT OF LIMITATIONS AND QUALIFICATIONS

The subject property has been examined based on best professional judgment and current Phase II Property Assessment evaluation methods. These methods include requirements of the Ohio Voluntary Action Program, ASTM Standards, and other professional site assessment guidelines.

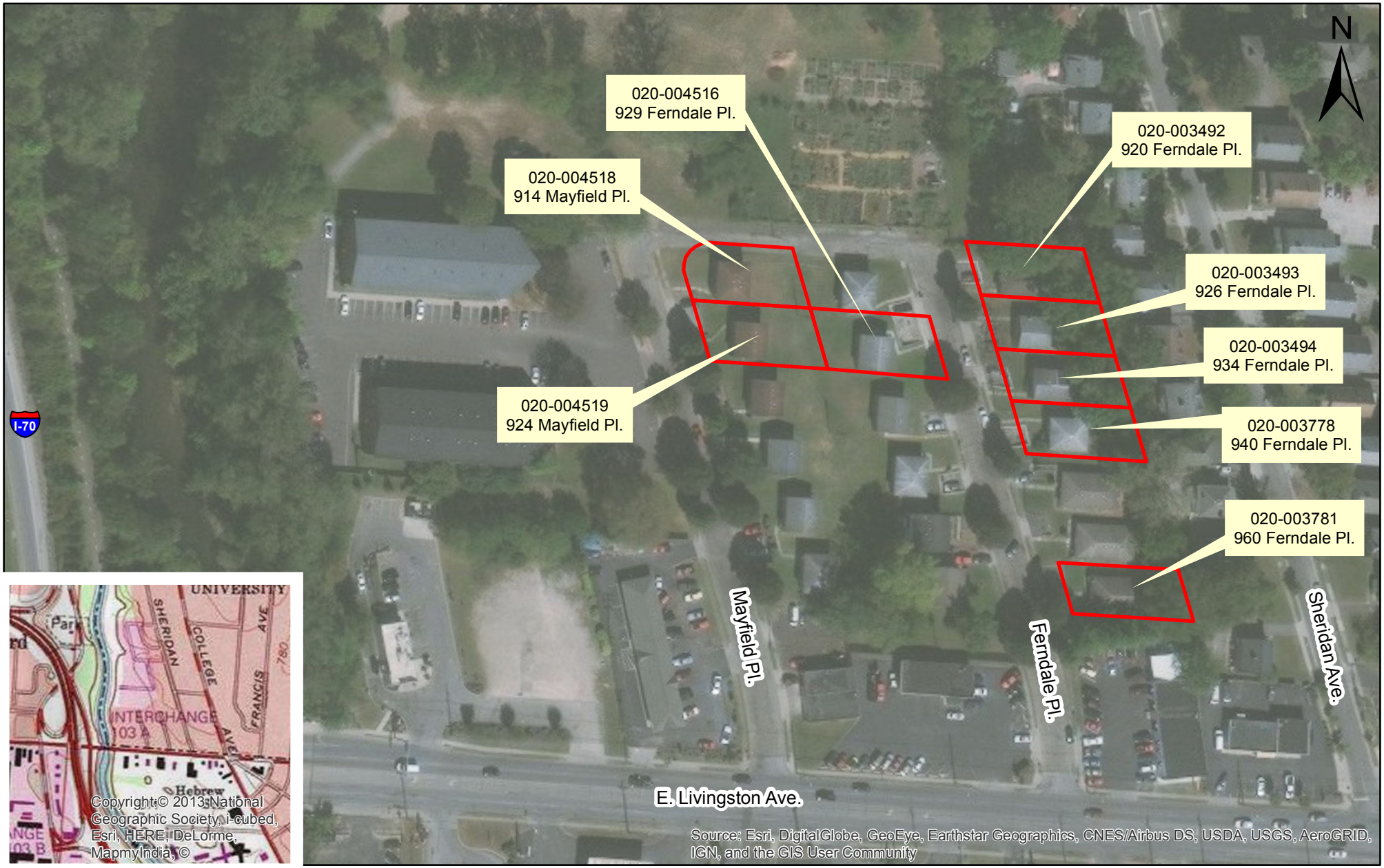
The evaluations, assessments, and conclusions stated in this report represent judgment and/or opinions which are based solely upon visual and analytical observations made during the site investigation and public records search including information from previous environmental investigations.

Any reuse of this information, assessment, or conclusions contained herein by parties other than those mentioned in Section 1 of this report, shall be at the sole risk or liability of the party undertaking the reuse of this information.

PANDEY makes no claim that the areas of contamination discovered as a result of the limited Phase II Property Assessment investigations represent the only possible areas of contamination at the site. The sampling locations were chosen based on a review of historical resources, previous environmental assessments, interviews, and a visual site reconnaissance.

Evidence has not been provided to PANDEY which suggests the likelihood of contamination at areas of the property other than those investigated to date. However, undocumented and/or unreported spills and/or releases which may have the potential to negatively impact the subject property may have occurred at the subject property over the course of its history.

FIGURES



Parcel

Note: Area includes a total of 8 Parcels

0 50 100 200 Feet

Phase II
Mayfield Pl. & Ferndale Pl. Sites
Bexley, Ohio 43209

Figure 1
Property Location & Parcels Map

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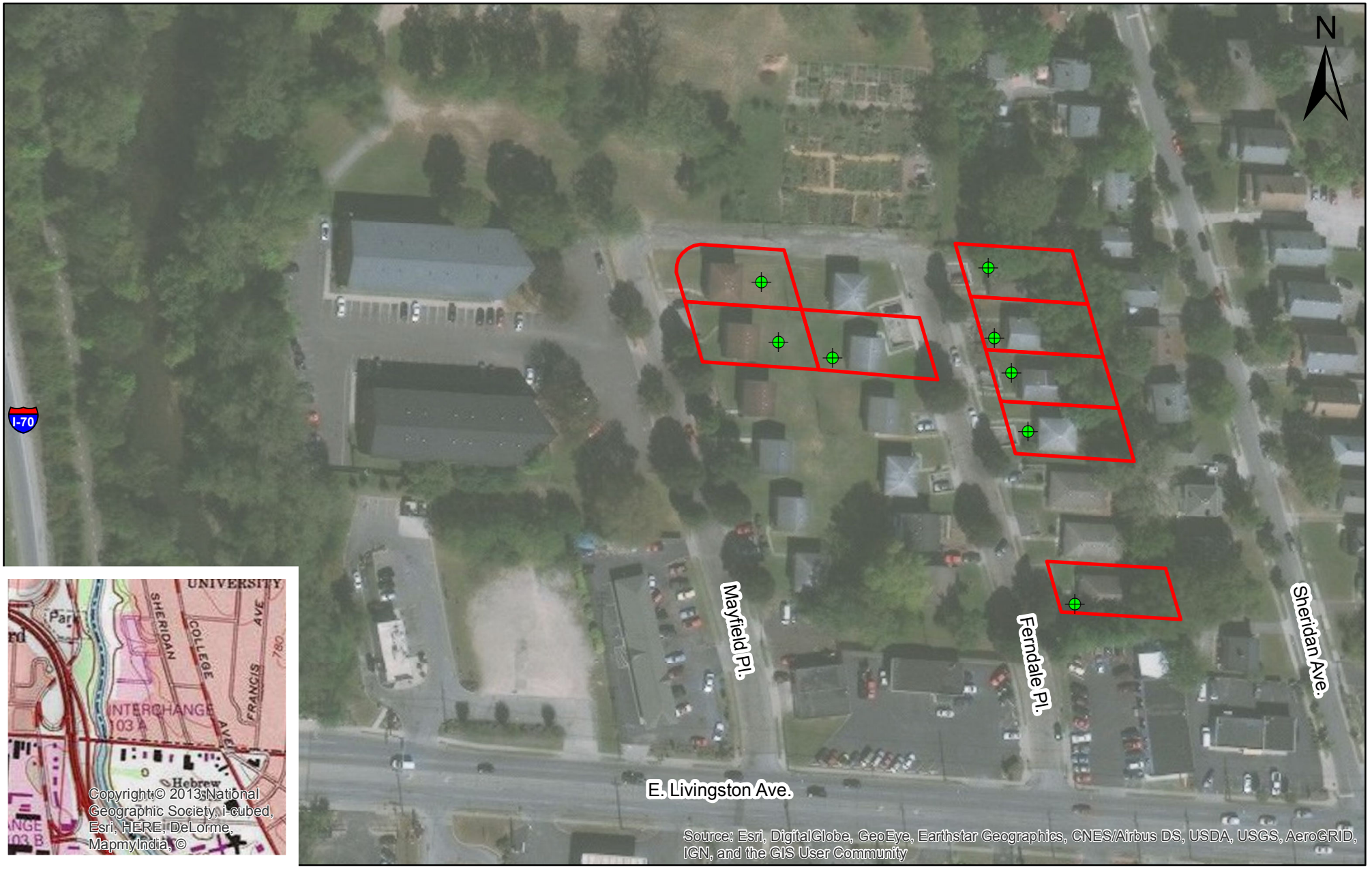
www.pandeyenvironmental.com

1/2/2020



Soil Boring

Parcel

0 50 100 200 Feet

Note: Area includes a total of 8 Parcels

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Figure 2
Soil Sampling
Locations Map

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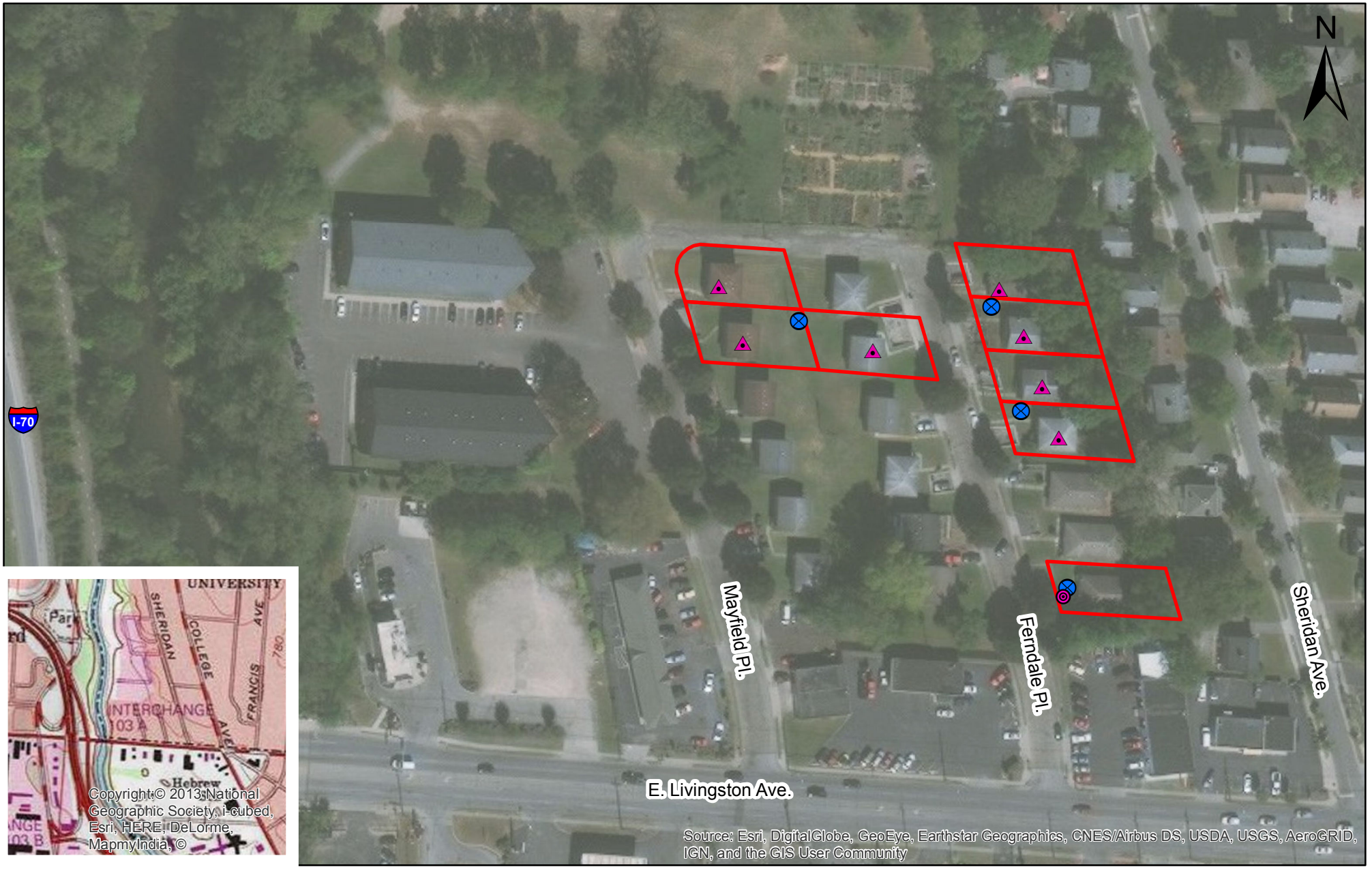

Monitoring Well

Sub-Slab Vapor Point

Soil Gas Probe

Parcel

0 50 100 200 Feet

Note: Area includes a total of 8 Parcels

Phase II
Mayfield Pl. & Ferndale Pl. Sites
Bexley, Ohio 43209

Figure 3
Groundwater, Sub-Slab Vapor and Soil Gas Sampling Locations Map

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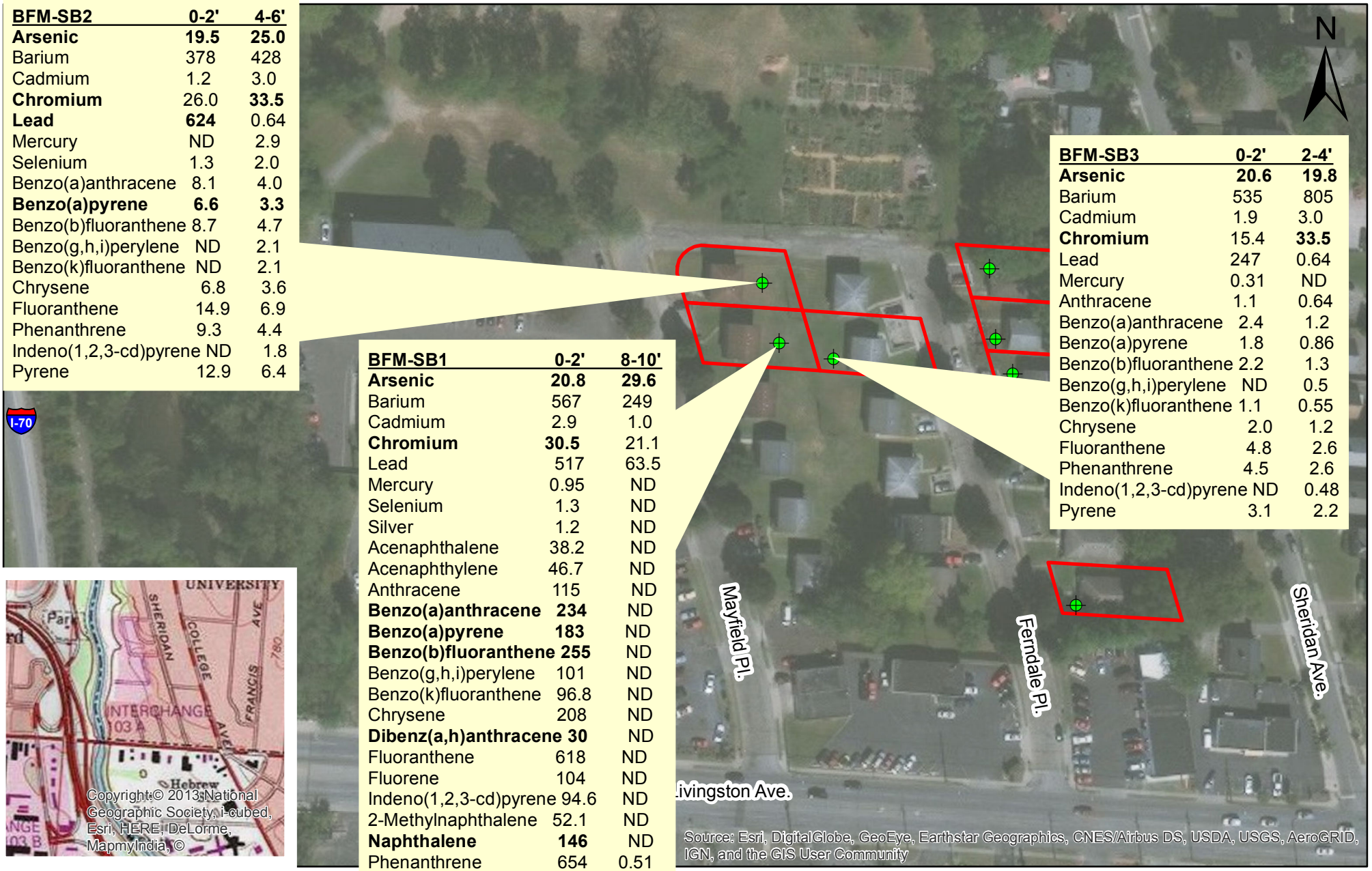

BFM-SB2	0-2'	4-6'
Arsenic	**19.5**	**25.0**
Barium	378	428
Cadmium	1.2	3.0
Chromium	26.0	**33.5**
Lead	**624**	0.64
Mercury	ND	2.9
Selenium	1.3	2.0
Benzo(a)anthracene	8.1	4.0
Benzo(a)pyrene	**6.6**	**3.3**
Benzo(b)fluoranthene	8.7	4.7
Benzo(g,h,i)perylene	ND	2.1
Benzo(k)fluoranthene	ND	2.1
Chrysene	6.8	3.6
Fluoranthene	14.9	6.9
Phenanthrene	9.3	4.4
Indeno(1,2,3-cd)pyrene	ND	1.8
Pyrene	12.9	6.4

BFM-SB1	0-2'	8-10'
Arsenic	**20.8**	**29.6**
Barium	567	249
Cadmium	2.9	1.0
Chromium	**30.5**	21.1
Lead	517	63.5
Mercury	0.95	ND
Selenium	1.3	ND
Silver	1.2	ND
Acenaphthalene	38.2	ND
Acenaphthylene	46.7	ND
Anthracene	115	ND
Benzo(a)anthracene	**234**	ND
Benzo(a)pyrene	**183**	ND
Benzo(b)fluoranthene	**255**	ND
Benzo(g,h,i)perylene	101	ND
Benzo(k)fluoranthene	96.8	ND
Chrysene	208	ND
Dibenz(a,h)anthracene	**30**	ND
Fluoranthene	618	ND
Fluorene	104	ND
Indeno(1,2,3-cd)pyrene	94.6	ND
2-Methylnaphthalene	52.1	ND
Naphthalene	**146**	ND
Phenanthrene	654	0.51
Pyrene	462	ND

BFM-SB3	0-2'	2-4'
Arsenic	**20.6**	**19.8**
Barium	535	805
Cadmium	1.9	3.0
Chromium	15.4	**33.5**
Lead	247	0.64
Mercury	0.31	ND
Anthracene	1.1	0.64
Benzo(a)anthracene	2.4	1.2
Benzo(a)pyrene	1.8	0.86
Benzo(b)fluoranthene	2.2	1.3
Benzo(g,h,i)perylene	ND	0.5
Benzo(k)fluoranthene	1.1	0.55
Chrysene	2.0	1.2
Fluoranthene	4.8	2.6
Phenanthrene	4.5	2.6
Indeno(1,2,3-cd)pyrene	ND	0.48
Pyrene	3.1	2.2

Soil Boring

Parcel

0 50 100 200 Feet

All results are listed in ppm (mg/kg)
Detections listed in **BOLD** indicate an exceedance of VAP GDCSS (Res. land use)

Phase II
Mayfield Pl. & Ferndale Pl. Sites
Bexley, Ohio 43209

Figure 4
Soil Analytical
Data Map - Part 1

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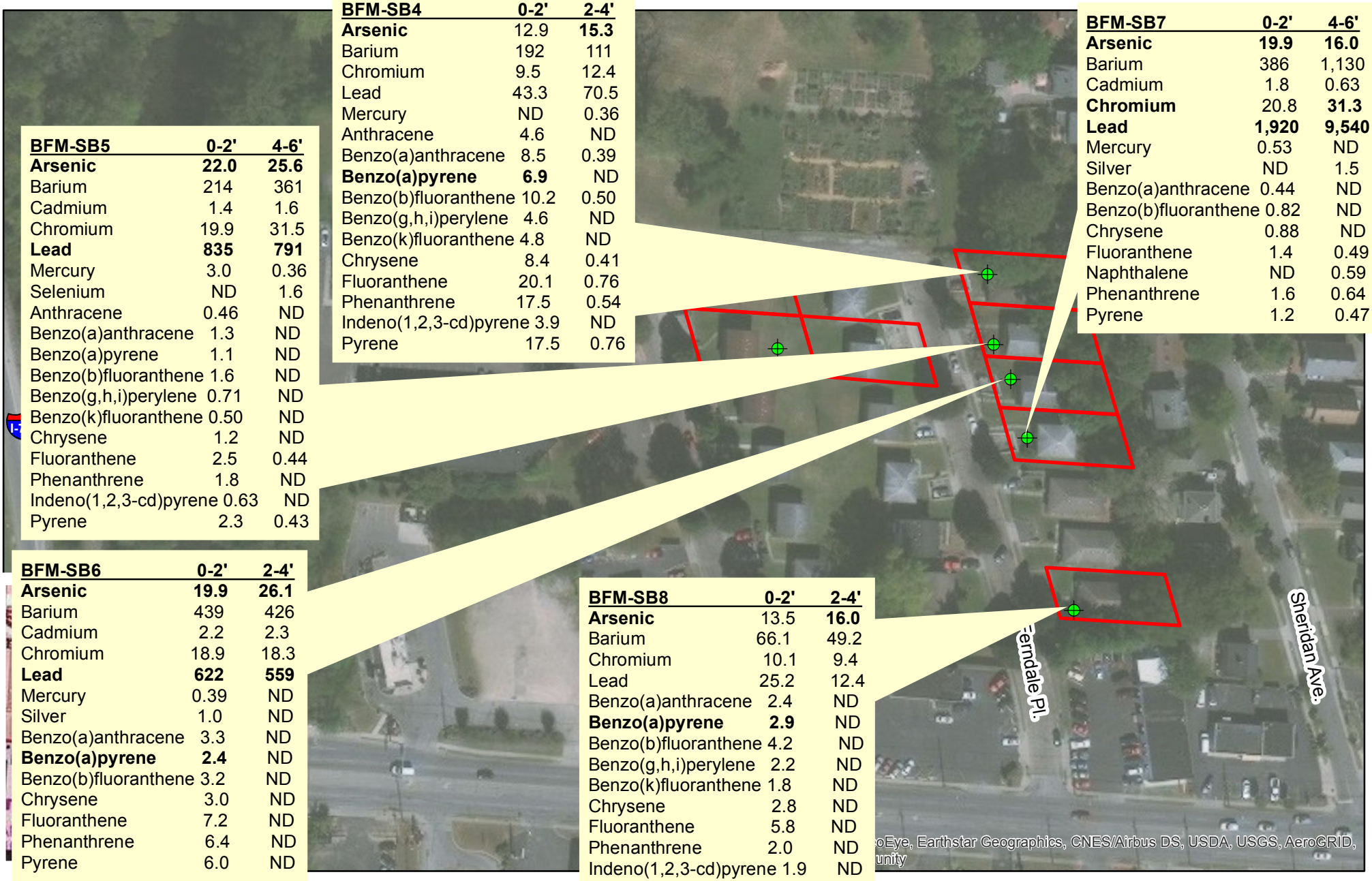

BFM-SB4	0-2'	2-4'
Arsenic	12.9	**15.3**
Barium	192	111
Chromium	9.5	12.4
Lead	43.3	70.5
Mercury	ND	0.36
Anthracene	4.6	ND
Benzo(a)anthracene	8.5	0.39
Benzo(a)pyrene	**6.9**	ND
Benzo(b)fluoranthene	10.2	0.50
Benzo(g,h,i)perylene	4.6	ND
Benzo(k)fluoranthene	4.8	ND
Chrysene	8.4	0.41
Fluoranthene	20.1	0.76
Phenanthrene	17.5	0.54
Indeno(1,2,3-cd)pyrene	3.9	ND
Pyrene	17.5	0.76

BFM-SB5	0-2'	4-6'
Arsenic	**22.0**	**25.6**
Barium	214	361
Cadmium	1.4	1.6
Chromium	19.9	31.5
Lead	**835**	**791**
Mercury	3.0	0.36
Selenium	ND	1.6
Anthracene	0.46	ND
Benzo(a)anthracene	1.3	ND
Benzo(a)pyrene	1.1	ND
Benzo(b)fluoranthene	1.6	ND
Benzo(g,h,i)perylene	0.71	ND
Benzo(k)fluoranthene	0.50	ND
Chrysene	1.2	ND
Fluoranthene	2.5	0.44
Phenanthrene	1.8	ND
Indeno(1,2,3-cd)pyrene	0.63	ND
Pyrene	2.3	0.43

BFM-SB6	0-2'	2-4'
Arsenic	**19.9**	**26.1**
Barium	439	426
Cadmium	2.2	2.3
Chromium	18.9	18.3
Lead	**622**	**559**
Mercury	0.39	ND
Silver	1.0	ND
Benzo(a)anthracene	3.3	ND
Benzo(a)pyrene	**2.4**	ND
Benzo(b)fluoranthene	3.2	ND
Chrysene	3.0	ND
Fluoranthene	7.2	ND
Phenanthrene	6.4	ND
Pyrene	6.0	ND

BFM-SB8	0-2'	2-4'
Arsenic	13.5	**16.0**
Barium	66.1	49.2
Chromium	10.1	9.4
Lead	25.2	12.4
Benzo(a)anthracene	2.4	ND
Benzo(a)pyrene	**2.9**	ND
Benzo(b)fluoranthene	4.2	ND
Benzo(g,h,i)perylene	2.2	ND
Benzo(k)fluoranthene	1.8	ND
Chrysene	2.8	ND
Fluoranthene	5.8	ND
Phenanthrene	2.0	ND
Indeno(1,2,3-cd)pyrene	1.9	ND
Pyrene	5.5	ND

BFM-SB7	0-2'	4-6'
Arsenic	**19.9**	**16.0**
Barium	386	1,130
Cadmium	1.8	0.63
Chromium	20.8	**31.3**
Lead	**1,920**	**9,540**
Mercury	0.53	ND
Silver	ND	1.5
Benzo(a)anthracene	0.44	ND
Benzo(b)fluoranthene	0.82	ND
Chrysene	0.88	ND
Fluoranthene	1.4	0.49
Naphthalene	ND	0.59
Phenanthrene	1.6	0.64
Pyrene	1.2	0.47

Soil Boring

Parcel

0 50 100 200 Feet

All results are listed in ppm (mg/kg)
Detections listed in **BOLD** indicate an exceedance of VAP GDCSS (Res. land use)

Phase II
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Bexley, Ohio 43209

Figure 4
Soil Analytical
Data Map - Part 2

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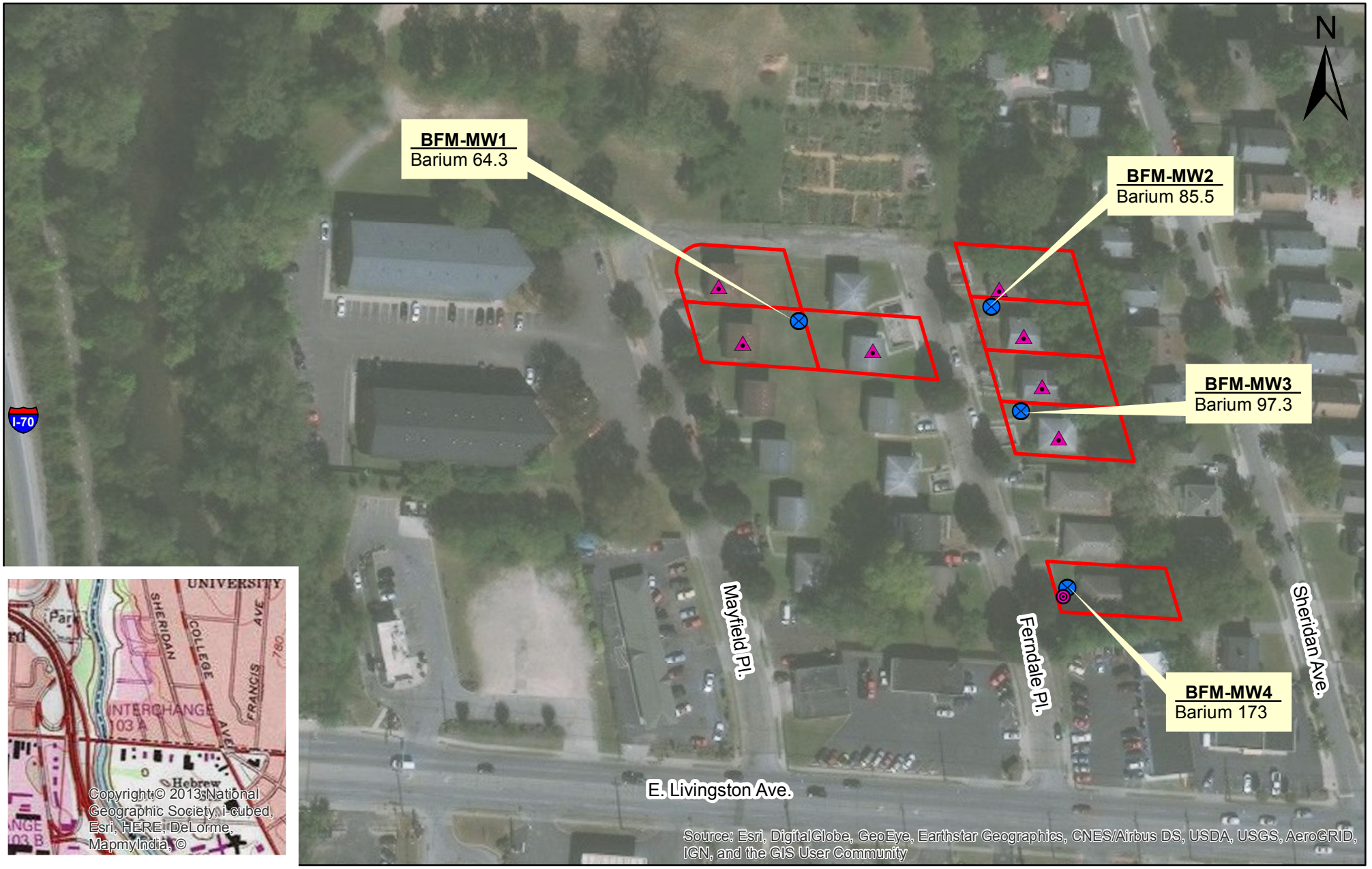

Monitoring Well

Sub-Slab Vapor Point

Soil Gas Probe

Parcel

0 50 100 200 Feet

All results listed in ppb (ug/L)

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Mayfield Pl. & Ferndale Pl. Sites
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Figure 5
Groundwater Analytical Data Map

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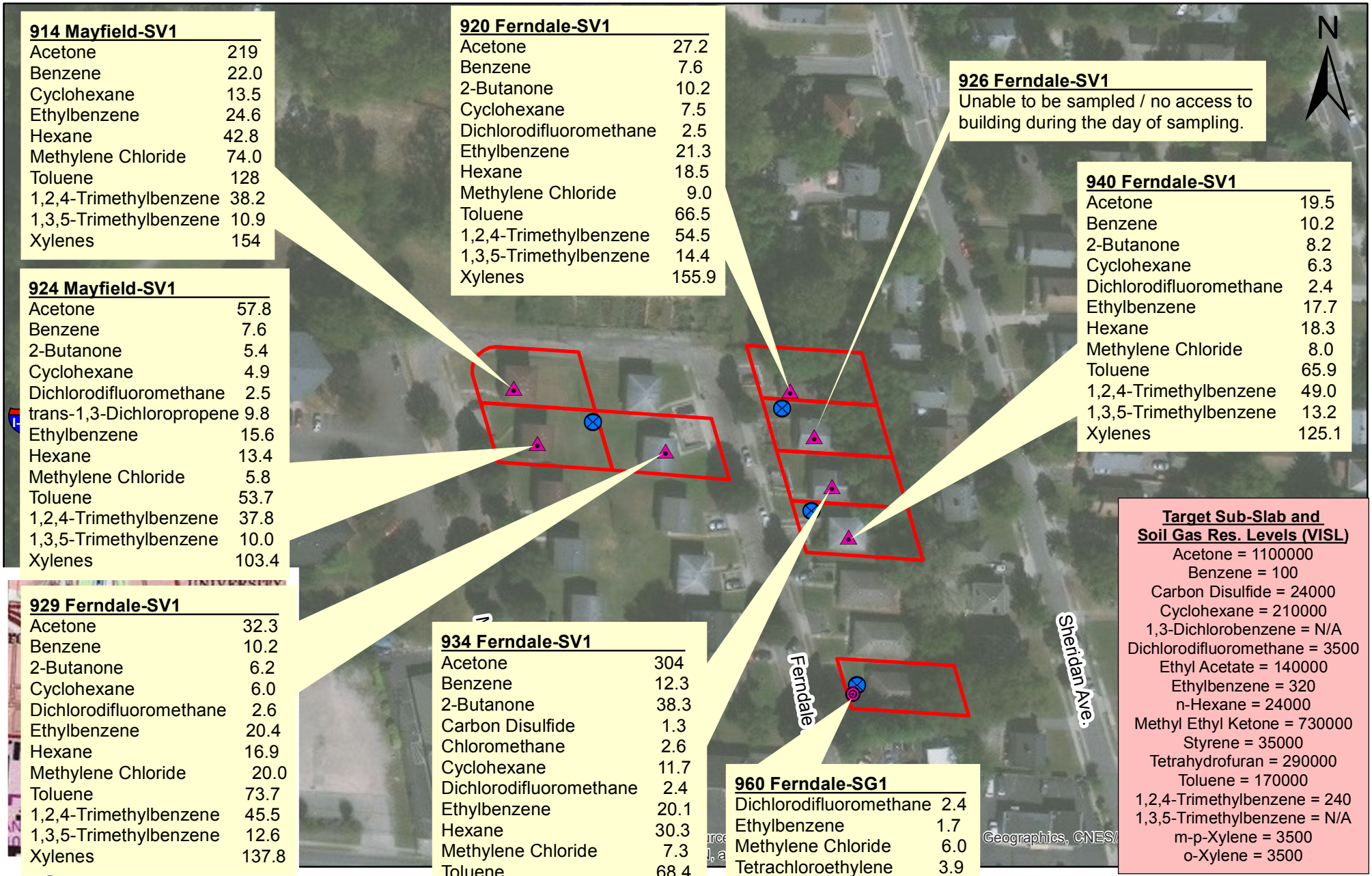

914 Mayfield-SV1

Acetone	219
Benzene	22.0
Cyclohexane	13.5
Ethylbenzene	24.6
Hexane	42.8
Methylene Chloride	74.0
Toluene	128
1,2,4-Trimethylbenzene	38.2
1,3,5-Trimethylbenzene	10.9
Xylenes	154

920 Ferndale-SV1

Acetone	27.2
Benzene	7.6
2-Butanone	10.2
Cyclohexane	7.5
Dichlorodifluoromethane	2.5
Ethylbenzene	21.3
Hexane	18.5
Methylene Chloride	9.0
Toluene	66.5
1,2,4-Trimethylbenzene	54.5
1,3,5-Trimethylbenzene	14.4
Xylenes	155.9

926 Ferndale-SV1

Unable to be sampled / no access to building during the day of sampling.

940 Ferndale-SV1

Acetone	19.5
Benzene	10.2
2-Butanone	8.2
Cyclohexane	6.3
Dichlorodifluoromethane	2.4
Ethylbenzene	17.7
Hexane	18.3
Methylene Chloride	8.0
Toluene	65.9
1,2,4-Trimethylbenzene	49.0
1,3,5-Trimethylbenzene	13.2
Xylenes	125.1

924 Mayfield-SV1

Acetone	57.8
Benzene	7.6
2-Butanone	5.4
Cyclohexane	4.9
Dichlorodifluoromethane	2.5
trans-1,3-Dichloropropene	9.8
Ethylbenzene	15.6
Hexane	13.4
Methylene Chloride	5.8
Toluene	53.7
1,2,4-Trimethylbenzene	37.8
1,3,5-Trimethylbenzene	10.0
Xylenes	103.4

Target Sub-Slab and Soil Gas Res. Levels (VISL)

Acetone = 1100000
Benzene = 100
Carbon Disulfide = 24000
Cyclohexane = 210000
1,3-Dichlorobenzene = N/A
Dichlorodifluoromethane = 3500
Ethyl Acetate = 140000
Ethylbenzene = 320
n-Hexane = 24000
Methyl Ethyl Ketone = 730000
Styrene = 35000
Tetrahydrofuran = 290000
Toluene = 170000
1,2,4-Trimethylbenzene = 240
1,3,5-Trimethylbenzene = N/A
m-p-Xylene = 3500
o-Xylene = 3500

929 Ferndale-SV1

Acetone	32.3
Benzene	10.2
2-Butanone	6.2
Cyclohexane	6.0
Dichlorodifluoromethane	2.6
Ethylbenzene	20.4
Hexane	16.9
Methylene Chloride	20.0
Toluene	73.7
1,2,4-Trimethylbenzene	45.5
1,3,5-Trimethylbenzene	12.6
Xylenes	137.8

934 Ferndale-SV1

Acetone	304
Benzene	12.3
2-Butanone	38.3
Carbon Disulfide	1.3
Chloromethane	2.6
Cyclohexane	11.7
Dichlorodifluoromethane	2.4
Ethylbenzene	20.1
Hexane	30.3
Methylene Chloride	7.3
Toluene	68.4
1,2,4-Trimethylbenzene	47.3
1,3,5-Trimethylbenzene	12.3
Xylenes	125.7

960 Ferndale-SG1

Dichlorodifluoromethane	2.4
Ethylbenzene	1.7
Methylene Chloride	6.0
Tetrachloroethylene	3.9
Xylenes	18.0

Monitoring Well
Sub-Slab Vapor Point
Soil Gas Probe
Parcel

0 55 110 220 Feet

All results listed in ug/m3

Phase II
Mayfield Pl. & Ferndale Pl. Sites
Bexley, Ohio 43209

Figure 6
Sub-Slab & Soil Gas
Analytical Data Map

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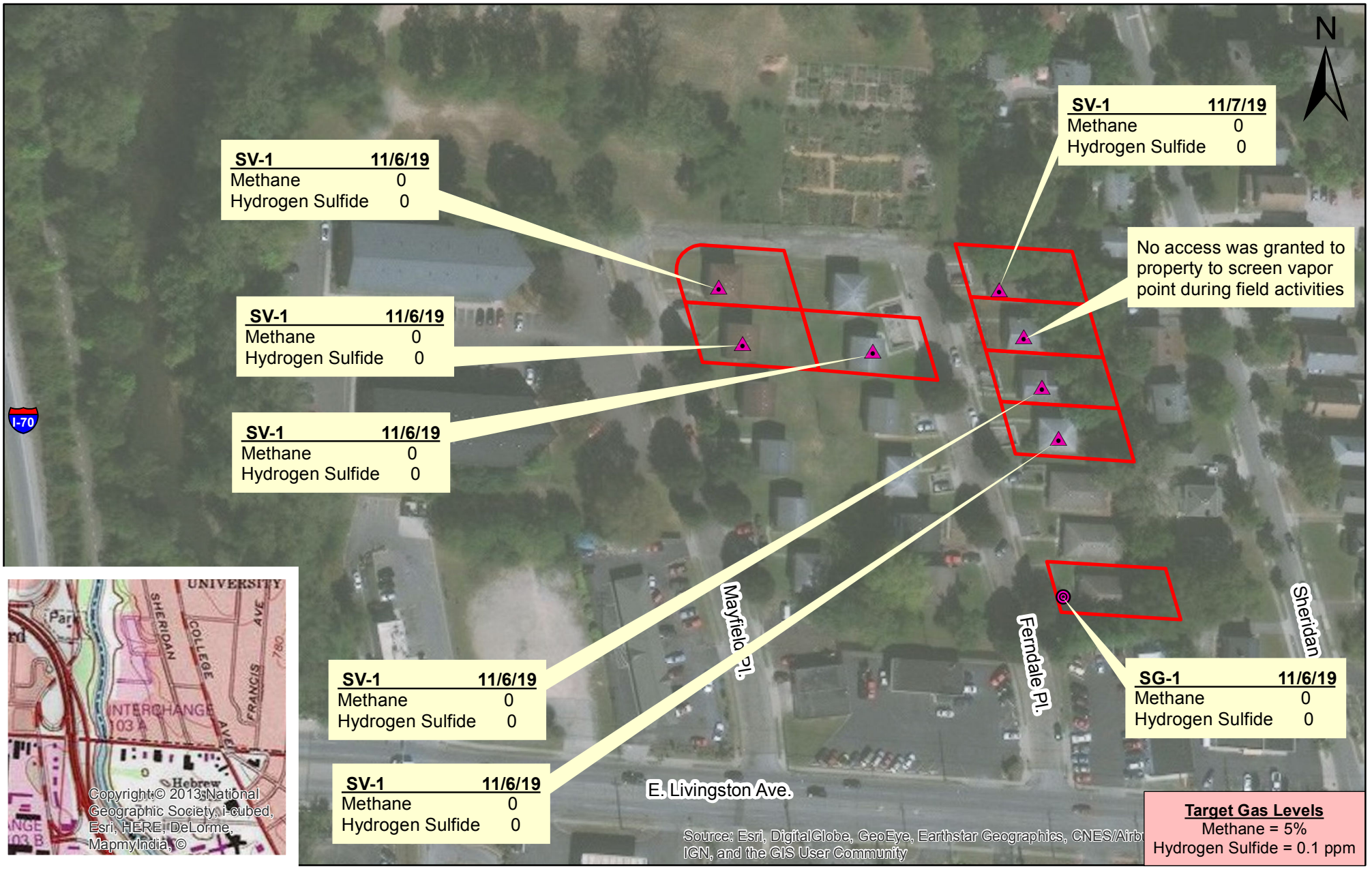
1/6/2020



Sub-Slab Vapor Point

Soil Gas Probe

Parcel

0 50 100 200 Feet

Note: Area includes a total of 8 Parcels
H2S results are listed in PPM
Methane results are listed in %LEL
Results listed in **BOLD** indicate an exceedance of applicable action levels

Phase II
Mayfield Pl. & Ferndale Pl. Sites
Bexley, Ohio 43209

Figure 7
Methane and Hydrogen Sulfide Screening Data Map

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1/13/2020

TABLES

TABLE 1: SUMMARY OF SOIL SAMPLING DATA

TABLE 2: SUMMARY OF GROUNDWATER SAMPLING DATA

TABLE 3: SUMMARY OF SUB-SLAB & SOIL GAS SAMPLING DATA

TABLE 4: SUMMARY OF METHANE AND HYDROGEN SULFIDE SCREENINGS

Table 1
Summary of Soil Sampling Data

	Bexley Ferndale-Mayfield Properties																*Ohio EPA VAP Standards Effective 10/17/19*	
Sample ID	**BFM-SB1**	**BFM-SB1**	**BFM-SB2**	**BFM-SB2**	**BFM-SB3**	**BFM-SB3**	**BFM-SB4**	**BFM-SB4**	**BFM-SB5**	**BFM-SB5**	**BFM-SB6**	**BFM-SB6**	**BFM-SB7**	**BFM-SB7**	**BFM-SB8**	**BFM-SB8**	**Ohio EPA Generic Direct Contact Soil Standard (residential)**	***Ohio EPA Generic Direct Contact Soil Standard (commercial land use with high frequency child exposure)***
Sample Depth	**0'-2'**	**8'-10'**	**0'-2'**	**4'-6'**	**0'-2'**	**2'-4'**	**0'-2'**	**2'-4'**	**0'-2'**	**4'-6'**	**0'-2'**	**2'-4'**	**0'-2'**	**4'-6'**	**0'-2'**	**8'-10'**		
Sampling Date	**11/4/2020**																	
RCRA 8 Metals																		
Arsenic	**20.8**	**29.6**	**19.5**	**25**	**20.6**	**19.8**	12.9	**15.3**	**22**	**25.6**	**19.9**	**26.1**	**19.9**	**16**	13.5	**16**	*14*	*46*
Barium	567	249	378	428	535	805	192	111	214	361	439	426	386	1,130	66	49.2	*30,000*	*85,000*
Cadmium	2.9	1	1.2	5.3	1.9	3	ND	ND	1.4	1.6	2.2	2.3	1.8	0.63	ND	ND	*140*	*370*
Chromium	**30.5**	21.1	26	**32.1**	15.4	**33.5**	9.5	12.4	19.9	31.5	18.9	18.3	20.8	**31.3**	10.1	9.4	*27*	*100*
Lead	517	63.5	**624**	445	247	432	43.3	70.5	835	**791**	**622**	**559**	**1,920**	**9,540**	25.2	12.4	*400*	*400*
Selenium	1.3	ND	1.3	2	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	*780*	*2,200*
Silver	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	1.5	ND	ND	*780*	*2,200*
Mercury	0.95	ND	ND	2.9	0.31	ND	ND	0.36	3	0.36	0.39	ND	0.53	ND	ND	ND	*3.1*	*3.1*
Volatile Organic Compounds (VOCs)																		
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*110,000*	*110,000*
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*28*	*130*
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*7.3*	*33*
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*460*	*910*
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*740*	*740*
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*16*	*74*
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*660*	*760*
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*7.9*	*35*
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*280*	*930*
Cumene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*7.3*	*270*
Dibromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*130*	*410*
Dibromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,600*	*2,800*
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*380*	*380*
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*65*	*290*
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*850*	*850*
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*89*	*390*
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*11*	*52*
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*310*	*880*
1,1-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*360*	*1,200*
trans-1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,900*	*1,900*
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*39*	*130*
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,500*	*1,500*
cis-1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*n/a*	*n/a*
trans-1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*n/a*	*n/a*
Ethyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*2,100*	*2,100*
Ethyl Methacrylate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,100*	*1,100*
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*140*	*480*
Hexane, N-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*140*	*140*
Methyl Ethyl Keton (2-Butanone)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*28,000*	*28,000*
Methyl Isobutyl Ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*3,400*	*3,400*
Methyl tert-Butrl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,100*	*5,400*
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*740*	*2,100*
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*870*	*870*
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*49*	*230*
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*15*	*71*

Table 1
Summary of Soil Sampling Data

Tetrachloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*170*	*170*
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*820*	*820*
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*140*	*400*
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*640*	*640*
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*28*	*130*
Trichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*10*	*33*
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1,200*	*1,200*
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*220*	*220*
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*620*	*2,700*
Vinyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*1.3*	*2.3*
Xylenes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*260*	*260*
Semi-volatile Organic Compounds (SVOCs)																		
Acenaphthene	38.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*7,200*	*16,000*
Acenaphthylene	46.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*7,200*	*16,000*
Anthracene	115	ND	ND	ND	ND	0.64	4.6	ND	0.46	ND	ND	ND	ND	ND	ND	ND	*36,000*	*81,000*
Benzo(a)anthracene	**234**	ND	8.1	4	2.4	1.2	8.5	0.39	1.3	ND	3.3	ND	0.44	ND	2.4	ND	*23*	*59*
Benzo(a)pyrene	**183**	ND	**6.6**	**3.3**	1.8	0.86	**6.9**	ND	1.1	ND	**2.4**	ND	ND	ND	**2.9**	ND	*2.3*	*5.9*
Benzo(b)fluoranthene	**255**	ND	8.7	4.7	2.2	1.3	10.1	0.5	1.6	ND	3.2	ND	0.82	ND	4.2	ND	*23*	*59*
Benzo(g,h,i)perylene	101	ND	ND	2.1	ND	0.5	4.6	ND	0.71	ND	ND	ND	ND	ND	2.2	ND	*3,600*	*8,100*
Benzo(k)fluoranthene	96.8	ND	ND	2.1	1.1	0.55	4.8	ND	0.5	ND	ND	ND	ND	ND	1.8	ND	*230*	*590*
Butlybenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5,700*	*18,000*
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*N/A*	*N/A*
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*N/A*	*N/A*
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*380*	*890*
bis(2-Chloroethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5.3*	*30*
bis(2chloro1methylethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,000*	*1,000*
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*N/A*	*N/A*
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*780*	*2,200*
Chrysene	208	ND	6.8	3.6	2	1.2	8.4	0.41	1.2	ND	3	ND	0.88	ND	2.8	ND	*2,300*	*5,900*
Dibenz(a,h)anthracene	**30**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2.3*	*5.9*
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*380*	*890*
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*100,000*	*240,000*
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2,500*	*5,900*
di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*N/A*	*N/A*
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*250*	*590*
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*35*	*110*
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*7.3*	*23*
Di-n-octyphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,300*	*3,000*
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*780*	*2,500*
Fluoranthene	618	ND	14.9	6.9	4.8	2.6	20.1	0.76	2.5	0.44	7.2	ND	1.4	0.49	5.8	ND	*4,800*	*11,000*
Fluorene	104	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*4,800*	*11,000*
Hexachlorocyclopentadine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*4.4*	*15*
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*45*	*210*
Indeno(1,2,3-cd)pyrene	94.6	ND	ND	1.8	ND	0.48	3.9	ND	0.63	ND	ND	ND	ND	ND	1.9	ND	*23*	*59*
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*11,000*	*36,000*
2-Methylnaphthalene	52.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*480*	*1,100*
2-Methylphenol (o-Cresol)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*6,300*	*15,000*
3&4-Methylphenol (m&p Cresol)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*6,300*	*15,000*
Naphthalene	**146**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59	ND	ND	*96*	*420*
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*130*	*560*
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1.6*	*5*

Table 1
Summary of Soil Sampling Data

N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2,200*	*7,100*
Phenanthrene	654	0.51	9.3	4.4	4.5	2.6	17.5	0.54	1.8	ND	6.4	ND	1.6	0.64	2	ND	*36,000*	*81,000*
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*38,000*	*89,000*
Pyrene	462	ND	12.9	6.4	3.9	2.2	17.5	0.76	2.3	0.43	6	ND	1.2	0.47	5.5	ND	*3,600*	*8,100*
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*13,000*	*30,000*
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*130*	*300*

All results in mg/kg. ND: Non-Detect.
Shading denotes detection of analyte. **BOLD** denotes an exceedance of applicable VAP Standard.
Reportling Limits are provided in the Laboratory Analytical Reports in Appendix A.
NA: Not Analyzed by Laboratory.

Table 2: Summary of Ground Water Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	BFM-MW1 (11/6/19)	BFM-MW2 (11/6/19)	BFM-MW3 (11/6/19)	BFM-MW4 (11/6/19)	Standard
Metals & Inorganic Analytes					
Arsenic, Inorganic	<10	<10	<10	<10	10
Barium and Compounds	**64.3**	**85.5**	**97.3**	**173**	2000
Cadmium	<2	<2	<2	<2	5
Chromium, Total	<10	<10	<10	<10	100
Lead and Compounds	<10	<10	<10	<10	15
Mercury and Compounds	<2	<2	<2	<2	2
Selenium	<10	<10	<10	<10	50
Silver	<10	<10	<10	<10	71
Volatile Organic Compounds (VOCs)					
Acetone	<100	<100	<100	<100	12000
Benzene	<5	<5	<5	<5	5
Bromodichloromethane	<5	<5	<5	<5	80
Bromoform	<5	<5	<5	<5	80
Bromomethane	<5	<5	<5	<5	7
Carbon Disulfide	<10	<10	<10	<10	720
Carbon Tetrachloride	<5	<5	<5	<5	5
Chlorobenzene	<5	<5	<5	<5	100
Chloroform	<5	<5	<5	<5	80
Chloromethane	<5	<5	<5	<5	190
Cumene	<5	<5	<5	<5	390
Dibromochloromethane	<5	<5	<5	<5	80

All values reported in ppb. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable
Standard: VAP Generic Unrestricted Potable Use Standards

Table 2: Summary of Ground Water Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	BFM-MW1 (11/6/19)	BFM-MW2 (11/6/19)	BFM-MW3 (11/6/19)	BFM-MW4 (11/6/19)	Standard
Volatile Organic Compounds (VOCs)					
Dibromomethane (Methylene Bro	<5	<5	<5	<5	150
Dichlorobenzene, 1,2-	<5	<5	<5	<5	600
Dichlorobenzene, 1,4-	<5	<5	<5	<5	75
Dichlorodifluoromethane	<5	<5	<5	<5	2800
Dichloroethane, 1,1-	<5	<5	<5	<5	24
Dichloroethane, 1,2-	<5	<5	<5	<5	5
Dichloroethene, cis - 1,2	<5	<5	<5	<5	70
Dichloroethylene, 1,1-	<5	<5	<5	<5	7
Dichloroethylene, 1,2-trans-	<5	<5	<5	<5	100
Dichloropropane, 1,2-	<5	<5	<5	<5	5
Dichloropropane, 1,3-	<5	<5	<5	<5	290
Dichloropropene, 1,3- (cis)	<4.1	<4.1	<4.1	<4.1	n/a
Dichloropropene, 1,3- (trans)	<4.1	<4.1	<4.1	<4.1	n/a
Ethyl Chloride	<5	<5	<5	<5	21000
Ethyl Methacrylate	<100	<100	<100	<100	420
Ethylbenzene	<5	<5	<5	<5	700
Hexane, N-	<5	<5	<5	<5	250
Methyl Ethyl Ketone (2-Butanone)	<25	<25	<25	<25	4900
Methyl Isobutyl Ketone (4-methyl-	<25	<25	<25	<25	1000
Methyl tert-Butyl Ether (MTBE)	<4	<4	<4	<4	120
Methylene Chloride	<5	<5	<5	<5	5
Styrene	<5	<5	<5	<5	100

All values reported in ppb. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable
Standard: VAP Generic Unrestricted Potable Use Standards

Table 2: Summary of Ground Water Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	BFM-MW1 (11/6/19)	BFM-MW2 (11/6/19)	BFM-MW3 (11/6/19)	BFM-MW4 (11/6/19)	Standard
Volatile Organic Compounds (VOCs)					
Tetrachloroethane, 1,1,1,2-	<5	<5	<5	<5	5
Tetrachloroethane, 1,1,2,2-	<5	<5	<5	<5	0.66
Tetrachloroethylene	<5	<5	<5	<5	5
Toluene	<5	<5	<5	<5	1000
Trichlorobenzene, 1,2,4-	<5	<5	<5	<5	70
Trichloroethane, 1,1,1-	<5	<5	<5	<5	200
Trichloroethane, 1,1,2-	<5	<5	<5	<5	5
Trichloroethylene	<5	<5	<5	<5	5
Trichlorofluoromethane	<5	<5	<5	<5	1100
Trimethylbenzene, 1,2,4-	<5	<5	<5	<5	15
Vinyl Acetate	<50	<50	<50	<50	410
Vinyl Chloride	<2	<2	<2	<2	2
Xylenes	<10	<10	<10	<10	10000
Semi-Volatile Organic Compounds (SVOCs)					
Acenaphthene	<0.95	<0.95	<0.95	<0.95	400
Acenaphthylene	<0.95	<0.95	<0.95	<0.95	400
Anthracene	<0.095	<0.095	<0.095	<0.095	1300
Benz[a]anthracene	<0.095	<0.095	<0.095	<0.095	0.92
Benzo(g,h,i)perylene	<0.095	<0.095	<0.095	<0.095	87
Benzo[a]pyrene	<0.095	<0.095	<0.095	<0.095	0.2
Benzo[b]fluoranthene	<0.095	<0.095	<0.095	<0.095	0.92

All values reported in ppb. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable
Standard: VAP Generic Unrestricted Potable Use Standards

Table 2: Summary of Ground Water Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	BFM-MW1 (11/6/19)	BFM-MW2 (11/6/19)	BFM-MW3 (11/6/19)	BFM-MW4 (11/6/19)	Standard
Semi-Volatile Organic Compounds (SVOCs)					
Benzo[k]fluoranthene	<0.095	<0.095	<0.095	<0.095	9.2
Bis(2-chloro-1-methylethyl) ether	<9.5	<9.5	<9.5	<9.5	3.1
Bis(2-chloroethoxy)methane	<9.5	<9.5	<9.5	<9.5	46
Bis(2-chloroethyl)ether	<9.5	<9.5	<9.5	<9.5	0.12
Bis(2-ethylhexyl)phthalate	<4.8	<4.8	<4.8	<4.8	6
Butyl Benzyl Phthlate	<9.5	<9.5	<9.5	<9.5	140
Chloroaniline, p-	<9.5	<9.5	<9.5	<9.5	3.2
Chloronaphthalene, Beta-	<9.5	<9.5	<9.5	<9.5	550
Chlorophenol, 2-	<9.5	<9.5	<9.5	<9.5	71
Chrysene	<0.48	<0.48	<0.48	<0.48	92
Cresol, m/p	<9.5	<9.5	<9.5	<9.5	n/a
Cresol, o-	<9.5	<9.5	<9.5	<9.5	720
Cresol, p-chloro-m-	<9.5	<9.5	<9.5	<9.5	1100
Dibenz[a,h]anthracene	<0.088	<0.088	<0.088	<0.088	0.092
Dibutyl Phthalate	<9.5	<9.5	<9.5	<9.5	670
Dichlorophenol, 2,4-	<9.5	<9.5	<9.5	<9.5	35
Diethyl Phthalate	<9.5	<9.5	<9.5	<9.5	11000
Dimethylphenol, 2,4-	<9.5	<9.5	<9.5	<9.5	270
Dinitrophenol, 2,4-	<47.6	<47.6	<47.6	<47.6	30
Dinitrotoluene, 2,4-	<9.5	<9.5	<9.5	<9.5	2
Dinitrotoluene, 2,6-	<9.5	<9.5	<9.5	<9.5	0.42
Fluoranthene	<0.95	<0.95	<0.95	<0.95	630

All values reported in ppb. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable
Standard: VAP Generic Unrestricted Potable Use Standards

Table 2: Summary of Ground Water Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	BFM-MW1 (11/6/19)	BFM-MW2 (11/6/19)	BFM-MW3 (11/6/19)	BFM-MW4 (11/6/19)	Standard
Semi-Volatile Organic Compounds (SVOCs)					
Fluorene	<0.95	<0.95	<0.95	<0.95	220
Hexachlorocyclopentadiene	<9.5	<9.5	<9.5	<9.5	50
Hexachloroethane	<9.5	<9.5	<9.5	<9.5	5.1
Indeno[1,2,3-cd]pyrene	<0.095	<0.095	<0.095	<0.095	0.92
Isophorone	<9.5	<9.5	<9.5	<9.5	670
Methylnaphthalene, 2-	<0.95	<0.95	<0.95	<0.95	27
Naphthalene	<0.95	<0.95	<0.95	<0.95	1.4
Nitrobenzene	<4.8	<4.8	<4.8	<4.8	1.2
Nitroso-di-N-propylamine, N-	<47.6	<47.6	<47.6	<47.6	0.093
Nitrosodiphenylamine, N-	<9.5	<9.5	<9.5	<9.5	100
Octyl Phthalate, di-N-	<9.5	<9.5	<9.5	<9.5	160
Phenanthrene	<0.95	<0.95	<0.95	<0.95	1300
Phenol	<9.5	<9.5	<9.5	<9.5	4500
Pyrene	<0.95	<0.95	<0.95	<0.95	87
Trichlorophenol, 2,4,5-	<9.5	<9.5	<9.5	<9.5	890
Trichlorophenol, 2,4,6-	<8.6	<8.6	<8.6	<8.6	9

All values reported in ppb. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable
Standard: VAP Generic Unrestricted Potable Use Standards

Table 3: Summary of Sub-Slab & Soil Gas Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	914 Mayfield (Sub-Slab) (11/6/19)	920 Ferndale (Sub-Slab) (11/7/19)	924 Mayfield (Sub-Slab) (11/6/19)	929 Ferndale (Sub-Slab) (11/6/19)	934 Ferndale (Sub-Slab) (11/6/19)	940 Ferndale (Sub-Slab) (11/6/19)	960 Ferndale (Soil Gas) (11/6/19)
Acetone	219	27.2	57.8	32.3	304	19.5	<3.7
Benzene	22	7.6	7.6	10.2	12.3	10.2	<0.49
Benzyl Chloride	<10.6	<4.2	<3.8	<4.6	<3.8	<4.2	<4
Bromodichloromethane	<5.5	<2.2	<2	<2.4	<2	<2.2	<2.1
Bromoform	<21.2	<8.5	<7.6	<9.2	<7.7	<8.5	<8
Bromomethane	<3.2	<1.3	<1.1	<1.4	<1.2	<1.3	<1.2
Butadiene, 1,3-	<1.8	<0.72	<0.65	<0.79	<0.66	<0.72	<0.68
Carbon Disulfide	<2.6	<1	<0.91	<1.1	1.3	<1	<0.96
Carbon Tetrachloride	<5.2	<2.1	<1.8	<2.2	<1.9	<2.1	<1.9
Chlorobenzene	<3.8	<1.5	<1.3	<1.6	<1.4	<1.5	<1.4
Chloroform	<2	<0.8	<0.71	<0.87	<0.72	<0.8	<0.75
Chloromethane	<1.7	<0.68	<0.6	<0.74	2.6	<0.68	<0.64
Cyclohexane	13.5	7.5	4.9	6	11.7	6.3	<2.7
Dibromochloromethane	<7	<2.8	<2.5	<3	<2.5	<2.8	<2.6
Dibromoethane, 1,2-	<3.2	<1.3	<1.1	<1.4	<1.1	<1.3	<1.2
Dichlorobenzene, 1,2-	<4.9	<2	<1.8	<2.1	<1.8	<2	<1.9
Dichlorobenzene, 1,3-	<4.9	<2	<1.8	<2.1	<1.8	<2	<1.9
Dichlorobenzene, 1,4-	<12.4	<4.9	<4.4	<5.4	<4.5	<4.9	<4.7
Dichlorodifluoromethane	<4.1	2.5	2.5	2.6	2.4	2.4	2.4
Dichloroethane, 1,1-	<3.3	<1.3	<1.2	<1.4	<1.2	<1.3	<1.3
Dichloroethane, 1,2-	<1.7	<0.66	<0.59	<0.72	<0.6	<0.66	<0.62
Dichloroethene, cis - 1,2	<3.3	<1.3	<1.2	<1.4	<1.2	<1.3	<1.2
Dichloroethylene, 1,1-	<3.3	<1.3	<1.2	<1.4	<1.2	<1.3	<1.2
Dichloroethylene, 1,2-trans-	<3.3	<1.3	<1.2	<1.4	<1.2	<1.3	<1.2
Dichloropropane, 1,2-	<3.8	<1.5	<1.4	<1.6	<1.4	<1.5	<1.4
Dichloropropene, 1,3- (cis)	<3.7	<1.5	<1.3	<1.6	<1.3	<1.5	<1.4
Dichloropropene, 1,3- (trans)	<3.7	<1.5	9.8	<1.6	<1.3	<1.5	<1.4
Ethyl Acetate	<3	<1.2	<1.1	<1.3	<1.1	<1.2	<1.1
Ethyl Chloride	<2.2	<0.86	<0.77	<0.94	<0.78	<0.86	<0.81
Ethylbenzene	24.6	21.3	15.6	20.4	20.1	17.7	1.7
Hexachlorobutadiene	<21.9	<8.7	<7.8	<9.5	<7.9	<8.7	<8.2
Hexane, N-	42.8	18.5	13.4	16.9	30.3	18.3	<1.1
Methyl Ethyl Ketone (2-Butanone)	<12.1	10.2	5.4	6.2	38.3	8.2	<4.6
Methyl Isobutyl Ketone (4-methyl-2-pe	<16.8	<6.7	<6	<7.3	<6.1	<6.7	<6.3
Methyl tert-Butyl Ether (MTBE)	<14.8	<5.9	<5.3	<6.4	<5.3	<5.9	<5.6
Methylene Chloride	74	9	5.8	20	7.3	8	6
Naphthalene	<10.7	<4.3	<3.8	<4.7	<3.9	<4.3	<4
Styrene	<3.5	<1.4	<1.2	<1.5	<1.3	<1.4	<1.3
Tetrachloroethane, 1,1,2,2-	<2.8	<1.1	<1	<1.2	<1	<1.1	<1.1
Tetrachloroethylene	<2.8	<1.1	<0.99	<1.2	<1	<1.1	3.9
Tetrahydrofuran	<2.4	<0.97	<0.86	<1	<0.88	<0.97	<0.91
Toluene	128	66.5	53.7	73.7	68.4	65.9	<1.2
Trichlorobenzene, 1,2,4-	<30.5	<12.1	<10.9	<13.2	<11	<12.1	<11.5
Trichloroethane, 1,1,1-	<4.5	<1.8	<1.6	<1.9	<1.6	<1.8	<1.7
Trichloroethane, 1,1,2-	<2.2	<0.89	<0.8	<0.97	<0.81	<0.89	<0.84
Trichloroethylene	<2.2	<0.88	<0.79	<0.96	<0.8	<0.88	<0.83
Trichlorofluoromethane	<4.6	<1.8	<1.6	<2	<1.7	<1.8	<1.7

All values reported in µg/m3. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable

Note: Sub-Slab vapor and soil gas results should be compared to Ohio EPA VISL Target Sub-Slab and Exterior Soil Gas Screening Levels for Residential Land Use.

Table 3: Summary of Sub-Slab & Soil Gas Sampling Data

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley, Ohio

PANDEY
ENVIRONMENTAL, LLC

Chemical Name	914 Mayfield (Sub-Slab) (11/6/19)	920 Ferndale (Sub-Slab) (11/7/19)	924 Mayfield (Sub-Slab) (11/6/19)	929 Ferndale (Sub-Slab) (11/6/19)	934 Ferndale (Sub-Slab) (11/6/19)	940 Ferndale (Sub-Slab) (11/6/19)	960 Ferndale (Soil Gas) (11/6/19)
Trimethylbenzene, 1,2,4-	38.2	54.5	37.8	45.5	47.3	49	<1.5
Trimethylbenzene, 1,3,5	10.9	14.4	10	12.6	12.3	13.2	<1.5
Vinyl Acetate	<7.2	<2.9	<2.6	<3.1	<2.6	<2.9	<2.7
Vinyl Chloride	<1.1	<0.42	<0.37	<0.46	<0.38	<0.42	<0.4
Xylene, m- p-	113	108	75.4	101	91.6	91.3	12.6
Xylene, o-	41	37.9	28	36.8	34.1	33.8	5.4

All values reported in µg/m3. Non-detects are shown as less than reporting limit. n/a = Not Analyzed or Not Applicable

Note: Sub-Slab vapor and soil gas results should be compared to Ohio EPA VISL Target Sub-Slab and Exterior Soil Gas Screening Levels for Residential Land Use.

Date	Screening Location	Parameter	Results (ppm)	H2S Action Level* (ppm)
11/6/2019	960 Ferndale - SG1	Hydrogen Sulfide	0	0.1 ppm
11/6/2019	940 Ferndale - SV1	Hydrogen Sulfide	0	0.1 ppm
11/6/2019	934 Ferndale - SV1	Hydrogen Sulfide	0	0.1 ppm
11/6/2019	929 Ferndale - SV1	Hydrogen Sulfide	0	0.1 ppm
11/6/2019	924 Mayfiedl Place - SV1	Hydrogen Sulfide	0	0.1 ppm
11/7/2019	920 Ferndale Place - SV1	Hydrogen Sulfide	0	0.1 ppm
11/6/2019	914 Mayfield Place - SV1	Hydrogen Sulfide	0	0.1 ppm
Date	Screening Location	Parameter	Results (%LEL)	Methane Action Level (%LEL)
11/6/2019	960 Ferndale - SG1	Methane	0	5%
11/6/2019	940 Ferndale - SV1	Methane	0	5%
11/6/2019	934 Ferndale - SV1	Methane	0	5%
11/6/2019	929 Ferndale - SV1	Methane	0	5%
11/6/2019	924 Mayfiedl Place - SV1	Methane	0	5%
11/7/2019	920 Ferndale Place - SV1	Methane	0	5%
11/6/2019	914 Mayfield Place - SV1	Methane	0	5%

*Hydrogen Sulfide does not have a promulgated action level for resdiential settings. However, a threshold of 0.1 ppm was used as this is the lowest detectable limit of hydrogen sulfide in the MiniRae 4-gas meter.

APPENDIX A
LABORATORY ANALYTICAL DATA, CHAIN OF CUSTODY, AND LABORATORY AFFIDAVITS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

November 12, 2019

Mr. Nick Vallera
Pandey Environmental, LLC
4100 Horizons Drive
Suite 205
Columbus, OH 43220

RE: Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Dear Mr. Vallera:
Enclosed are the analytical results for sample(s) received by the laboratory on November 05, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kenneth Hunt
kenneth.hunt@pacelabs.com
(317)228-3100
Project Manager

Enclosures

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50240581001	**BFM-SB3:0-2**	Solid	11/04/19 09:15	11/05/19 08:50
50240581002	**BFM-SB3:2-4**	Solid	11/04/19 09:20	11/05/19 08:50
50240581003	**BFM-SB2:0-2**	Solid	11/04/19 08:20	11/05/19 08:50
50240581004	**BFM-SB2:4-6**	Solid	11/04/19 08:30	11/05/19 08:50
50240581005	**BFM-SB1:0-2**	Solid	11/04/19 08:45	11/05/19 08:50
50240581006	**BFM-SB1:8-10**	Solid	11/04/19 09:00	11/05/19 08:50
50240581007	**BFM-SB4:0-2**	Solid	11/04/19 12:30	11/05/19 08:50
50240581008	**BFM-SB4:2-4**	Solid	11/04/19 12:45	11/05/19 08:50
50240581009	**BFM-SB5:0-2**	Solid	11/04/19 13:00	11/05/19 08:50
50240581010	**BFM-SB5:4-6**	Solid	11/04/19 13:10	11/05/19 08:50
50240581011	**BFM-SB6:0-2**	Solid	11/04/19 13:20	11/05/19 08:50
50240581012	**BFM-SB6:2-4**	Solid	11/04/19 13:30	11/05/19 08:50
50240581013	**BFM-SB7:0-2**	Solid	11/04/19 13:45	11/05/19 08:50
50240581014	**BFM-SB7:4-6**	Solid	11/04/19 14:00	11/05/19 08:50
50240581015	**BFM-SB8:0-2**	Solid	11/04/19 14:45	11/05/19 08:50
50240581016	**BFM-SB8:8-10**	Solid	11/04/19 15:00	11/05/19 08:50

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50240581001	**BFM-SB3:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581002	**BFM-SB3:2-4**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581003	**BFM-SB2:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581004	**BFM-SB2:4-6**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581005	**BFM-SB1:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581006	**BFM-SB1:8-10**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581007	**BFM-SB4:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581008	**BFM-SB4:2-4**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581009	**BFM-SB5:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581010	**BFM-SB5:4-6**	EPA 6010	RAM	7	PASI-I

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7726 Moller Road
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(317)228-3100

SAMPLE ANALYTE COUNT

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581011	**BFM-SB6:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581012	**BFM-SB6:2-4**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581013	**BFM-SB7:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581014	**BFM-SB7:4-6**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581015	**BFM-SB8:0-2**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I
50240581016	**BFM-SB8:8-10**	EPA 6010	RAM	7	PASI-I
		EPA 7471	ILP	1	PASI-I
		EPA 8270	JCM	51	PASI-I
		SM 2540G	WZE	1	PASI-I

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581001	**BFM-SB3:0-2**					
EPA 6010	Arsenic	20.6	mg/kg	1.3	11/07/19 16:28	
EPA 6010	Barium	535	mg/kg	1.3	11/07/19 16:28	
EPA 6010	Cadmium	1.9	mg/kg	0.65	11/07/19 16:28	
EPA 6010	Chromium	15.4	mg/kg	1.3	11/07/19 16:28	
EPA 6010	Lead	247	mg/kg	1.3	11/07/19 16:28	
EPA 7471	Mercury	0.31	mg/kg	0.28	11/08/19 09:47	
EPA 8270	Anthracene	1.1	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Benzo(a)anthracene	2.4	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Benzo(a)pyrene	1.8	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Benzo(b)fluoranthene	2.2	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Benzo(k)fluoranthene	1.1	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Chrysene	2.0	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Fluoranthene	4.8	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Phenanthrene	4.5	mg/kg	0.96	11/09/19 01:54	
EPA 8270	Pyrene	3.9	mg/kg	0.96	11/09/19 01:54	
SM 2540G	Percent Moisture	31.6	%	0.10	11/11/19 10:05	
50240581002	**BFM-SB3:2-4**					
EPA 6010	Arsenic	19.8	mg/kg	1.2	11/07/19 16:44	
EPA 6010	Barium	805	mg/kg	1.2	11/07/19 16:44	
EPA 6010	Cadmium	3.0	mg/kg	0.60	11/07/19 16:44	
EPA 6010	Chromium	33.5	mg/kg	1.2	11/07/19 16:44	
EPA 6010	Lead	432	mg/kg	1.2	11/07/19 16:44	
EPA 8270	Anthracene	0.64	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Benzo(a)anthracene	1.2	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Benzo(a)pyrene	0.86	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Benzo(b)fluoranthene	1.3	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Benzo(g,h,i)perylene	0.50	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Benzo(k)fluoranthene	0.55	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Chrysene	1.2	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Fluoranthene	2.6	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Indeno(1,2,3-cd)pyrene	0.48	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Phenanthrene	2.6	mg/kg	0.42	11/12/19 14:22	
EPA 8270	Pyrene	2.2	mg/kg	0.42	11/12/19 14:22	
SM 2540G	Percent Moisture	22.1	%	0.10	11/11/19 10:06	
50240581003	**BFM-SB2:0-2**					
EPA 6010	Arsenic	19.5	mg/kg	1.1	11/07/19 16:46	
EPA 6010	Barium	378	mg/kg	1.1	11/07/19 16:46	
EPA 6010	Cadmium	1.2	mg/kg	0.57	11/07/19 16:46	
EPA 6010	Chromium	26.0	mg/kg	1.1	11/07/19 16:46	
EPA 6010	Lead	624	mg/kg	1.1	11/07/19 16:46	
EPA 6010	Selenium	1.3	mg/kg	1.1	11/07/19 16:46	
EPA 8270	Benzo(a)anthracene	8.1	mg/kg	4.2	11/09/19 02:27	
EPA 8270	Benzo(a)pyrene	6.6	mg/kg	4.2	11/09/19 02:27	
EPA 8270	Benzo(b)fluoranthene	8.7	mg/kg	4.2	11/09/19 02:27	
EPA 8270	Chrysene	6.8	mg/kg	4.2	11/09/19 02:27	
EPA 8270	Fluoranthene	14.9	mg/kg	4.2	11/09/19 02:27	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581003	**BFM-SB2:0-2**					
EPA 8270	Phenanthrene	9.3	mg/kg	4.2	11/09/19 02:27	
EPA 8270	Pyrene	12.9	mg/kg	4.2	11/09/19 02:27	
SM 2540G	Percent Moisture	22.0	%	0.10	11/11/19 10:06	
50240581004	**BFM-SB2:4-6**					
EPA 6010	Arsenic	25.0	mg/kg	1.3	11/07/19 16:49	
EPA 6010	Barium	428	mg/kg	1.3	11/07/19 16:49	
EPA 6010	Cadmium	5.3	mg/kg	0.63	11/07/19 16:49	
EPA 6010	Chromium	32.1	mg/kg	1.3	11/07/19 16:49	
EPA 6010	Lead	445	mg/kg	1.3	11/07/19 16:49	
EPA 6010	Selenium	2.0	mg/kg	1.3	11/07/19 16:49	
EPA 7471	Mercury	2.9	mg/kg	1.3	11/08/19 11:43	
EPA 8270	Benzo(a)anthracene	4.0	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Benzo(a)pyrene	3.3	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Benzo(b)fluoranthene	4.7	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Benzo(g,h,i)perylene	2.1	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Benzo(k)fluoranthene	2.1	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Chrysene	3.6	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Fluoranthene	6.9	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Indeno(1,2,3-cd)pyrene	1.8	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Phenanthrene	4.4	mg/kg	1.4	11/11/19 20:56	
EPA 8270	Pyrene	6.4	mg/kg	1.4	11/11/19 20:56	
SM 2540G	Percent Moisture	28.3	%	0.10	11/11/19 10:06	
50240581005	**BFM-SB1:0-2**					
EPA 6010	Arsenic	20.8	mg/kg	1.1	11/07/19 16:51	
EPA 6010	Barium	567	mg/kg	1.1	11/07/19 16:51	
EPA 6010	Cadmium	2.9	mg/kg	0.55	11/07/19 16:51	
EPA 6010	Chromium	30.5	mg/kg	1.1	11/07/19 16:51	
EPA 6010	Lead	517	mg/kg	1.1	11/07/19 16:51	
EPA 6010	Selenium	1.3	mg/kg	1.1	11/07/19 16:51	
EPA 6010	Silver	1.2	mg/kg	0.55	11/07/19 16:51	
EPA 7471	Mercury	0.95	mg/kg	0.26	11/08/19 10:04	
EPA 8270	Acenaphthene	38.2	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Acenaphthylene	46.7	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Anthracene	115	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Benzo(a)anthracene	234	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Benzo(a)pyrene	183	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Benzo(b)fluoranthene	255	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Benzo(g,h,i)perylene	101	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Benzo(k)fluoranthene	96.8	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Chrysene	208	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Dibenz(a,h)anthracene	30.0	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Fluoranthene	618	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Fluorene	104	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Indeno(1,2,3-cd)pyrene	94.6	mg/kg	10.3	11/11/19 18:41	
EPA 8270	2-Methylnaphthalene	52.1	mg/kg	10.3	11/11/19 18:41	
EPA 8270	Naphthalene	146	mg/kg	10.3	11/11/19 18:41	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581005	**BFM-SB1:0-2**					
EPA 8270	Phenanthrene	654	mg/kg	51.5	11/12/19 11:17	
EPA 8270	Pyrene	462	mg/kg	51.5	11/12/19 11:17	
SM 2540G	Percent Moisture	20.6	%	0.10	11/11/19 10:06	
50240581006	**BFM-SB1:8-10**					
EPA 6010	Arsenic	29.6	mg/kg	1.1	11/07/19 16:54	
EPA 6010	Barium	249	mg/kg	1.1	11/07/19 16:54	
EPA 6010	Cadmium	1.0	mg/kg	0.57	11/07/19 16:54	
EPA 6010	Chromium	21.1	mg/kg	1.1	11/07/19 16:54	
EPA 6010	Lead	63.5	mg/kg	1.1	11/07/19 16:54	
EPA 8270	Phenanthrene	0.51	mg/kg	0.43	11/12/19 14:39	
SM 2540G	Percent Moisture	24.1	%	0.10	11/11/19 10:06	
50240581007	**BFM-SB4:0-2**					
EPA 6010	Arsenic	12.9	mg/kg	1.0	11/07/19 16:56	
EPA 6010	Barium	192	mg/kg	1.0	11/07/19 16:56	
EPA 6010	Chromium	9.5	mg/kg	1.0	11/07/19 16:56	
EPA 6010	Lead	43.3	mg/kg	1.0	11/07/19 16:56	
EPA 8270	Anthracene	4.6	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Benzo(a)anthracene	8.5	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Benzo(a)pyrene	6.9	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Benzo(b)fluoranthene	10.1	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Benzo(g,h,i)perylene	4.6	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Benzo(k)fluoranthene	4.8	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Chrysene	8.4	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Fluoranthene	20.1	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Indeno(1,2,3-cd)pyrene	3.9	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Phenanthrene	17.5	mg/kg	3.8	11/08/19 23:18	
EPA 8270	Pyrene	17.5	mg/kg	3.8	11/08/19 23:18	
SM 2540G	Percent Moisture	13.3	%	0.10	11/11/19 10:07	
50240581008	**BFM-SB4:2-4**					
EPA 6010	Arsenic	15.3	mg/kg	0.96	11/07/19 16:58	
EPA 6010	Barium	111	mg/kg	0.96	11/07/19 16:58	
EPA 6010	Chromium	12.4	mg/kg	0.96	11/07/19 16:58	
EPA 6010	Lead	70.5	mg/kg	0.96	11/07/19 16:58	
EPA 7471	Mercury	0.36	mg/kg	0.22	11/08/19 10:11	
EPA 8270	Benzo(a)anthracene	0.39	mg/kg	0.36	11/08/19 23:35	
EPA 8270	Benzo(b)fluoranthene	0.50	mg/kg	0.36	11/08/19 23:35	
EPA 8270	Chrysene	0.41	mg/kg	0.36	11/08/19 23:35	
EPA 8270	Fluoranthene	0.76	mg/kg	0.36	11/08/19 23:35	
EPA 8270	Phenanthrene	0.54	mg/kg	0.36	11/08/19 23:35	
EPA 8270	Pyrene	0.76	mg/kg	0.36	11/08/19 23:35	
SM 2540G	Percent Moisture	9.5	%	0.10	11/11/19 10:07	
50240581009	**BFM-SB5:0-2**					
EPA 6010	Arsenic	22.0	mg/kg	1.1	11/07/19 17:01	
EPA 6010	Barium	214	mg/kg	1.1	11/07/19 17:01	
EPA 6010	Cadmium	1.4	mg/kg	0.54	11/07/19 17:01	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581009	**BFM-SB5:0-2**					
EPA 6010	Chromium	19.9	mg/kg	1.1	11/07/19 17:01	
EPA 6010	Lead	835	mg/kg	1.1	11/07/19 17:01	
EPA 7471	Mercury	3.0	mg/kg	1.1	11/08/19 11:46	
EPA 8270	Anthracene	0.46	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Benzo(a)anthracene	1.3	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Benzo(a)pyrene	1.1	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Benzo(b)fluoranthene	1.6	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Benzo(g,h,i)perylene	0.71	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Benzo(k)fluoranthene	0.50	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Chrysene	1.2	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Fluoranthene	2.5	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Indeno(1,2,3-cd)pyrene	0.63	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Phenanthrene	1.8	mg/kg	0.40	11/08/19 23:52	
EPA 8270	Pyrene	2.3	mg/kg	0.40	11/08/19 23:52	
SM 2540G	Percent Moisture	17.5	%	0.10	11/11/19 10:07	
50240581010	**BFM-SB5:4-6**					
EPA 6010	Arsenic	25.6	mg/kg	1.1	11/07/19 17:03	
EPA 6010	Barium	361	mg/kg	1.1	11/07/19 17:03	
EPA 6010	Cadmium	1.6	mg/kg	0.53	11/07/19 17:03	
EPA 6010	Chromium	31.5	mg/kg	1.1	11/07/19 17:03	
EPA 6010	Lead	791	mg/kg	1.1	11/07/19 17:03	
EPA 6010	Selenium	1.6	mg/kg	1.1	11/07/19 17:03	
EPA 7471	Mercury	0.36	mg/kg	0.24	11/08/19 10:19	
EPA 8270	Fluoranthene	0.44	mg/kg	0.38	11/09/19 00:09	
EPA 8270	Pyrene	0.43	mg/kg	0.38	11/09/19 00:09	
SM 2540G	Percent Moisture	13.7	%	0.10	11/11/19 10:07	
50240581011	**BFM-SB6:0-2**					
EPA 6010	Arsenic	19.9	mg/kg	1.2	11/07/19 17:09	
EPA 6010	Barium	439	mg/kg	1.2	11/07/19 17:09	
EPA 6010	Cadmium	2.2	mg/kg	0.58	11/07/19 17:09	
EPA 6010	Chromium	18.9	mg/kg	1.2	11/07/19 17:09	
EPA 6010	Lead	622	mg/kg	1.2	11/07/19 17:09	
EPA 6010	Silver	1.0	mg/kg	0.58	11/07/19 17:09	
EPA 7471	Mercury	0.39	mg/kg	0.23	11/08/19 10:21	
EPA 8270	Benzo(a)anthracene	3.3	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Benzo(a)pyrene	2.4	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Benzo(b)fluoranthene	3.2	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Chrysene	3.0	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Fluoranthene	7.2	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Phenanthrene	6.4	mg/kg	2.0	11/11/19 18:58	
EPA 8270	Pyrene	6.0	mg/kg	2.0	11/11/19 18:58	
SM 2540G	Percent Moisture	19.1	%	0.10	11/11/19 10:07	
50240581012	**BFM-SB6:2-4**					
EPA 6010	Arsenic	26.1	mg/kg	1.1	11/07/19 17:12	
EPA 6010	Barium	426	mg/kg	1.1	11/07/19 17:12	
EPA 6010	Cadmium	2.3	mg/kg	0.56	11/07/19 17:12	

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SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581012	**BFM-SB6:2-4**					
EPA 6010	Chromium	18.3	mg/kg	1.1	11/07/19 17:12	
EPA 6010	Lead	559	mg/kg	1.1	11/07/19 17:12	
SM 2540G	Percent Moisture	16.5	%	0.10	11/11/19 10:07	
50240581013	**BFM-SB7:0-2**					
EPA 6010	Arsenic	19.9	mg/kg	1.3	11/07/19 17:14	
EPA 6010	Barium	386	mg/kg	1.3	11/07/19 17:14	
EPA 6010	Cadmium	1.8	mg/kg	0.63	11/07/19 17:14	
EPA 6010	Chromium	20.8	mg/kg	1.3	11/07/19 17:14	
EPA 6010	Lead	1920	mg/kg	1.3	11/07/19 17:14	
EPA 7471	Mercury	0.53	mg/kg	0.28	11/08/19 10:33	
EPA 8270	Benzo(a)anthracene	0.44	mg/kg	0.44	11/11/19 19:32	
EPA 8270	Benzo(b)fluoranthene	0.82	mg/kg	0.44	11/11/19 19:32	
EPA 8270	Chrysene	0.88	mg/kg	0.44	11/11/19 19:32	
EPA 8270	Fluoranthene	1.4	mg/kg	0.44	11/11/19 19:32	
EPA 8270	Phenanthrene	1.6	mg/kg	0.44	11/11/19 19:32	
EPA 8270	Pyrene	1.2	mg/kg	0.44	11/11/19 19:32	
SM 2540G	Percent Moisture	25.3	%	0.10	11/11/19 10:08	
50240581014	**BFM-SB7:4-6**					
EPA 6010	Arsenic	16.0	mg/kg	1.1	11/07/19 17:17	
EPA 6010	Barium	1130	mg/kg	5.5	11/07/19 17:23	
EPA 6010	Cadmium	0.63	mg/kg	0.55	11/07/19 17:17	
EPA 6010	Chromium	31.3	mg/kg	1.1	11/07/19 17:17	
EPA 6010	Lead	9540	mg/kg	5.5	11/07/19 17:23	
EPA 6010	Silver	1.5	mg/kg	0.55	11/07/19 17:17	
EPA 8270	Fluoranthene	0.49	mg/kg	0.41	11/11/19 19:49	
EPA 8270	Naphthalene	0.59	mg/kg	0.41	11/11/19 19:49	
EPA 8270	Phenanthrene	0.64	mg/kg	0.41	11/11/19 19:49	
EPA 8270	Pyrene	0.47	mg/kg	0.41	11/11/19 19:49	
SM 2540G	Percent Moisture	20.4	%	0.10	11/11/19 10:08	
50240581015	**BFM-SB8:0-2**					
EPA 6010	Arsenic	13.5	mg/kg	1.0	11/07/19 17:19	
EPA 6010	Barium	66.1	mg/kg	1.0	11/07/19 17:19	
EPA 6010	Chromium	10.1	mg/kg	1.0	11/07/19 17:19	
EPA 6010	Lead	25.2	mg/kg	1.0	11/07/19 17:19	
EPA 8270	Benzo(a)anthracene	2.4	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Benzo(a)pyrene	2.9	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Benzo(b)fluoranthene	4.2	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Benzo(g,h,i)perylene	2.2	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Benzo(k)fluoranthene	1.8	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Chrysene	2.8	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Fluoranthene	5.8	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Indeno(1,2,3-cd)pyrene	1.9	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Phenanthrene	2.0	mg/kg	1.8	11/12/19 11:51	
EPA 8270	Pyrene	5.5	mg/kg	1.8	11/12/19 11:51	
SM 2540G	Percent Moisture	9.3	%	0.10	11/11/19 10:08	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50240581016	**BFM-SB8:8-10**					
EPA 6010	Arsenic	16.0	mg/kg	1.1	11/07/19 17:21	
EPA 6010	Barium	49.2	mg/kg	1.1	11/07/19 17:21	
EPA 6010	Chromium	9.4	mg/kg	1.1	11/07/19 17:21	
EPA 6010	Lead	12.4	mg/kg	1.1	11/07/19 17:21	
SM 2540G	Percent Moisture	15.5	%	0.10	11/11/19 10:08	

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB3:0-2 **Lab ID: 50240581001** Collected: 11/04/19 09:15 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**20.6**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:28	7440-38-2	
Barium	**535**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:28	7440-39-3	
Cadmium	**1.9**	mg/kg	0.65	1	11/06/19 13:35	11/07/19 16:28	7440-43-9	
Chromium	**15.4**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:28	7440-47-3	
Lead	**247**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:28	7439-92-1	
Selenium	ND	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:28	7782-49-2	
Silver	ND	mg/kg	0.65	1	11/06/19 13:35	11/07/19 16:28	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.31**	mg/kg	0.28	1	11/07/19 23:30	11/08/19 09:47	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	83-32-9	
Acenaphthylene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	208-96-8	
Anthracene	**1.1**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	120-12-7	
Benzo(a)anthracene	**2.4**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	56-55-3	
Benzo(a)pyrene	**1.8**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	50-32-8	
Benzo(b)fluoranthene	**2.2**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	191-24-2	
Benzo(k)fluoranthene	**1.1**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	1.9	1	11/07/19 11:45	11/09/19 01:54	59-50-7	
4-Chloroaniline	ND	mg/kg	1.9	1	11/07/19 11:45	11/09/19 01:54	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	91-58-7	
2-Chlorophenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	95-57-8	
Chrysene	**2.0**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	120-83-2	
Diethylphthalate	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	4.6	1	11/07/19 11:45	11/09/19 01:54	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	117-81-7	
Fluoranthene	**4.8**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	206-44-0	
Fluorene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	77-47-4	
Hexachloroethane	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	193-39-5	
Isophorone	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	78-59-1	

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB3:0-2 **Lab ID: 50240581001** Collected: 11/04/19 09:15 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	1.9	1	11/07/19 11:45	11/09/19 01:54		
Naphthalene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	91-20-3	
Nitrobenzene	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	86-30-6	
Phenanthrene	**4.5**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	85-01-8	
Phenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	108-95-2	
Pyrene	**3.9**	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.96	1	11/07/19 11:45	11/09/19 01:54	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	52	%.	18-98	1	11/07/19 11:45	11/09/19 01:54	4165-60-0	
Phenol-d5 (S)	69	%.	18-108	1	11/07/19 11:45	11/09/19 01:54	4165-62-2	
2-Fluorophenol (S)	69	%.	16-104	1	11/07/19 11:45	11/09/19 01:54	367-12-4	
2,4,6-Tribromophenol (S)	57	%.	10-114	1	11/07/19 11:45	11/09/19 01:54	118-79-6	
2-Fluorobiphenyl (S)	68	%.	21-96	1	11/07/19 11:45	11/09/19 01:54	321-60-8	
p-Terphenyl-d14 (S)	87	%.	29-124	1	11/07/19 11:45	11/09/19 01:54	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**31.6**	%	0.10	1		11/11/19 10:05		

REPORT OF LABORATORY ANALYSIS

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(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB3:2-4 **Lab ID: 50240581002** Collected: 11/04/19 09:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**19.8**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 16:44	7440-38-2	
Barium	**805**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 16:44	7440-39-3	
Cadmium	**3.0**	mg/kg	0.60	1	11/06/19 13:35	11/07/19 16:44	7440-43-9	
Chromium	**33.5**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 16:44	7440-47-3	
Lead	**432**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 16:44	7439-92-1	
Selenium	ND	mg/kg	1.2	1	11/06/19 13:35	11/07/19 16:44	7782-49-2	
Silver	ND	mg/kg	0.60	1	11/06/19 13:35	11/07/19 16:44	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.26	1	11/07/19 23:30	11/08/19 09:50	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	83-32-9	
Acenaphthylene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	208-96-8	
Anthracene	**0.64**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	120-12-7	
Benzo(a)anthracene	**1.2**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	56-55-3	
Benzo(a)pyrene	**0.86**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	50-32-8	
Benzo(b)fluoranthene	**1.3**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	205-99-2	
Benzo(g,h,i)perylene	**0.50**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	191-24-2	
Benzo(k)fluoranthene	**0.55**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.84	1	11/12/19 09:41	11/12/19 14:22	59-50-7	
4-Chloroaniline	ND	mg/kg	0.84	1	11/12/19 09:41	11/12/19 14:22	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	91-58-7	
2-Chlorophenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	95-57-8	
Chrysene	**1.2**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	120-83-2	
Diethylphthalate	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	2.0	1	11/12/19 09:41	11/12/19 14:22	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	117-81-7	
Fluoranthene	**2.6**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	206-44-0	
Fluorene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	77-47-4	
Hexachloroethane	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	67-72-1	
Indeno(1,2,3-cd)pyrene	**0.48**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	193-39-5	
Isophorone	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB3:2-4 **Lab ID: 50240581002** Collected: 11/04/19 09:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.84	1	11/12/19 09:41	11/12/19 14:22		
Naphthalene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	91-20-3	
Nitrobenzene	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	86-30-6	
Phenanthrene	**2.6**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	85-01-8	
Phenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	108-95-2	
Pyrene	**2.2**	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.42	1	11/12/19 09:41	11/12/19 14:22	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	25	%.	18-98	1	11/12/19 09:41	11/12/19 14:22	4165-60-0	
Phenol-d5 (S)	44	%.	18-108	1	11/12/19 09:41	11/12/19 14:22	4165-62-2	
2-Fluorophenol (S)	44	%.	16-104	1	11/12/19 09:41	11/12/19 14:22	367-12-4	
2,4,6-Tribromophenol (S)	27	%.	10-114	1	11/12/19 09:41	11/12/19 14:22	118-79-6	
2-Fluorobiphenyl (S)	35	%.	21-96	1	11/12/19 09:41	11/12/19 14:22	321-60-8	
p-Terphenyl-d14 (S)	30	%.	29-124	1	11/12/19 09:41	11/12/19 14:22	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**22.1**	%	0.10	1		11/11/19 10:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB2:0-2 **Lab ID: 50240581003** Collected: 11/04/19 08:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**19.5**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:46	7440-38-2	
Barium	**378**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:46	7440-39-3	
Cadmium	**1.2**	mg/kg	0.57	1	11/06/19 13:35	11/07/19 16:46	7440-43-9	
Chromium	**26.0**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:46	7440-47-3	
Lead	**624**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:46	7439-92-1	
Selenium	**1.3**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:46	7782-49-2	
Silver	ND	mg/kg	0.57	1	11/06/19 13:35	11/07/19 16:46	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.26	1	11/07/19 23:30	11/08/19 09:57	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	83-32-9	
Acenaphthylene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	208-96-8	
Anthracene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	120-12-7	
Benzo(a)anthracene	**8.1**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	56-55-3	
Benzo(a)pyrene	**6.6**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	50-32-8	
Benzo(b)fluoranthene	**8.7**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	207-08-9	
Butylbenzylphthalate	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	8.4	10	11/07/19 11:45	11/09/19 02:27	59-50-7	
4-Chloroaniline	ND	mg/kg	8.4	10	11/07/19 11:45	11/09/19 02:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	108-60-1	
2-Chloronaphthalene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	91-58-7	
2-Chlorophenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	95-57-8	
Chrysene	**6.8**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	120-83-2	
Diethylphthalate	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	105-67-9	
Di-n-butylphthalate	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	20.4	10	11/07/19 11:45	11/09/19 02:27	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	606-20-2	
Di-n-octylphthalate	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	117-81-7	
Fluoranthene	**14.9**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	206-44-0	
Fluorene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	77-47-4	
Hexachloroethane	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	193-39-5	
Isophorone	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB2:0-2 **Lab ID: 50240581003** Collected: 11/04/19 08:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	8.4	10	11/07/19 11:45	11/09/19 02:27		
Naphthalene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	91-20-3	
Nitrobenzene	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	86-30-6	
Phenanthrene	**9.3**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	85-01-8	
Phenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	108-95-2	ED
Pyrene	**12.9**	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	4.2	10	11/07/19 11:45	11/09/19 02:27	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	65	%.	18-98	10	11/07/19 11:45	11/09/19 02:27	4165-60-0	
Phenol-d5 (S)	68	%.	18-108	10	11/07/19 11:45	11/09/19 02:27	4165-62-2	
2-Fluorophenol (S)	68	%.	16-104	10	11/07/19 11:45	11/09/19 02:27	367-12-4	
2,4,6-Tribromophenol (S)	64	%.	10-114	10	11/07/19 11:45	11/09/19 02:27	118-79-6	
2-Fluorobiphenyl (S)	69	%.	21-96	10	11/07/19 11:45	11/09/19 02:27	321-60-8	
p-Terphenyl-d14 (S)	82	%.	29-124	10	11/07/19 11:45	11/09/19 02:27	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**22.0**	%	0.10	1		11/11/19 10:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB2:4-6 **Lab ID: 50240581004** Collected: 11/04/19 08:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**25.0**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:49	7440-38-2	
Barium	**428**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:49	7440-39-3	
Cadmium	**5.3**	mg/kg	0.63	1	11/06/19 13:35	11/07/19 16:49	7440-43-9	
Chromium	**32.1**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:49	7440-47-3	
Lead	**445**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:49	7439-92-1	
Selenium	**2.0**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 16:49	7782-49-2	
Silver	ND	mg/kg	0.63	1	11/06/19 13:35	11/07/19 16:49	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**2.9**	mg/kg	1.3	5	11/07/19 23:30	11/08/19 11:43	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	83-32-9	
Acenaphthylene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	208-96-8	
Anthracene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	120-12-7	
Benzo(a)anthracene	**4.0**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	56-55-3	
Benzo(a)pyrene	**3.3**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	50-32-8	
Benzo(b)fluoranthene	**4.7**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	205-99-2	
Benzo(g,h,i)perylene	**2.1**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	191-24-2	
Benzo(k)fluoranthene	**2.1**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	207-08-9	
Butylbenzylphthalate	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	2.8	1	11/07/19 11:45	11/11/19 20:56	59-50-7	
4-Chloroaniline	ND	mg/kg	2.8	1	11/07/19 11:45	11/11/19 20:56	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	108-60-1	
2-Chloronaphthalene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	91-58-7	
2-Chlorophenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	95-57-8	
Chrysene	**3.6**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	120-83-2	
Diethylphthalate	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	105-67-9	
Di-n-butylphthalate	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	6.7	1	11/07/19 11:45	11/11/19 20:56	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	606-20-2	
Di-n-octylphthalate	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	117-81-7	
Fluoranthene	**6.9**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	206-44-0	
Fluorene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	77-47-4	
Hexachloroethane	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	67-72-1	
Indeno(1,2,3-cd)pyrene	**1.8**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	193-39-5	
Isophorone	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB2:4-6 **Lab ID: 50240581004** Collected: 11/04/19 08:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	2.8	1	11/07/19 11:45	11/11/19 20:56		
Naphthalene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	91-20-3	
Nitrobenzene	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	86-30-6	
Phenanthrene	**4.4**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	85-01-8	
Phenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	108-95-2	
Pyrene	**6.4**	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	1.4	1	11/07/19 11:45	11/11/19 20:56	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	59	%.	18-98	1	11/07/19 11:45	11/11/19 20:56	4165-60-0	
Phenol-d5 (S)	64	%.	18-108	1	11/07/19 11:45	11/11/19 20:56	4165-62-2	
2-Fluorophenol (S)	61	%.	16-104	1	11/07/19 11:45	11/11/19 20:56	367-12-4	
2,4,6-Tribromophenol (S)	43	%.	10-114	1	11/07/19 11:45	11/11/19 20:56	118-79-6	
2-Fluorobiphenyl (S)	60	%.	21-96	1	11/07/19 11:45	11/11/19 20:56	321-60-8	
p-Terphenyl-d14 (S)	67	%.	29-124	1	11/07/19 11:45	11/11/19 20:56	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**28.3**	%	0.10	1		11/11/19 10:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB1:0-2 **Lab ID: 50240581005** Collected: 11/04/19 08:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**20.8**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:51	7440-38-2	
Barium	**567**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:51	7440-39-3	
Cadmium	**2.9**	mg/kg	0.55	1	11/06/19 13:35	11/07/19 16:51	7440-43-9	
Chromium	**30.5**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:51	7440-47-3	
Lead	**517**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:51	7439-92-1	
Selenium	**1.3**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:51	7782-49-2	
Silver	**1.2**	mg/kg	0.55	1	11/06/19 13:35	11/07/19 16:51	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.95**	mg/kg	0.26	1	11/07/19 23:30	11/08/19 10:04	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	**38.2**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	83-32-9	
Acenaphthylene	**46.7**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	208-96-8	
Anthracene	**115**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	120-12-7	
Benzo(a)anthracene	**234**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	56-55-3	
Benzo(a)pyrene	**183**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	50-32-8	
Benzo(b)fluoranthene	**255**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	205-99-2	
Benzo(g,h,i)perylene	**101**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	191-24-2	
Benzo(k)fluoranthene	**96.8**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	207-08-9	
Butylbenzylphthalate	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	20.6	5	11/08/19 11:46	11/11/19 18:41	59-50-7	
4-Chloroaniline	ND	mg/kg	20.6	5	11/08/19 11:46	11/11/19 18:41	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	108-60-1	
2-Chloronaphthalene	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	91-58-7	
2-Chlorophenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	95-57-8	
Chrysene	**208**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	218-01-9	
Dibenz(a,h)anthracene	**30.0**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	120-83-2	
Diethylphthalate	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	105-67-9	
Di-n-butylphthalate	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	49.9	5	11/08/19 11:46	11/11/19 18:41	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	606-20-2	
Di-n-octylphthalate	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	117-81-7	
Fluoranthene	**618**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	206-44-0	
Fluorene	**104**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	77-47-4	
Hexachloroethane	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	67-72-1	
Indeno(1,2,3-cd)pyrene	**94.6**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	193-39-5	
Isophorone	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	78-59-1	

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB1:0-2 **Lab ID: 50240581005** Collected: 11/04/19 08:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	**52.1**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	20.6	5	11/08/19 11:46	11/11/19 18:41		
Naphthalene	**146**	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	91-20-3	
Nitrobenzene	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	86-30-6	
Phenanthrene	**654**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	85-01-8	
Phenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	108-95-2	ED
Pyrene	**462**	mg/kg	51.5	25	11/08/19 11:46	11/12/19 11:17	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	10.3	5	11/08/19 11:46	11/11/19 18:41	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	312	%.	18-98	5	11/08/19 11:46	11/11/19 18:41	4165-60-0	S4
Phenol-d5 (S)	308	%.	18-108	5	11/08/19 11:46	11/11/19 18:41	4165-62-2	S4
2-Fluorophenol (S)	297	%.	16-104	5	11/08/19 11:46	11/11/19 18:41	367-12-4	S4
2,4,6-Tribromophenol (S)	267	%.	10-114	5	11/08/19 11:46	11/11/19 18:41	118-79-6	S4
2-Fluorobiphenyl (S)	315	%.	21-96	5	11/08/19 11:46	11/11/19 18:41	321-60-8	S4
p-Terphenyl-d14 (S)	338	%.	29-124	5	11/08/19 11:46	11/11/19 18:41	1718-51-0	S4
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**20.6**	%	0.10	1		11/11/19 10:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB1:8-10 **Lab ID: 50240581006** Collected: 11/04/19 09:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**29.6**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:54	7440-38-2	
Barium	**249**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:54	7440-39-3	
Cadmium	**1.0**	mg/kg	0.57	1	11/06/19 13:35	11/07/19 16:54	7440-43-9	
Chromium	**21.1**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:54	7440-47-3	
Lead	**63.5**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:54	7439-92-1	
Selenium	ND	mg/kg	1.1	1	11/06/19 13:35	11/07/19 16:54	7782-49-2	
Silver	ND	mg/kg	0.57	1	11/06/19 13:35	11/07/19 16:54	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.27	1	11/07/19 23:30	11/08/19 10:07	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	83-32-9	
Acenaphthylene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	208-96-8	
Anthracene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.86	1	11/12/19 09:41	11/12/19 14:39	59-50-7	
4-Chloroaniline	ND	mg/kg	0.86	1	11/12/19 09:41	11/12/19 14:39	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	91-58-7	
2-Chlorophenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	95-57-8	
Chrysene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	120-83-2	
Diethylphthalate	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	2.1	1	11/12/19 09:41	11/12/19 14:39	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	117-81-7	
Fluoranthene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	206-44-0	
Fluorene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	77-47-4	
Hexachloroethane	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	193-39-5	
Isophorone	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB1:8-10 **Lab ID: 50240581006** Collected: 11/04/19 09:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.86	1	11/12/19 09:41	11/12/19 14:39		
Naphthalene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	91-20-3	
Nitrobenzene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	86-30-6	
Phenanthrene	**0.51**	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	85-01-8	
Phenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	108-95-2	
Pyrene	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.43	1	11/12/19 09:41	11/12/19 14:39	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	55	%.	18-98	1	11/12/19 09:41	11/12/19 14:39	4165-60-0	
Phenol-d5 (S)	44	%.	18-108	1	11/12/19 09:41	11/12/19 14:39	4165-62-2	
2-Fluorophenol (S)	47	%.	16-104	1	11/12/19 09:41	11/12/19 14:39	367-12-4	
2,4,6-Tribromophenol (S)	36	%.	10-114	1	11/12/19 09:41	11/12/19 14:39	118-79-6	
2-Fluorobiphenyl (S)	59	%.	21-96	1	11/12/19 09:41	11/12/19 14:39	321-60-8	
p-Terphenyl-d14 (S)	50	%.	29-124	1	11/12/19 09:41	11/12/19 14:39	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**24.1**	%	0.10	1		11/11/19 10:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB4:0-2 **Lab ID: 50240581007** Collected: 11/04/19 12:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**12.9**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 16:56	7440-38-2	
Barium	**192**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 16:56	7440-39-3	
Cadmium	ND	mg/kg	0.52	1	11/06/19 13:35	11/07/19 16:56	7440-43-9	
Chromium	**9.5**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 16:56	7440-47-3	
Lead	**43.3**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 16:56	7439-92-1	
Selenium	ND	mg/kg	1.0	1	11/06/19 13:35	11/07/19 16:56	7782-49-2	
Silver	ND	mg/kg	0.52	1	11/06/19 13:35	11/07/19 16:56	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.23	1	11/07/19 23:30	11/08/19 10:09	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	83-32-9	
Acenaphthylene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	208-96-8	
Anthracene	**4.6**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	120-12-7	
Benzo(a)anthracene	**8.5**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	56-55-3	
Benzo(a)pyrene	**6.9**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	50-32-8	
Benzo(b)fluoranthene	**10.1**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	205-99-2	
Benzo(g,h,i)perylene	**4.6**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	191-24-2	
Benzo(k)fluoranthene	**4.8**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	207-08-9	
Butylbenzylphthalate	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	7.6	10	11/08/19 09:48	11/08/19 23:18	59-50-7	
4-Chloroaniline	ND	mg/kg	7.6	10	11/08/19 09:48	11/08/19 23:18	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	108-60-1	
2-Chloronaphthalene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	91-58-7	
2-Chlorophenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	95-57-8	
Chrysene	**8.4**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	120-83-2	
Diethylphthalate	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	105-67-9	
Di-n-butylphthalate	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	18.4	10	11/08/19 09:48	11/08/19 23:18	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	606-20-2	
Di-n-octylphthalate	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	117-81-7	
Fluoranthene	**20.1**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	206-44-0	
Fluorene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	77-47-4	
Hexachloroethane	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	67-72-1	
Indeno(1,2,3-cd)pyrene	**3.9**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	193-39-5	
Isophorone	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB4:0-2 **Lab ID: 50240581007** Collected: 11/04/19 12:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	7.6	10	11/08/19 09:48	11/08/19 23:18		
Naphthalene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	91-20-3	
Nitrobenzene	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	86-30-6	
Phenanthrene	**17.5**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	85-01-8	
Phenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	108-95-2	ED
Pyrene	**17.5**	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	3.8	10	11/08/19 09:48	11/08/19 23:18	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	65	%.	18-98	10	11/08/19 09:48	11/08/19 23:18	4165-60-0	
Phenol-d5 (S)	75	%.	18-108	10	11/08/19 09:48	11/08/19 23:18	4165-62-2	
2-Fluorophenol (S)	72	%.	16-104	10	11/08/19 09:48	11/08/19 23:18	367-12-4	
2,4,6-Tribromophenol (S)	58	%.	10-114	10	11/08/19 09:48	11/08/19 23:18	118-79-6	
2-Fluorobiphenyl (S)	67	%.	21-96	10	11/08/19 09:48	11/08/19 23:18	321-60-8	
p-Terphenyl-d14 (S)	66	%.	29-124	10	11/08/19 09:48	11/08/19 23:18	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**13.3**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB4:2-4 **Lab ID: 50240581008** Collected: 11/04/19 12:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**15.3**	mg/kg	0.96	1	11/06/19 13:35	11/07/19 16:58	7440-38-2	
Barium	**111**	mg/kg	0.96	1	11/06/19 13:35	11/07/19 16:58	7440-39-3	
Cadmium	ND	mg/kg	0.48	1	11/06/19 13:35	11/07/19 16:58	7440-43-9	
Chromium	**12.4**	mg/kg	0.96	1	11/06/19 13:35	11/07/19 16:58	7440-47-3	
Lead	**70.5**	mg/kg	0.96	1	11/06/19 13:35	11/07/19 16:58	7439-92-1	
Selenium	ND	mg/kg	0.96	1	11/06/19 13:35	11/07/19 16:58	7782-49-2	
Silver	ND	mg/kg	0.48	1	11/06/19 13:35	11/07/19 16:58	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.36**	mg/kg	0.22	1	11/07/19 23:30	11/08/19 10:11	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	83-32-9	
Acenaphthylene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	208-96-8	
Anthracene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	120-12-7	
Benzo(a)anthracene	**0.39**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	50-32-8	
Benzo(b)fluoranthene	**0.50**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.73	1	11/08/19 09:48	11/08/19 23:35	59-50-7	
4-Chloroaniline	ND	mg/kg	0.73	1	11/08/19 09:48	11/08/19 23:35	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	91-58-7	
2-Chlorophenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	95-57-8	
Chrysene	**0.41**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	120-83-2	
Diethylphthalate	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	1.8	1	11/08/19 09:48	11/08/19 23:35	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	117-81-7	
Fluoranthene	**0.76**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	206-44-0	
Fluorene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	77-47-4	
Hexachloroethane	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	193-39-5	
Isophorone	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	78-59-1	

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB4:2-4 **Lab ID: 50240581008** Collected: 11/04/19 12:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.73	1	11/08/19 09:48	11/08/19 23:35		
Naphthalene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	91-20-3	
Nitrobenzene	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	86-30-6	
Phenanthrene	**0.54**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	85-01-8	
Phenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	108-95-2	
Pyrene	**0.76**	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.36	1	11/08/19 09:48	11/08/19 23:35	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	66	%.	18-98	1	11/08/19 09:48	11/08/19 23:35	4165-60-0	
Phenol-d5 (S)	71	%.	18-108	1	11/08/19 09:48	11/08/19 23:35	4165-62-2	
2-Fluorophenol (S)	66	%.	16-104	1	11/08/19 09:48	11/08/19 23:35	367-12-4	
2,4,6-Tribromophenol (S)	61	%.	10-114	1	11/08/19 09:48	11/08/19 23:35	118-79-6	
2-Fluorobiphenyl (S)	68	%.	21-96	1	11/08/19 09:48	11/08/19 23:35	321-60-8	
p-Terphenyl-d14 (S)	70	%.	29-124	1	11/08/19 09:48	11/08/19 23:35	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.5**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

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(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB5:0-2 **Lab ID: 50240581009** Collected: 11/04/19 13:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**22.0**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:01	7440-38-2	
Barium	**214**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:01	7440-39-3	
Cadmium	**1.4**	mg/kg	0.54	1	11/06/19 13:35	11/07/19 17:01	7440-43-9	
Chromium	**19.9**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:01	7440-47-3	
Lead	**835**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:01	7439-92-1	
Selenium	ND	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:01	7782-49-2	
Silver	ND	mg/kg	0.54	1	11/06/19 13:35	11/07/19 17:01	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**3.0**	mg/kg	1.1	5	11/07/19 23:30	11/08/19 11:46	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	83-32-9	
Acenaphthylene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	208-96-8	
Anthracene	**0.46**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	120-12-7	
Benzo(a)anthracene	**1.3**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	56-55-3	
Benzo(a)pyrene	**1.1**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	50-32-8	
Benzo(b)fluoranthene	**1.6**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	205-99-2	
Benzo(g,h,i)perylene	**0.71**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	191-24-2	
Benzo(k)fluoranthene	**0.50**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.79	1	11/08/19 09:48	11/08/19 23:52	59-50-7	
4-Chloroaniline	ND	mg/kg	0.79	1	11/08/19 09:48	11/08/19 23:52	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	91-58-7	
2-Chlorophenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	95-57-8	
Chrysene	**1.2**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	120-83-2	
Diethylphthalate	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	1.9	1	11/08/19 09:48	11/08/19 23:52	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	117-81-7	
Fluoranthene	**2.5**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	206-44-0	
Fluorene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	77-47-4	
Hexachloroethane	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	67-72-1	
Indeno(1,2,3-cd)pyrene	**0.63**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	193-39-5	
Isophorone	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB5:0-2 **Lab ID: 50240581009** Collected: 11/04/19 13:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.79	1	11/08/19 09:48	11/08/19 23:52		
Naphthalene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	91-20-3	
Nitrobenzene	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	86-30-6	
Phenanthrene	**1.8**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	85-01-8	
Phenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	108-95-2	
Pyrene	**2.3**	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.40	1	11/08/19 09:48	11/08/19 23:52	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	66	%.	18-98	1	11/08/19 09:48	11/08/19 23:52	4165-60-0	
Phenol-d5 (S)	76	%.	18-108	1	11/08/19 09:48	11/08/19 23:52	4165-62-2	
2-Fluorophenol (S)	71	%.	16-104	1	11/08/19 09:48	11/08/19 23:52	367-12-4	
2,4,6-Tribromophenol (S)	69	%.	10-114	1	11/08/19 09:48	11/08/19 23:52	118-79-6	
2-Fluorobiphenyl (S)	68	%.	21-96	1	11/08/19 09:48	11/08/19 23:52	321-60-8	
p-Terphenyl-d14 (S)	70	%.	29-124	1	11/08/19 09:48	11/08/19 23:52	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**17.5**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB5:4-6 **Lab ID: 50240581010** Collected: 11/04/19 13:10 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**25.6**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:03	7440-38-2	
Barium	**361**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:03	7440-39-3	
Cadmium	**1.6**	mg/kg	0.53	1	11/06/19 13:35	11/07/19 17:03	7440-43-9	
Chromium	**31.5**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:03	7440-47-3	
Lead	**791**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:03	7439-92-1	
Selenium	**1.6**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:03	7782-49-2	
Silver	ND	mg/kg	0.53	1	11/06/19 13:35	11/07/19 17:03	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.36**	mg/kg	0.24	1	11/07/19 23:30	11/08/19 10:19	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	83-32-9	
Acenaphthylene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	208-96-8	
Anthracene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.76	1	11/08/19 09:48	11/09/19 00:09	59-50-7	
4-Chloroaniline	ND	mg/kg	0.76	1	11/08/19 09:48	11/09/19 00:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	91-58-7	
2-Chlorophenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	95-57-8	
Chrysene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	120-83-2	
Diethylphthalate	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	1.8	1	11/08/19 09:48	11/09/19 00:09	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	117-81-7	
Fluoranthene	**0.44**	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	206-44-0	
Fluorene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	77-47-4	
Hexachloroethane	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	193-39-5	
Isophorone	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	78-59-1	

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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB5:4-6 **Lab ID: 50240581010** Collected: 11/04/19 13:10 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.76	1	11/08/19 09:48	11/09/19 00:09		
Naphthalene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	91-20-3	
Nitrobenzene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	86-30-6	
Phenanthrene	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	85-01-8	
Phenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	108-95-2	
Pyrene	**0.43**	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.38	1	11/08/19 09:48	11/09/19 00:09	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	68	%.	18-98	1	11/08/19 09:48	11/09/19 00:09	4165-60-0	
Phenol-d5 (S)	77	%.	18-108	1	11/08/19 09:48	11/09/19 00:09	4165-62-2	
2-Fluorophenol (S)	72	%.	16-104	1	11/08/19 09:48	11/09/19 00:09	367-12-4	
2,4,6-Tribromophenol (S)	70	%.	10-114	1	11/08/19 09:48	11/09/19 00:09	118-79-6	
2-Fluorobiphenyl (S)	70	%.	21-96	1	11/08/19 09:48	11/09/19 00:09	321-60-8	
p-Terphenyl-d14 (S)	74	%.	29-124	1	11/08/19 09:48	11/09/19 00:09	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**13.7**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB6:0-2 **Lab ID: 50240581011** Collected: 11/04/19 13:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**19.9**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 17:09	7440-38-2	
Barium	**439**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 17:09	7440-39-3	
Cadmium	**2.2**	mg/kg	0.58	1	11/06/19 13:35	11/07/19 17:09	7440-43-9	
Chromium	**18.9**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 17:09	7440-47-3	
Lead	**622**	mg/kg	1.2	1	11/06/19 13:35	11/07/19 17:09	7439-92-1	
Selenium	ND	mg/kg	1.2	1	11/06/19 13:35	11/07/19 17:09	7782-49-2	
Silver	**1.0**	mg/kg	0.58	1	11/06/19 13:35	11/07/19 17:09	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.39**	mg/kg	0.23	1	11/07/19 23:30	11/08/19 10:21	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	83-32-9	
Acenaphthylene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	208-96-8	
Anthracene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	120-12-7	
Benzo(a)anthracene	**3.3**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	56-55-3	
Benzo(a)pyrene	**2.4**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	50-32-8	
Benzo(b)fluoranthene	**3.2**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	207-08-9	
Butylbenzylphthalate	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	4.1	5	11/08/19 11:46	11/11/19 18:58	59-50-7	
4-Chloroaniline	ND	mg/kg	4.1	5	11/08/19 11:46	11/11/19 18:58	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	108-60-1	
2-Chloronaphthalene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	91-58-7	
2-Chlorophenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	95-57-8	
Chrysene	**3.0**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	120-83-2	
Diethylphthalate	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	105-67-9	
Di-n-butylphthalate	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	9.9	5	11/08/19 11:46	11/11/19 18:58	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	606-20-2	
Di-n-octylphthalate	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	117-81-7	
Fluoranthene	**7.2**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	206-44-0	
Fluorene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	77-47-4	
Hexachloroethane	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	193-39-5	
Isophorone	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	78-59-1	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB6:0-2 **Lab ID: 50240581011** Collected: 11/04/19 13:20 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	4.1	5	11/08/19 11:46	11/11/19 18:58		
Naphthalene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	91-20-3	
Nitrobenzene	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	86-30-6	
Phenanthrene	**6.4**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	85-01-8	
Phenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	108-95-2	ED
Pyrene	**6.0**	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	2.0	5	11/08/19 11:46	11/11/19 18:58	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	67	%.	18-98	5	11/08/19 11:46	11/11/19 18:58	4165-60-0	
Phenol-d5 (S)	65	%.	18-108	5	11/08/19 11:46	11/11/19 18:58	4165-62-2	
2-Fluorophenol (S)	63	%.	16-104	5	11/08/19 11:46	11/11/19 18:58	367-12-4	
2,4,6-Tribromophenol (S)	63	%.	10-114	5	11/08/19 11:46	11/11/19 18:58	118-79-6	
2-Fluorobiphenyl (S)	68	%.	21-96	5	11/08/19 11:46	11/11/19 18:58	321-60-8	
p-Terphenyl-d14 (S)	76	%.	29-124	5	11/08/19 11:46	11/11/19 18:58	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**19.1**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB6:2-4 **Lab ID: 50240581012** Collected: 11/04/19 13:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**26.1**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:12	7440-38-2	
Barium	**426**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:12	7440-39-3	
Cadmium	**2.3**	mg/kg	0.56	1	11/06/19 13:35	11/07/19 17:12	7440-43-9	
Chromium	**18.3**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:12	7440-47-3	
Lead	**559**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:12	7439-92-1	
Selenium	ND	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:12	7782-49-2	
Silver	ND	mg/kg	0.56	1	11/06/19 13:35	11/07/19 17:12	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.25	1	11/07/19 23:30	11/08/19 10:24	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	83-32-9	
Acenaphthylene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	208-96-8	
Anthracene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.79	1	11/08/19 11:46	11/12/19 11:34	59-50-7	
4-Chloroaniline	ND	mg/kg	0.79	1	11/08/19 11:46	11/12/19 11:34	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	91-58-7	
2-Chlorophenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	95-57-8	
Chrysene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	120-83-2	
Diethylphthalate	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	1.9	1	11/08/19 11:46	11/12/19 11:34	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	117-81-7	
Fluoranthene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	206-44-0	
Fluorene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	77-47-4	
Hexachloroethane	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	193-39-5	
Isophorone	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	78-59-1	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB6:2-4 **Lab ID: 50240581012** Collected: 11/04/19 13:30 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.79	1	11/08/19 11:46	11/12/19 11:34		
Naphthalene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	91-20-3	
Nitrobenzene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	86-30-6	
Phenanthrene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	85-01-8	
Phenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	108-95-2	
Pyrene	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.40	1	11/08/19 11:46	11/12/19 11:34	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	41	%.	18-98	1	11/08/19 11:46	11/12/19 11:34	4165-60-0	
Phenol-d5 (S)	39	%.	18-108	1	11/08/19 11:46	11/12/19 11:34	4165-62-2	
2-Fluorophenol (S)	38	%.	16-104	1	11/08/19 11:46	11/12/19 11:34	367-12-4	
2,4,6-Tribromophenol (S)	37	%.	10-114	1	11/08/19 11:46	11/12/19 11:34	118-79-6	
2-Fluorobiphenyl (S)	43	%.	21-96	1	11/08/19 11:46	11/12/19 11:34	321-60-8	
p-Terphenyl-d14 (S)	44	%.	29-124	1	11/08/19 11:46	11/12/19 11:34	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**16.5**	%	0.10	1		11/11/19 10:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB7:0-2 **Lab ID: 50240581013** Collected: 11/04/19 13:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**19.9**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 17:14	7440-38-2	
Barium	**386**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 17:14	7440-39-3	
Cadmium	**1.8**	mg/kg	0.63	1	11/06/19 13:35	11/07/19 17:14	7440-43-9	
Chromium	**20.8**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 17:14	7440-47-3	
Lead	**1920**	mg/kg	1.3	1	11/06/19 13:35	11/07/19 17:14	7439-92-1	
Selenium	ND	mg/kg	1.3	1	11/06/19 13:35	11/07/19 17:14	7782-49-2	
Silver	ND	mg/kg	0.63	1	11/06/19 13:35	11/07/19 17:14	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	**0.53**	mg/kg	0.28	1	11/07/19 23:30	11/08/19 10:33	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	83-32-9	
Acenaphthylene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	208-96-8	
Anthracene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	120-12-7	
Benzo(a)anthracene	**0.44**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	50-32-8	
Benzo(b)fluoranthene	**0.82**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.88	1	11/08/19 11:46	11/11/19 19:32	59-50-7	
4-Chloroaniline	ND	mg/kg	0.88	1	11/08/19 11:46	11/11/19 19:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	91-58-7	
2-Chlorophenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	95-57-8	
Chrysene	**0.88**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	120-83-2	
Diethylphthalate	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	2.1	1	11/08/19 11:46	11/11/19 19:32	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	117-81-7	
Fluoranthene	**1.4**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	206-44-0	
Fluorene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	77-47-4	
Hexachloroethane	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	193-39-5	
Isophorone	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB7:0-2 **Lab ID: 50240581013** Collected: 11/04/19 13:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.88	1	11/08/19 11:46	11/11/19 19:32		
Naphthalene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	91-20-3	
Nitrobenzene	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	86-30-6	
Phenanthrene	**1.6**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	85-01-8	
Phenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	108-95-2	
Pyrene	**1.2**	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.44	1	11/08/19 11:46	11/11/19 19:32	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	52	%.	18-98	1	11/08/19 11:46	11/11/19 19:32	4165-60-0	
Phenol-d5 (S)	53	%.	18-108	1	11/08/19 11:46	11/11/19 19:32	4165-62-2	
2-Fluorophenol (S)	52	%.	16-104	1	11/08/19 11:46	11/11/19 19:32	367-12-4	
2,4,6-Tribromophenol (S)	49	%.	10-114	1	11/08/19 11:46	11/11/19 19:32	118-79-6	
2-Fluorobiphenyl (S)	54	%.	21-96	1	11/08/19 11:46	11/11/19 19:32	321-60-8	
p-Terphenyl-d14 (S)	55	%.	29-124	1	11/08/19 11:46	11/11/19 19:32	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**25.3**	%	0.10	1		11/11/19 10:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB7:4-6 **Lab ID: 50240581014** Collected: 11/04/19 14:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**16.0**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:17	7440-38-2	
Barium	**1130**	mg/kg	5.5	5	11/06/19 13:35	11/07/19 17:23	7440-39-3	
Cadmium	**0.63**	mg/kg	0.55	1	11/06/19 13:35	11/07/19 17:17	7440-43-9	
Chromium	**31.3**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:17	7440-47-3	
Lead	**9540**	mg/kg	5.5	5	11/06/19 13:35	11/07/19 17:23	7439-92-1	
Selenium	ND	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:17	7782-49-2	
Silver	**1.5**	mg/kg	0.55	1	11/06/19 13:35	11/07/19 17:17	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.25	1	11/07/19 23:30	11/08/19 10:36	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	83-32-9	
Acenaphthylene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	208-96-8	
Anthracene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.82	1	11/08/19 11:46	11/11/19 19:49	59-50-7	
4-Chloroaniline	ND	mg/kg	0.82	1	11/08/19 11:46	11/11/19 19:49	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	91-58-7	
2-Chlorophenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	95-57-8	
Chrysene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	120-83-2	
Diethylphthalate	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	2.0	1	11/08/19 11:46	11/11/19 19:49	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	117-81-7	
Fluoranthene	**0.49**	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	206-44-0	
Fluorene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	77-47-4	
Hexachloroethane	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	193-39-5	
Isophorone	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB7:4-6 **Lab ID: 50240581014** Collected: 11/04/19 14:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.82	1	11/08/19 11:46	11/11/19 19:49		
Naphthalene	**0.59**	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	91-20-3	
Nitrobenzene	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	86-30-6	
Phenanthrene	**0.64**	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	85-01-8	
Phenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	108-95-2	
Pyrene	**0.47**	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.41	1	11/08/19 11:46	11/11/19 19:49	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	63	%.	18-98	1	11/08/19 11:46	11/11/19 19:49	4165-60-0	
Phenol-d5 (S)	63	%.	18-108	1	11/08/19 11:46	11/11/19 19:49	4165-62-2	
2-Fluorophenol (S)	59	%.	16-104	1	11/08/19 11:46	11/11/19 19:49	367-12-4	
2,4,6-Tribromophenol (S)	65	%.	10-114	1	11/08/19 11:46	11/11/19 19:49	118-79-6	
2-Fluorobiphenyl (S)	67	%.	21-96	1	11/08/19 11:46	11/11/19 19:49	321-60-8	
p-Terphenyl-d14 (S)	74	%.	29-124	1	11/08/19 11:46	11/11/19 19:49	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**20.4**	%	0.10	1		11/11/19 10:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB8:0-2 **Lab ID: 50240581015** Collected: 11/04/19 14:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**13.5**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 17:19	7440-38-2	
Barium	**66.1**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 17:19	7440-39-3	
Cadmium	ND	mg/kg	0.50	1	11/06/19 13:35	11/07/19 17:19	7440-43-9	
Chromium	**10.1**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 17:19	7440-47-3	
Lead	**25.2**	mg/kg	1.0	1	11/06/19 13:35	11/07/19 17:19	7439-92-1	
Selenium	ND	mg/kg	1.0	1	11/06/19 13:35	11/07/19 17:19	7782-49-2	
Silver	ND	mg/kg	0.50	1	11/06/19 13:35	11/07/19 17:19	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.21	1	11/07/19 23:30	11/08/19 10:38	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	83-32-9	
Acenaphthylene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	208-96-8	
Anthracene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	120-12-7	
Benzo(a)anthracene	**2.4**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	56-55-3	
Benzo(a)pyrene	**2.9**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	50-32-8	
Benzo(b)fluoranthene	**4.2**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	205-99-2	
Benzo(g,h,i)perylene	**2.2**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	191-24-2	
Benzo(k)fluoranthene	**1.8**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	207-08-9	
Butylbenzylphthalate	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	3.6	1	11/08/19 11:46	11/12/19 11:51	59-50-7	
4-Chloroaniline	ND	mg/kg	3.6	1	11/08/19 11:46	11/12/19 11:51	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	108-60-1	
2-Chloronaphthalene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	91-58-7	
2-Chlorophenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	95-57-8	
Chrysene	**2.8**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	120-83-2	
Diethylphthalate	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	105-67-9	
Di-n-butylphthalate	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	8.7	1	11/08/19 11:46	11/12/19 11:51	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	606-20-2	
Di-n-octylphthalate	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	117-81-7	
Fluoranthene	**5.8**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	206-44-0	
Fluorene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	77-47-4	
Hexachloroethane	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	67-72-1	
Indeno(1,2,3-cd)pyrene	**1.9**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	193-39-5	
Isophorone	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB8:0-2 **Lab ID: 50240581015** Collected: 11/04/19 14:45 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	3.6	1	11/08/19 11:46	11/12/19 11:51		
Naphthalene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	91-20-3	
Nitrobenzene	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	86-30-6	
Phenanthrene	**2.0**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	85-01-8	
Phenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	108-95-2	
Pyrene	**5.5**	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	1.8	1	11/08/19 11:46	11/12/19 11:51	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	55	%.	18-98	1	11/08/19 11:46	11/12/19 11:51	4165-60-0	
Phenol-d5 (S)	57	%.	18-108	1	11/08/19 11:46	11/12/19 11:51	4165-62-2	
2-Fluorophenol (S)	51	%.	16-104	1	11/08/19 11:46	11/12/19 11:51	367-12-4	
2,4,6-Tribromophenol (S)	39	%.	10-114	1	11/08/19 11:46	11/12/19 11:51	118-79-6	
2-Fluorobiphenyl (S)	54	%.	21-96	1	11/08/19 11:46	11/12/19 11:51	321-60-8	
p-Terphenyl-d14 (S)	59	%.	29-124	1	11/08/19 11:46	11/12/19 11:51	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**9.3**	%	0.10	1		11/11/19 10:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB8:8-10 **Lab ID: 50240581016** Collected: 11/04/19 15:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Arsenic	**16.0**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:21	7440-38-2	
Barium	**49.2**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:21	7440-39-3	
Cadmium	ND	mg/kg	0.57	1	11/06/19 13:35	11/07/19 17:21	7440-43-9	
Chromium	**9.4**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:21	7440-47-3	
Lead	**12.4**	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:21	7439-92-1	
Selenium	ND	mg/kg	1.1	1	11/06/19 13:35	11/07/19 17:21	7782-49-2	
Silver	ND	mg/kg	0.57	1	11/06/19 13:35	11/07/19 17:21	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.24	1	11/07/19 23:30	11/08/19 10:41	7439-97-6	
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	83-32-9	
Acenaphthylene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	208-96-8	
Anthracene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	207-08-9	
Butylbenzylphthalate	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.77	1	11/08/19 11:46	11/11/19 20:23	59-50-7	
4-Chloroaniline	ND	mg/kg	0.77	1	11/08/19 11:46	11/11/19 20:23	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	111-44-4	
bis(2chloro1methylethyl) ether	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	108-60-1	
2-Chloronaphthalene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	91-58-7	
2-Chlorophenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	95-57-8	
Chrysene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	53-70-3	
2,4-Dichlorophenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	120-83-2	
Diethylphthalate	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	105-67-9	
Di-n-butylphthalate	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	84-74-2	
2,4-Dinitrophenol	ND	mg/kg	1.9	1	11/08/19 11:46	11/11/19 20:23	51-28-5	
2,4-Dinitrotoluene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	117-81-7	
Fluoranthene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	206-44-0	
Fluorene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	86-73-7	
Hexachlorocyclopentadiene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	77-47-4	
Hexachloroethane	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	193-39-5	
Isophorone	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	78-59-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Sample: BFM-SB8:8-10 **Lab ID: 50240581016** Collected: 11/04/19 15:00 Received: 11/05/19 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC SS Soil	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
2-Methylnaphthalene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.77	1	11/08/19 11:46	11/11/19 20:23		
Naphthalene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	91-20-3	
Nitrobenzene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	98-95-3	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	86-30-6	
Phenanthrene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	85-01-8	
Phenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	108-95-2	
Pyrene	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	129-00-0	
2,4,5-Trichlorophenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.39	1	11/08/19 11:46	11/11/19 20:23	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	75	%.	18-98	1	11/08/19 11:46	11/11/19 20:23	4165-60-0	
Phenol-d5 (S)	76	%.	18-108	1	11/08/19 11:46	11/11/19 20:23	4165-62-2	
2-Fluorophenol (S)	72	%.	16-104	1	11/08/19 11:46	11/11/19 20:23	367-12-4	
2,4,6-Tribromophenol (S)	72	%.	10-114	1	11/08/19 11:46	11/11/19 20:23	118-79-6	
2-Fluorobiphenyl (S)	74	%.	21-96	1	11/08/19 11:46	11/11/19 20:23	321-60-8	
p-Terphenyl-d14 (S)	83	%.	29-124	1	11/08/19 11:46	11/11/19 20:23	1718-51-0	
Percent Moisture	Analytical Method: SM 2540G							
Percent Moisture	**15.5**	%	0.10	1		11/11/19 10:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 531104 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 50240581001, 50240581002, 50240581003, 50240581004, 50240581005, 50240581006, 50240581007, 50240581008, 50240581009, 50240581010, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

METHOD BLANK: 2450637 Matrix: Solid
Associated Lab Samples: 50240581001, 50240581002, 50240581003, 50240581004, 50240581005, 50240581006, 50240581007, 50240581008, 50240581009, 50240581010, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.20	11/08/19 09:28	

LABORATORY CONTROL SAMPLE: 2450638

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.5	0.50	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450639 2450640

Parameter	Units	50240510006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	0.57	0.56	0.59	0.59	102	102	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 531021 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 50240581001, 50240581002, 50240581003, 50240581004, 50240581005, 50240581006, 50240581007, 50240581008, 50240581009, 50240581010, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

METHOD BLANK: 2450217 Matrix: Solid
Associated Lab Samples: 50240581001, 50240581002, 50240581003, 50240581004, 50240581005, 50240581006, 50240581007, 50240581008, 50240581009, 50240581010, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	1.0	11/07/19 16:24	
Barium	mg/kg	ND	1.0	11/07/19 16:24	
Cadmium	mg/kg	ND	0.50	11/07/19 16:24	
Chromium	mg/kg	ND	1.0	11/07/19 16:24	
Lead	mg/kg	ND	1.0	11/07/19 16:24	
Selenium	mg/kg	ND	1.0	11/07/19 16:24	
Silver	mg/kg	ND	0.50	11/07/19 16:24	

LABORATORY CONTROL SAMPLE: 2450218

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	47.2	94	80-120	
Barium	mg/kg	50	49.8	100	80-120	
Cadmium	mg/kg	50	48.2	96	80-120	
Chromium	mg/kg	50	48.9	98	80-120	
Lead	mg/kg	50	47.7	95	80-120	
Selenium	mg/kg	50	48.4	97	80-120	
Silver	mg/kg	25	23.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2450219 2450220

Parameter	Units	50240581001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	20.6	64.2	64.6	69.2	66.1	76	70	75-125	5	20	M0
Barium	mg/kg	535	64.2	64.6	390	716	-226	280	75-125	59	20	1d,M0
Cadmium	mg/kg	1.9	64.2	64.6	52.4	54.6	79	82	75-125	4	20	
Chromium	mg/kg	15.4	64.2	64.6	69.0	68.4	84	82	75-125	1	20	
Lead	mg/kg	247	64.2	64.6	365	336	184	139	75-125	8	20	M3
Selenium	mg/kg	ND	64.2	64.6	47.6	50.9	73	78	75-125	7	20	M0
Silver	mg/kg	ND	32	32.3	25.5	25.6	79	79	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 531494 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave Short Spike
Associated Lab Samples: 50240581001, 50240581003, 50240581004

METHOD BLANK: 2452727 Matrix: Solid
Associated Lab Samples: 50240581001, 50240581003, 50240581004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-Trichlorophenol	mg/kg	ND	0.33	11/08/19 17:39	
2,4,6-Trichlorophenol	mg/kg	ND	0.33	11/08/19 17:39	
2,4-Dichlorophenol	mg/kg	ND	0.33	11/08/19 17:39	
2,4-Dimethylphenol	mg/kg	ND	0.33	11/08/19 17:39	
2,4-Dinitrophenol	mg/kg	ND	1.6	11/08/19 17:39	
2,4-Dinitrotoluene	mg/kg	ND	0.33	11/08/19 17:39	
2,6-Dinitrotoluene	mg/kg	ND	0.33	11/08/19 17:39	
2-Chloronaphthalene	mg/kg	ND	0.33	11/08/19 17:39	
2-Chlorophenol	mg/kg	ND	0.33	11/08/19 17:39	
2-Methylnaphthalene	mg/kg	ND	0.33	11/08/19 17:39	
2-Methylphenol(o-Cresol)	mg/kg	ND	0.33	11/08/19 17:39	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.65	11/08/19 17:39	
4-Chloro-3-methylphenol	mg/kg	ND	0.65	11/08/19 17:39	
4-Chloroaniline	mg/kg	ND	0.65	11/08/19 17:39	
Acenaphthene	mg/kg	ND	0.33	11/08/19 17:39	
Acenaphthylene	mg/kg	ND	0.33	11/08/19 17:39	
Anthracene	mg/kg	ND	0.33	11/08/19 17:39	
Benzo(a)anthracene	mg/kg	ND	0.33	11/08/19 17:39	
Benzo(a)pyrene	mg/kg	ND	0.33	11/08/19 17:39	
Benzo(b)fluoranthene	mg/kg	ND	0.33	11/08/19 17:39	
Benzo(g,h,i)perylene	mg/kg	ND	0.33	11/08/19 17:39	
Benzo(k)fluoranthene	mg/kg	ND	0.33	11/08/19 17:39	
bis(2-Chloroethoxy)methane	mg/kg	ND	0.33	11/08/19 17:39	
bis(2-Chloroethyl) ether	mg/kg	ND	0.33	11/08/19 17:39	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.33	11/08/19 17:39	
bis(2chloro1methylethyl) ether	mg/kg	ND	0.33	11/08/19 17:39	
Butylbenzylphthalate	mg/kg	ND	0.33	11/08/19 17:39	
Chrysene	mg/kg	ND	0.33	11/08/19 17:39	
Di-n-butylphthalate	mg/kg	ND	0.33	11/08/19 17:39	
Di-n-octylphthalate	mg/kg	ND	0.33	11/08/19 17:39	
Dibenz(a,h)anthracene	mg/kg	ND	0.33	11/08/19 17:39	
Diethylphthalate	mg/kg	ND	0.33	11/08/19 17:39	
Fluoranthene	mg/kg	ND	0.33	11/08/19 17:39	
Fluorene	mg/kg	ND	0.33	11/08/19 17:39	
Hexachlorocyclopentadiene	mg/kg	ND	0.33	11/08/19 17:39	
Hexachloroethane	mg/kg	ND	0.33	11/08/19 17:39	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.33	11/08/19 17:39	
Isophorone	mg/kg	ND	0.33	11/08/19 17:39	
N-Nitroso-di-n-propylamine	mg/kg	ND	0.33	11/08/19 17:39	
N-Nitrosodiphenylamine	mg/kg	ND	0.33	11/08/19 17:39	
Naphthalene	mg/kg	ND	0.33	11/08/19 17:39	

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

METHOD BLANK: 2452727 Matrix: Solid
Associated Lab Samples: 50240581001, 50240581003, 50240581004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene	mg/kg	ND	0.33	11/08/19 17:39	
Phenanthrene	mg/kg	ND	0.33	11/08/19 17:39	
Phenol	mg/kg	ND	0.33	11/08/19 17:39	
Pyrene	mg/kg	ND	0.33	11/08/19 17:39	
2,4,6-Tribromophenol (S)	%.	81	10-114	11/08/19 17:39	
2-Fluorobiphenyl (S)	%.	70	21-96	11/08/19 17:39	
2-Fluorophenol (S)	%.	77	16-104	11/08/19 17:39	
Nitrobenzene-d5 (S)	%.	65	18-98	11/08/19 17:39	
p-Terphenyl-d14 (S)	%.	93	29-124	11/08/19 17:39	
Phenol-d5 (S)	%.	73	18-108	11/08/19 17:39	

LABORATORY CONTROL SAMPLE: 2452728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	mg/kg	3.3	2.6	79	32-115	
2-Chlorophenol	mg/kg	3.3	2.3	70	47-102	
2-Methylnaphthalene	mg/kg	3.3	2.3	70	49-101	
4-Chloro-3-methylphenol	mg/kg	3.3	2.4	74	46-112	
Acenaphthene	mg/kg	3.3	2.5	75	45-103	
Acenaphthylene	mg/kg	3.3	2.3	70	46-103	
Anthracene	mg/kg	3.3	2.6	79	53-106	
Benzo(a)anthracene	mg/kg	3.3	2.9	89	52-107	
Benzo(a)pyrene	mg/kg	3.3	2.7	80	46-108	
Benzo(b)fluoranthene	mg/kg	3.3	2.6	79	48-111	
Benzo(g,h,i)perylene	mg/kg	3.3	2.7	81	44-111	
Benzo(k)fluoranthene	mg/kg	3.3	3.0	90	49-111	
Chrysene	mg/kg	3.3	2.8	85	53-109	
Dibenz(a,h)anthracene	mg/kg	3.3	2.7	81	47-110	
Fluoranthene	mg/kg	3.3	2.7	83	50-113	
Fluorene	mg/kg	3.3	2.5	76	46-107	
Indeno(1,2,3-cd)pyrene	mg/kg	3.3	2.7	83	46-111	
N-Nitroso-di-n-propylamine	mg/kg	3.3	2.0	60	40-103	
Naphthalene	mg/kg	3.3	2.2	67	47-97	
Phenanthrene	mg/kg	3.3	2.5	76	53-107	
Phenol	mg/kg	3.3	2.3	69	40-104	
Pyrene	mg/kg	3.3	2.7	81	45-119	
2,4,6-Tribromophenol (S)	%.			75	10-114	
2-Fluorobiphenyl (S)	%.			66	21-96	
2-Fluorophenol (S)	%.			68	16-104	
Nitrobenzene-d5 (S)	%.			61	18-98	
p-Terphenyl-d14 (S)	%.			92	29-124	
Phenol-d5 (S)	%.			64	18-108	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 531756 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave Short Spike
Associated Lab Samples: 50240581007, 50240581008, 50240581009, 50240581010

METHOD BLANK: 2454147 Matrix: Solid
Associated Lab Samples: 50240581007, 50240581008, 50240581009, 50240581010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-Trichlorophenol	mg/kg	ND	0.33	11/08/19 22:11	
2,4,6-Trichlorophenol	mg/kg	ND	0.33	11/08/19 22:11	
2,4-Dichlorophenol	mg/kg	ND	0.33	11/08/19 22:11	
2,4-Dimethylphenol	mg/kg	ND	0.33	11/08/19 22:11	
2,4-Dinitrophenol	mg/kg	ND	1.6	11/08/19 22:11	
2,4-Dinitrotoluene	mg/kg	ND	0.33	11/08/19 22:11	
2,6-Dinitrotoluene	mg/kg	ND	0.33	11/08/19 22:11	
2-Chloronaphthalene	mg/kg	ND	0.33	11/08/19 22:11	
2-Chlorophenol	mg/kg	ND	0.33	11/08/19 22:11	
2-Methylnaphthalene	mg/kg	ND	0.33	11/08/19 22:11	
2-Methylphenol(o-Cresol)	mg/kg	ND	0.33	11/08/19 22:11	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.66	11/08/19 22:11	
4-Chloro-3-methylphenol	mg/kg	ND	0.66	11/08/19 22:11	
4-Chloroaniline	mg/kg	ND	0.66	11/08/19 22:11	
Acenaphthene	mg/kg	ND	0.33	11/08/19 22:11	
Acenaphthylene	mg/kg	ND	0.33	11/08/19 22:11	
Anthracene	mg/kg	ND	0.33	11/08/19 22:11	
Benzo(a)anthracene	mg/kg	ND	0.33	11/08/19 22:11	
Benzo(a)pyrene	mg/kg	ND	0.33	11/08/19 22:11	
Benzo(b)fluoranthene	mg/kg	ND	0.33	11/08/19 22:11	
Benzo(g,h,i)perylene	mg/kg	ND	0.33	11/08/19 22:11	
Benzo(k)fluoranthene	mg/kg	ND	0.33	11/08/19 22:11	
bis(2-Chloroethoxy)methane	mg/kg	ND	0.33	11/08/19 22:11	
bis(2-Chloroethyl) ether	mg/kg	ND	0.33	11/08/19 22:11	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.33	11/08/19 22:11	
bis(2chloro1methylethyl) ether	mg/kg	ND	0.33	11/08/19 22:11	
Butylbenzylphthalate	mg/kg	ND	0.33	11/08/19 22:11	
Chrysene	mg/kg	ND	0.33	11/08/19 22:11	
Di-n-butylphthalate	mg/kg	ND	0.33	11/08/19 22:11	
Di-n-octylphthalate	mg/kg	ND	0.33	11/08/19 22:11	
Dibenz(a,h)anthracene	mg/kg	ND	0.33	11/08/19 22:11	
Diethylphthalate	mg/kg	ND	0.33	11/08/19 22:11	
Fluoranthene	mg/kg	ND	0.33	11/08/19 22:11	
Fluorene	mg/kg	ND	0.33	11/08/19 22:11	
Hexachlorocyclopentadiene	mg/kg	ND	0.33	11/08/19 22:11	
Hexachloroethane	mg/kg	ND	0.33	11/08/19 22:11	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.33	11/08/19 22:11	
Isophorone	mg/kg	ND	0.33	11/08/19 22:11	
N-Nitroso-di-n-propylamine	mg/kg	ND	0.33	11/08/19 22:11	
N-Nitrosodiphenylamine	mg/kg	ND	0.33	11/08/19 22:11	
Naphthalene	mg/kg	ND	0.33	11/08/19 22:11	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

METHOD BLANK: 2454147 Matrix: Solid
Associated Lab Samples: 50240581007, 50240581008, 50240581009, 50240581010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene	mg/kg	ND	0.33	11/08/19 22:11	
Phenanthrene	mg/kg	ND	0.33	11/08/19 22:11	
Phenol	mg/kg	ND	0.33	11/08/19 22:11	
Pyrene	mg/kg	ND	0.33	11/08/19 22:11	
2,4,6-Tribromophenol (S)	%.	70	10-114	11/08/19 22:11	
2-Fluorobiphenyl (S)	%.	67	21-96	11/08/19 22:11	
2-Fluorophenol (S)	%.	80	16-104	11/08/19 22:11	
Nitrobenzene-d5 (S)	%.	67	18-98	11/08/19 22:11	
p-Terphenyl-d14 (S)	%.	78	29-124	11/08/19 22:11	
Phenol-d5 (S)	%.	83	18-108	11/08/19 22:11	

LABORATORY CONTROL SAMPLE: 2454148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	mg/kg	3.3	2.9	87	32-115	
2-Chlorophenol	mg/kg	3.3	3.1	92	47-102	
2-Methylnaphthalene	mg/kg	3.3	2.7	81	49-101	
4-Chloro-3-methylphenol	mg/kg	3.3	3.2	95	46-112	
Acenaphthene	mg/kg	3.3	2.8	86	45-103	
Acenaphthylene	mg/kg	3.3	2.8	86	46-103	
Anthracene	mg/kg	3.3	2.8	84	53-106	
Benzo(a)anthracene	mg/kg	3.3	2.9	88	52-107	
Benzo(a)pyrene	mg/kg	3.3	2.9	86	46-108	
Benzo(b)fluoranthene	mg/kg	3.3	3.2	98	48-111	
Benzo(g,h,i)perylene	mg/kg	3.3	2.9	89	44-111	
Benzo(k)fluoranthene	mg/kg	3.3	2.8	85	49-111	
Chrysene	mg/kg	3.3	3.0	90	53-109	
Dibenz(a,h)anthracene	mg/kg	3.3	3.0	89	47-110	
Fluoranthene	mg/kg	3.3	2.7	82	50-113	
Fluorene	mg/kg	3.3	2.9	88	46-107	
Indeno(1,2,3-cd)pyrene	mg/kg	3.3	3.0	89	46-111	
N-Nitroso-di-n-propylamine	mg/kg	3.3	2.8	83	40-103	
Naphthalene	mg/kg	3.3	2.6	78	47-97	
Phenanthrene	mg/kg	3.3	2.9	86	53-107	
Phenol	mg/kg	3.3	3.1	95	40-104	
Pyrene	mg/kg	3.3	3.1	94	45-119	
2,4,6-Tribromophenol (S)	%.			82	10-114	
2-Fluorobiphenyl (S)	%.			76	21-96	
2-Fluorophenol (S)	%.			85	16-104	
Nitrobenzene-d5 (S)	%.			73	18-98	
p-Terphenyl-d14 (S)	%.			85	29-124	
Phenol-d5 (S)	%.			89	18-108	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 531817 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave Short Spike
Associated Lab Samples: 50240581005, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

METHOD BLANK: 2454437 Matrix: Solid
Associated Lab Samples: 50240581005, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-Trichlorophenol	mg/kg	ND	0.33	11/11/19 18:08	
2,4,6-Trichlorophenol	mg/kg	ND	0.33	11/11/19 18:08	
2,4-Dichlorophenol	mg/kg	ND	0.33	11/11/19 18:08	
2,4-Dimethylphenol	mg/kg	ND	0.33	11/11/19 18:08	
2,4-Dinitrophenol	mg/kg	ND	1.6	11/11/19 18:08	
2,4-Dinitrotoluene	mg/kg	ND	0.33	11/11/19 18:08	
2,6-Dinitrotoluene	mg/kg	ND	0.33	11/11/19 18:08	
2-Chloronaphthalene	mg/kg	ND	0.33	11/11/19 18:08	
2-Chlorophenol	mg/kg	ND	0.33	11/11/19 18:08	
2-Methylnaphthalene	mg/kg	ND	0.33	11/11/19 18:08	
2-Methylphenol(o-Cresol)	mg/kg	ND	0.33	11/11/19 18:08	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.65	11/11/19 18:08	
4-Chloro-3-methylphenol	mg/kg	ND	0.65	11/11/19 18:08	
4-Chloroaniline	mg/kg	ND	0.65	11/11/19 18:08	
Acenaphthene	mg/kg	ND	0.33	11/11/19 18:08	
Acenaphthylene	mg/kg	ND	0.33	11/11/19 18:08	
Anthracene	mg/kg	ND	0.33	11/11/19 18:08	
Benzo(a)anthracene	mg/kg	ND	0.33	11/11/19 18:08	
Benzo(a)pyrene	mg/kg	ND	0.33	11/11/19 18:08	
Benzo(b)fluoranthene	mg/kg	ND	0.33	11/11/19 18:08	
Benzo(g,h,i)perylene	mg/kg	ND	0.33	11/11/19 18:08	
Benzo(k)fluoranthene	mg/kg	ND	0.33	11/11/19 18:08	
bis(2-Chloroethoxy)methane	mg/kg	ND	0.33	11/11/19 18:08	
bis(2-Chloroethyl) ether	mg/kg	ND	0.33	11/11/19 18:08	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.33	11/11/19 18:08	
bis(2chloro1methylethyl) ether	mg/kg	ND	0.33	11/11/19 18:08	
Butylbenzylphthalate	mg/kg	ND	0.33	11/11/19 18:08	
Chrysene	mg/kg	ND	0.33	11/11/19 18:08	
Di-n-butylphthalate	mg/kg	ND	0.33	11/11/19 18:08	
Di-n-octylphthalate	mg/kg	ND	0.33	11/11/19 18:08	
Dibenz(a,h)anthracene	mg/kg	ND	0.33	11/11/19 18:08	
Diethylphthalate	mg/kg	ND	0.33	11/11/19 18:08	
Fluoranthene	mg/kg	ND	0.33	11/11/19 18:08	
Fluorene	mg/kg	ND	0.33	11/11/19 18:08	
Hexachlorocyclopentadiene	mg/kg	ND	0.33	11/11/19 18:08	
Hexachloroethane	mg/kg	ND	0.33	11/11/19 18:08	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.33	11/11/19 18:08	
Isophorone	mg/kg	ND	0.33	11/11/19 18:08	
N-Nitroso-di-n-propylamine	mg/kg	ND	0.33	11/11/19 18:08	
N-Nitrosodiphenylamine	mg/kg	ND	0.33	11/11/19 18:08	
Naphthalene	mg/kg	ND	0.33	11/11/19 18:08	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

METHOD BLANK: 2454437 Matrix: Solid
Associated Lab Samples: 50240581005, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene	mg/kg	ND	0.33	11/11/19 18:08	
Phenanthrene	mg/kg	ND	0.33	11/11/19 18:08	
Phenol	mg/kg	ND	0.33	11/11/19 18:08	
Pyrene	mg/kg	ND	0.33	11/11/19 18:08	
2,4,6-Tribromophenol (S)	%.	74	10-114	11/11/19 18:08	
2-Fluorobiphenyl (S)	%.	72	21-96	11/11/19 18:08	
2-Fluorophenol (S)	%.	76	16-104	11/11/19 18:08	
Nitrobenzene-d5 (S)	%.	72	18-98	11/11/19 18:08	
p-Terphenyl-d14 (S)	%.	87	29-124	11/11/19 18:08	
Phenol-d5 (S)	%.	76	18-108	11/11/19 18:08	

LABORATORY CONTROL SAMPLE: 2454438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	mg/kg	3.3	2.8	85	32-115	
2-Chlorophenol	mg/kg	3.3	2.6	79	47-102	
2-Methylnaphthalene	mg/kg	3.3	2.4	74	49-101	
4-Chloro-3-methylphenol	mg/kg	3.3	2.7	83	46-112	
Acenaphthene	mg/kg	3.3	2.5	77	45-103	
Acenaphthylene	mg/kg	3.3	2.6	78	46-103	
Anthracene	mg/kg	3.3	2.7	81	53-106	
Benzo(a)anthracene	mg/kg	3.3	2.8	85	52-107	
Benzo(a)pyrene	mg/kg	3.3	2.6	79	46-108	
Benzo(b)fluoranthene	mg/kg	3.3	2.7	83	48-111	
Benzo(g,h,i)perylene	mg/kg	3.3	2.8	86	44-111	
Benzo(k)fluoranthene	mg/kg	3.3	2.8	84	49-111	
Chrysene	mg/kg	3.3	2.9	87	53-109	
Dibenz(a,h)anthracene	mg/kg	3.3	2.8	84	47-110	
Fluoranthene	mg/kg	3.3	2.7	82	50-113	
Fluorene	mg/kg	3.3	2.6	80	46-107	
Indeno(1,2,3-cd)pyrene	mg/kg	3.3	2.8	85	46-111	
N-Nitroso-di-n-propylamine	mg/kg	3.3	2.5	76	40-103	
Naphthalene	mg/kg	3.3	2.4	73	47-97	
Phenanthrene	mg/kg	3.3	2.6	80	53-107	
Phenol	mg/kg	3.3	2.7	81	40-104	
Pyrene	mg/kg	3.3	2.8	85	45-119	
2,4,6-Tribromophenol (S)	%.			78	10-114	
2-Fluorobiphenyl (S)	%.			73	21-96	
2-Fluorophenol (S)	%.			79	16-104	
Nitrobenzene-d5 (S)	%.			72	18-98	
p-Terphenyl-d14 (S)	%.			91	29-124	
Phenol-d5 (S)	%.			78	18-108	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 532406
QC Batch Method: EPA 3546
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV Microwave Short Spike
Associated Lab Samples: 50240581002, 50240581006

METHOD BLANK: 2457143
Matrix: Solid
Associated Lab Samples: 50240581002, 50240581006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-Trichlorophenol	mg/kg	ND	0.33	11/12/19 12:07	
2,4,6-Trichlorophenol	mg/kg	ND	0.33	11/12/19 12:07	
2,4-Dichlorophenol	mg/kg	ND	0.33	11/12/19 12:07	
2,4-Dimethylphenol	mg/kg	ND	0.33	11/12/19 12:07	
2,4-Dinitrophenol	mg/kg	ND	1.6	11/12/19 12:07	
2,4-Dinitrotoluene	mg/kg	ND	0.33	11/12/19 12:07	
2,6-Dinitrotoluene	mg/kg	ND	0.33	11/12/19 12:07	
2-Chloronaphthalene	mg/kg	ND	0.33	11/12/19 12:07	
2-Chlorophenol	mg/kg	ND	0.33	11/12/19 12:07	
2-Methylnaphthalene	mg/kg	ND	0.33	11/12/19 12:07	
2-Methylphenol(o-Cresol)	mg/kg	ND	0.33	11/12/19 12:07	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.66	11/12/19 12:07	
4-Chloro-3-methylphenol	mg/kg	ND	0.66	11/12/19 12:07	
4-Chloroaniline	mg/kg	ND	0.66	11/12/19 12:07	
Acenaphthene	mg/kg	ND	0.33	11/12/19 12:07	
Acenaphthylene	mg/kg	ND	0.33	11/12/19 12:07	
Anthracene	mg/kg	ND	0.33	11/12/19 12:07	
Benzo(a)anthracene	mg/kg	ND	0.33	11/12/19 12:07	
Benzo(a)pyrene	mg/kg	ND	0.33	11/12/19 12:07	
Benzo(b)fluoranthene	mg/kg	ND	0.33	11/12/19 12:07	
Benzo(g,h,i)perylene	mg/kg	ND	0.33	11/12/19 12:07	
Benzo(k)fluoranthene	mg/kg	ND	0.33	11/12/19 12:07	
bis(2-Chloroethoxy)methane	mg/kg	ND	0.33	11/12/19 12:07	
bis(2-Chloroethyl) ether	mg/kg	ND	0.33	11/12/19 12:07	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.33	11/12/19 12:07	
bis(2chloro1methylethyl) ether	mg/kg	ND	0.33	11/12/19 12:07	
Butylbenzylphthalate	mg/kg	ND	0.33	11/12/19 12:07	
Chrysene	mg/kg	ND	0.33	11/12/19 12:07	
Di-n-butylphthalate	mg/kg	ND	0.33	11/12/19 12:07	
Di-n-octylphthalate	mg/kg	ND	0.33	11/12/19 12:07	
Dibenz(a,h)anthracene	mg/kg	ND	0.33	11/12/19 12:07	
Diethylphthalate	mg/kg	ND	0.33	11/12/19 12:07	
Fluoranthene	mg/kg	ND	0.33	11/12/19 12:07	
Fluorene	mg/kg	ND	0.33	11/12/19 12:07	
Hexachlorocyclopentadiene	mg/kg	ND	0.33	11/12/19 12:07	
Hexachloroethane	mg/kg	ND	0.33	11/12/19 12:07	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.33	11/12/19 12:07	
Isophorone	mg/kg	ND	0.33	11/12/19 12:07	
N-Nitroso-di-n-propylamine	mg/kg	ND	0.33	11/12/19 12:07	
N-Nitrosodiphenylamine	mg/kg	ND	0.33	11/12/19 12:07	
Naphthalene	mg/kg	ND	0.33	11/12/19 12:07	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

METHOD BLANK: 2457143 Matrix: Solid
Associated Lab Samples: 50240581002, 50240581006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene	mg/kg	ND	0.33	11/12/19 12:07	
Phenanthrene	mg/kg	ND	0.33	11/12/19 12:07	
Phenol	mg/kg	ND	0.33	11/12/19 12:07	
Pyrene	mg/kg	ND	0.33	11/12/19 12:07	
2,4,6-Tribromophenol (S)	%.	71	10-114	11/12/19 12:07	
2-Fluorobiphenyl (S)	%.	66	21-96	11/12/19 12:07	
2-Fluorophenol (S)	%.	75	16-104	11/12/19 12:07	
Nitrobenzene-d5 (S)	%.	65	18-98	11/12/19 12:07	
p-Terphenyl-d14 (S)	%.	80	29-124	11/12/19 12:07	
Phenol-d5 (S)	%.	77	18-108	11/12/19 12:07	

LABORATORY CONTROL SAMPLE: 2457144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	mg/kg	3.3	2.2	66	32-115	
2-Chlorophenol	mg/kg	3.3	2.6	78	47-102	
2-Methylnaphthalene	mg/kg	3.3	2.4	71	49-101	
4-Chloro-3-methylphenol	mg/kg	3.3	2.6	79	46-112	
Acenaphthene	mg/kg	3.3	2.4	73	45-103	
Acenaphthylene	mg/kg	3.3	2.4	72	46-103	
Anthracene	mg/kg	3.3	2.6	77	53-106	
Benzo(a)anthracene	mg/kg	3.3	2.7	80	52-107	
Benzo(a)pyrene	mg/kg	3.3	2.6	78	46-108	
Benzo(b)fluoranthene	mg/kg	3.3	2.7	81	48-111	
Benzo(g,h,i)perylene	mg/kg	3.3	2.8	84	44-111	
Benzo(k)fluoranthene	mg/kg	3.3	2.7	83	49-111	
Chrysene	mg/kg	3.3	2.8	84	53-109	
Dibenz(a,h)anthracene	mg/kg	3.3	2.7	82	47-110	
Fluoranthene	mg/kg	3.3	2.6	79	50-113	
Fluorene	mg/kg	3.3	2.5	76	46-107	
Indeno(1,2,3-cd)pyrene	mg/kg	3.3	2.7	83	46-111	
N-Nitroso-di-n-propylamine	mg/kg	3.3	2.4	73	40-103	
Naphthalene	mg/kg	3.3	2.3	70	47-97	
Phenanthrene	mg/kg	3.3	2.5	76	53-107	
Phenol	mg/kg	3.3	2.6	77	40-104	
Pyrene	mg/kg	3.3	2.8	86	45-119	
2,4,6-Tribromophenol (S)	%.			74	10-114	
2-Fluorobiphenyl (S)	%.			66	21-96	
2-Fluorophenol (S)	%.			74	16-104	
Nitrobenzene-d5 (S)	%.			66	18-98	
p-Terphenyl-d14 (S)	%.			83	29-124	
Phenol-d5 (S)	%.			76	18-108	

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

QC Batch: 532173 Analysis Method: SM 2540G
QC Batch Method: SM 2540G Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 50240581001, 50240581002, 50240581003, 50240581004, 50240581005, 50240581006, 50240581007, 50240581008, 50240581009, 50240581010, 50240581011, 50240581012, 50240581013, 50240581014, 50240581015, 50240581016

SAMPLE DUPLICATE: 2456536

Parameter	Units	50240581016 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.5	15.2	2	5	

SAMPLE DUPLICATE: 2456548

Parameter	Units	50240581001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	31.6	33.9	7	5	R1

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

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.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis

ANALYTE QUALIFIERS

1d	RPD is outside control limits due to sample non-homogeniety.
ED	Due to the extract's physical characteristics, the analysis was performed at dilution.
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.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

METHOD CROSS REFERENCE TABLE

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Parameter	Matrix	Analytical Method	Preparation Method
6010 MET ICP	Solid	SW-846 6010B	SW-846 3050B
7471 Mercury	Solid	SW-846 7471A	SW-846 7471A
8270 SVOC SS Soil	Solid	SW-846 8270C	SW-846 3546

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50240581001	BFM-SB3:0-2	EPA 3050	531021	EPA 6010	531665
50240581002	BFM-SB3:2-4	EPA 3050	531021	EPA 6010	531665
50240581003	BFM-SB2:0-2	EPA 3050	531021	EPA 6010	531665
50240581004	BFM-SB2:4-6	EPA 3050	531021	EPA 6010	531665
50240581005	BFM-SB1:0-2	EPA 3050	531021	EPA 6010	531665
50240581006	BFM-SB1:8-10	EPA 3050	531021	EPA 6010	531665
50240581007	BFM-SB4:0-2	EPA 3050	531021	EPA 6010	531665
50240581008	BFM-SB4:2-4	EPA 3050	531021	EPA 6010	531665
50240581009	BFM-SB5:0-2	EPA 3050	531021	EPA 6010	531665
50240581010	BFM-SB5:4-6	EPA 3050	531021	EPA 6010	531665
50240581011	BFM-SB6:0-2	EPA 3050	531021	EPA 6010	531665
50240581012	BFM-SB6:2-4	EPA 3050	531021	EPA 6010	531665
50240581013	BFM-SB7:0-2	EPA 3050	531021	EPA 6010	531665
50240581014	BFM-SB7:4-6	EPA 3050	531021	EPA 6010	531665
50240581015	BFM-SB8:0-2	EPA 3050	531021	EPA 6010	531665
50240581016	BFM-SB8:8-10	EPA 3050	531021	EPA 6010	531665
50240581001	BFM-SB3:0-2	EPA 7471	531104	EPA 7471	531757
50240581002	BFM-SB3:2-4	EPA 7471	531104	EPA 7471	531757
50240581003	BFM-SB2:0-2	EPA 7471	531104	EPA 7471	531757
50240581004	BFM-SB2:4-6	EPA 7471	531104	EPA 7471	531757
50240581005	BFM-SB1:0-2	EPA 7471	531104	EPA 7471	531757
50240581006	BFM-SB1:8-10	EPA 7471	531104	EPA 7471	531757
50240581007	BFM-SB4:0-2	EPA 7471	531104	EPA 7471	531757
50240581008	BFM-SB4:2-4	EPA 7471	531104	EPA 7471	531757
50240581009	BFM-SB5:0-2	EPA 7471	531104	EPA 7471	531757
50240581010	BFM-SB5:4-6	EPA 7471	531104	EPA 7471	531757
50240581011	BFM-SB6:0-2	EPA 7471	531104	EPA 7471	531757
50240581012	BFM-SB6:2-4	EPA 7471	531104	EPA 7471	531757
50240581013	BFM-SB7:0-2	EPA 7471	531104	EPA 7471	531757
50240581014	BFM-SB7:4-6	EPA 7471	531104	EPA 7471	531757
50240581015	BFM-SB8:0-2	EPA 7471	531104	EPA 7471	531757
50240581016	BFM-SB8:8-10	EPA 7471	531104	EPA 7471	531757
50240581001	BFM-SB3:0-2	EPA 3546	531494	EPA 8270	531947
50240581002	BFM-SB3:2-4	EPA 3546	532406	EPA 8270	532506
50240581003	BFM-SB2:0-2	EPA 3546	531494	EPA 8270	531947
50240581004	BFM-SB2:4-6	EPA 3546	531494	EPA 8270	531947
50240581005	BFM-SB1:0-2	EPA 3546	531817	EPA 8270	532431
50240581006	BFM-SB1:8-10	EPA 3546	532406	EPA 8270	532506
50240581007	BFM-SB4:0-2	EPA 3546	531756	EPA 8270	531973
50240581008	BFM-SB4:2-4	EPA 3546	531756	EPA 8270	531973
50240581009	BFM-SB5:0-2	EPA 3546	531756	EPA 8270	531973
50240581010	BFM-SB5:4-6	EPA 3546	531756	EPA 8270	531973
50240581011	BFM-SB6:0-2	EPA 3546	531817	EPA 8270	532431
50240581012	BFM-SB6:2-4	EPA 3546	531817	EPA 8270	532431
50240581013	BFM-SB7:0-2	EPA 3546	531817	EPA 8270	532431

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50240581

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50240581014	**BFM-SB7:4-6**	EPA 3546	531817	EPA 8270	532431
50240581015	**BFM-SB8:0-2**	EPA 3546	531817	EPA 8270	532431
50240581016	**BFM-SB8:8-10**	EPA 3546	531817	EPA 8270	532431
50240581001	**BFM-SB3:0-2**	SM 2540G	532173		
50240581002	**BFM-SB3:2-4**	SM 2540G	532173		
50240581003	**BFM-SB2:0-2**	SM 2540G	532173		
50240581004	**BFM-SB2:4-6**	SM 2540G	532173		
50240581005	**BFM-SB1:0-2**	SM 2540G	532173		
50240581006	**BFM-SB1:8-10**	SM 2540G	532173		
50240581007	**BFM-SB4:0-2**	SM 2540G	532173		
50240581008	**BFM-SB4:2-4**	SM 2540G	532173		
50240581009	**BFM-SB5:0-2**	SM 2540G	532173		
50240581010	**BFM-SB5:4-6**	SM 2540G	532173		
50240581011	**BFM-SB6:0-2**	SM 2540G	532173		
50240581012	**BFM-SB6:2-4**	SM 2540G	532173		
50240581013	**BFM-SB7:0-2**	SM 2540G	532173		
50240581014	**BFM-SB7:4-6**	SM 2540G	532173		
50240581015	**BFM-SB8:0-2**	SM 2540G	532173		
50240581016	**BFM-SB8:8-10**	SM 2540G	532173		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Pandey Enviornmental, LLC	Report To:	Nick Vallera	Attention:	Accounts Payable
Address:	4100 Horizons Drive	Copy To:		Company Name:	Pandey
	Columbus, OH 43220			Address:	
Email:	nvallera@pandeyenvironmental.com	Purchase Order #:	-	Pace Quote:	yes
Phone:	Fax:	Project Name:	Bexley Ferndale ~~VAP~~ Mayfield VAP	Pace Project Manager:	kenneth.hunt@pacelabs.com,
Requested Due Date:	Standard	Project #:		Pace Profile #:	5556

Regulatory Agency
VAP
State / Location
OH

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	SVOC 8270	RCRA 8 Metals	SVOC/PAH combo Water	Residual Chlorine (Y/N)	50240581
1	BFM-SB3: 0-2	SL	G			11-4-19	9:15		2	X										X	X				001
2	BFM-SB3: 2-4	SL	G				9:20		2	X										X	X				002
3	BFM-SB2: 0-2	SL	G				8:20		2	X										X	X				003
4	BFM-SB2: 4-6	SL	G				8:30		2	X										X	X				004
5	BFM-SB1: 0-2	SL	G				8:45		2	X										X	X				005
6	BFM-SB1: 8-10	SL	G				9:00		2	X										X	X				006
7	BFM-SB4: 0-2	SL	G				12:30		2	X										X	X				007
8	BFM-SB4: 2-4	SL	G				12:45		2	X										X	X				008
9	BFM-SB5: 0-2	SL	G				1:00		2	X										X	X				009
10	BFM-SB5: 4-6	SL	G				1:10		2	X										X	X				010
11	BFM-SB6: 0-2	SL	G				1:20		2	X										X	X				011
12	BFM-SB6: 2-4	SL	G			↓	1:30		2	X										X	X				012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
VAP	Fedex	11-5-19	8:30		11-5-19	850	1.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Nick Vallera		
SIGNATURE of SAMPLER:		DATE Signed:	11-4-19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Pandey Enviornmental, LLC	Report To:	Nick Vallera	Attention:	Accounts Payable
Address:	4100 Horizons Drive	Copy To:		Company Name:	Pandey
Columbus, OH 43220				Address:	
Email:	nvallera@pandeyenvironmental.com	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Bexley Ferndale ~~VAP~~ - Mayfield VAP	Pace Project Manager:	kenneth.hunt@pacelabs.com,
Requested Due Date:	Standard	Project #:		Pace Profile #:	5556

Regulatory Agency
VAP
State / Location
OH

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	SVOC 8270	RCRA 8 Metals	SVOC/PAH combo Water	Residual Chlorine (Y/N)	50240581
1	BFM-SB7: 0-2	SL	G			11-4-19	1:45		2	X										X	X			013
2	BFM-SB7: 4-6	SL	G			↓	2:00		2	X										X	X			014
3	BFM-SB8: 0-2	SL	G			↓	2:45		2	X										X	X			015
4	BFM-SB8: 8-10	SL	G			↓	3:00		2	X										X	X			016
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
VAP	Fedex	11-5-19	850	KC	11-5-19	850	1.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Vallera

SIGNATURE of SAMPLER: [signature]

DATE Signed: 11-4-19

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 #: 50240581

Date/Time and Initials of person examining contents: KS 11-5-19 1230

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: 1250 8111 6929

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 Ice Type: ☒ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☒ N/A

Cooler Temperature: 1.3 / 1.3 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:	✓		Dissolved Metals field filtered?:			✓
Chain of Custody Filled Out:	✓ TKS	✓	Headspace Wisconsin Sulfide			✓
Short Hold Time Analysis (<72hr)?: **Analysis:**		✓		Present	Absent	N/A
Time 5035A TC placed in Freezer or Short Holds To Lab:			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)?	✓NA					

Comments: COC unrelinquished

COC PAGE 1 1st of 2

Sample Container Count

WO# : 50240581

50240581

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	2																									SL			
2																													
3																													
4																													
5																													
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

COC PAGE 2 of 2

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	2																									SL			
2	↓																									↓			
3																													
4																													
5																													
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

Affidavit of VAP Certified Laboratory

[For VAP certified laboratories to attest to "certified data" under OAC 3745-300-13(N) and OAC 3745-300-04(A). Note that Ohio EPA is to receive a legible copy of the CL's affidavit. The entity that received the CL's analytical report under affidavit may retain the CL's affidavit original.]

State of Indiana)
) ss:
County of Marion)

I, Anne Troyer, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen years old and competent to testify herein.

2. I am employed by Pace Analytical Services - Indianapolis ("the laboratory") as Quality Assurance Analyst. I am authorized to submit this affidavit on behalf of the laboratory.

3. The purpose of this submission is to support a request for a no further action letter or other aspects of a voluntary action, under Ohio's Voluntary Action Program (VAP) as set forth in Ohio Revised Code Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.

4. Pace Analytical Services - Indianapolis performed analyses for Pandey Environmental, LLC for a voluntary action at property known as Bexley Ferndale Mayfield.

5. This affidavit applies to and is submitted with the following information, data, documents or reports for the property:

Document ID	Date of Document
50240581	November 12, 2019

6. Pace Analytical Services - Indianapolis was a VAP certified laboratory pursuant to OAC 3745-300-04 when it performed the analyses referenced herein.

7. All analyses under this affidavit consist of VAP "certified data" as described in OAC 3745-300-04(A) - - unless paragraph b., below, specifies the exceptions:

   a. The laboratory performed the analyses within its current VAP certification, number CL0065. The laboratory was certified for each analyte, parameter group and method used at the time that it performed the analyses – see Method Cross Reference Table. The analyses were performed consistent with the laboratory's standard operating procedures and quality assurance program plan as approved under OAC 3745-300-04.

   b. Exceptions, if any: Any soil moisture performed by method SM 2540G used for dry weight correction of data or any analysis used for batch QC on matrix spikes, matrix spike duplicates or sample duplicates that are not associated with the referenced project number identified in item 5 above.

8. The information, data, documents and reports identified under this affidavit are true, accurate and complete.

50240581

Further affiant sayeth naught.

Signature of Affiant

Sworn to before me and subscribed in my presence this 13th day of November, 2019.

Melissa Lynn Albertson
Notary Public Seal State of Indiana
Marion County
Commission # 710839
My Commission Expires 02/25/2026

Notary Public

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

November 15, 2019

Mr. Nick Vallera
Pandey Environmental, LLC
4100 Horizons Drive
Suite 205
Columbus, OH 43220

RE: Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Dear Mr. Vallera:
Enclosed are the analytical results for sample(s) received by the laboratory on November 08, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kenneth Hunt
kenneth.hunt@pacelabs.com
(317)228-3100
Project Manager

Enclosures

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas/NELAP Certification #: E-10177
Kentucky UST Certification #: 80226
Kentucky WW Certification #: 98019
Michigan Department of Environmental Quality, Laboratory #9050
Ohio VAP Certification #: CL0065
Oklahoma Certification #: 9204
Texas Certification #: T104704355
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-19-00257

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50241094001	**BFM-MW2**	Water	11/06/19 09:21	11/08/19 08:55
50241094002	**BFM-MW4**	Water	11/06/19 10:15	11/08/19 08:55
50241094003	**BFM-MW1**	Water	11/06/19 11:03	11/08/19 08:55
50241094004	**BFM-MW3**	Water	11/06/19 11:50	11/08/19 08:55
50241094005	**TRIP BLANK**	Water	11/06/19 08:00	11/08/19 08:55

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50241094001	**BFM-MW2**	EPA 6010	JPK	7	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	32	PASI-I
		EPA 8260	CAP	50	PASI-I
50241094002	**BFM-MW4**	EPA 6010	JPK	7	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	32	PASI-I
		EPA 8260	CAP	50	PASI-I
50241094003	**BFM-MW1**	EPA 6010	JPK	7	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	32	PASI-I
		EPA 8260	CAP	50	PASI-I
50241094004	**BFM-MW3**	EPA 6010	JPK	7	PASI-I
		EPA 7470	ILP	1	PASI-I
		EPA 8270 by SIM	GRM	19	PASI-I
		EPA 8270	GRM	32	PASI-I
		EPA 8260	CAP	50	PASI-I
50241094005	**TRIP BLANK**	EPA 8260	CAP	50	PASI-I

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50241094001	**BFM-MW2**					
EPA 6010	Barium	85.5	ug/L	10.0	11/12/19 23:56	
50241094002	**BFM-MW4**					
EPA 6010	Barium	173	ug/L	10.0	11/12/19 23:59	
50241094003	**BFM-MW1**					
EPA 6010	Barium	64.3	ug/L	10.0	11/13/19 00:01	
50241094004	**BFM-MW3**					
EPA 6010	Barium	97.3	ug/L	10.0	11/13/19 00:03	

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW2 **Lab ID: 50241094001** Collected: 11/06/19 09:21 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7440-38-2	
Barium	**85.5**	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7440-39-3	
Cadmium	ND	ug/L	2.0	1	11/10/19 09:07	11/12/19 23:56	7440-43-9	
Chromium	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7440-47-3	
Lead	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7782-49-2	
Silver	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:56	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/12/19 21:32	11/13/19 10:10	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	83-32-9	1d
Acenaphthylene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	208-96-8	1d
Anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	120-12-7	1d
Benzo(a)anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	56-55-3	1d
Benzo(a)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	50-32-8	1d
Benzo(b)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	205-99-2	1d
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	191-24-2	1d
Benzo(k)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	207-08-9	1d
Chrysene	ND	ug/L	0.48	1	11/11/19 09:05	11/11/19 16:45	218-01-9	1d
Dibenz(a,h)anthracene	ND	ug/L	0.088	1	11/11/19 09:05	11/11/19 16:45	53-70-3	1d
Fluoranthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	206-44-0	1d
Fluorene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	86-73-7	1d
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:45	193-39-5	1d
2-Methylnaphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	91-57-6	1d
Naphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	91-20-3	1d
Phenanthrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	85-01-8	1d
Pyrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:45	129-00-0	1d
Surrogates								
2-Fluorobiphenyl (S)	87	%.	10-83	1	11/11/19 09:05	11/11/19 16:45	321-60-8	S3
p-Terphenyl-d14 (S)	107	%.	28-125	1	11/11/19 09:05	11/11/19 16:45	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Butylbenzylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	85-68-7	1d
4-Chloro-3-methylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	59-50-7	1d
4-Chloroaniline	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	106-47-8	1d
bis(2-Chloroethoxy)methane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	111-91-1	1d
bis(2-Chloroethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	111-44-4	1d
bis(2chloro1methylethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	108-60-1	1d
2-Chloronaphthalene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	91-58-7	1d
2-Chlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	95-57-8	1d
2,4-Dichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	120-83-2	1d
Diethylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	84-66-2	1d
2,4-Dimethylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	105-67-9	1d
Di-n-butylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	84-74-2	1d

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW2 **Lab ID: 50241094001** Collected: 11/06/19 09:21 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
2,4-Dinitrophenol	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:00	51-28-5	1d
2,4-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	121-14-2	1d
2,6-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	606-20-2	1d
Di-n-octylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	117-84-0	1d
bis(2-Ethylhexyl)phthalate	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:00	117-81-7	1d
Hexachlorocyclopentadiene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	77-47-4	1d
Hexachloroethane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	67-72-1	1d
Isophorone	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	78-59-1	1d
2-Methylphenol(o-Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	95-48-7	1d
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00		1d
Nitrobenzene	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:00	98-95-3	1d
N-Nitroso-di-n-propylamine	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:00	621-64-7	1d
N-Nitrosodiphenylamine	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	86-30-6	1d
Phenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	108-95-2	1d
2,4,5-Trichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:00	95-95-4	1d
2,4,6-Trichlorophenol	ND	ug/L	8.6	1	11/11/19 09:05	11/11/19 17:00	88-06-2	1d
Surrogates								
Nitrobenzene-d5 (S)	72	%.	15-115	1	11/11/19 09:05	11/11/19 17:00	4165-60-0	
Phenol-d5 (S)	30	%.	10-65	1	11/11/19 09:05	11/11/19 17:00	4165-62-2	
2-Fluorophenol (S)	46	%.	10-82	1	11/11/19 09:05	11/11/19 17:00	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	29-134	1	11/11/19 09:05	11/11/19 17:00	118-79-6	
8260/5030 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	100	1		11/13/19 21:19	67-64-1	
Benzene	ND	ug/L	5.0	1		11/13/19 21:19	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/13/19 21:19	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/13/19 21:19	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/13/19 21:19	74-83-9	CL,H7
2-Butanone (MEK)	ND	ug/L	25.0	1		11/13/19 21:19	78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		11/13/19 21:19	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/13/19 21:19	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/13/19 21:19	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/13/19 21:19	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/13/19 21:19	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/13/19 21:19	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/13/19 21:19	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		11/13/19 21:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:19	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:19	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/13/19 21:19	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/13/19 21:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/13/19 21:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/13/19 21:19	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/13/19 21:19	142-28-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW2 **Lab ID: 50241094001** Collected: 11/06/19 09:21 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
cis-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 21:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 21:19	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/13/19 21:19	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/13/19 21:19	97-63-2	
n-Hexane	ND	ug/L	5.0	1		11/13/19 21:19	110-54-3	N2
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/13/19 21:19	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/13/19 21:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/13/19 21:19	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/13/19 21:19	1634-04-4	
Styrene	ND	ug/L	5.0	1		11/13/19 21:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 21:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 21:19	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/13/19 21:19	127-18-4	
Toluene	ND	ug/L	5.0	1		11/13/19 21:19	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:19	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/13/19 21:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/13/19 21:19	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/13/19 21:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/13/19 21:19	75-69-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/13/19 21:19	95-63-6	
Vinyl acetate	ND	ug/L	50.0	1		11/13/19 21:19	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		11/13/19 21:19	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/13/19 21:19	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		11/13/19 21:19	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		11/13/19 21:19	460-00-4	
Toluene-d8 (S)	101	%.	85-114	1		11/13/19 21:19	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW4 **Lab ID: 50241094002** Collected: 11/06/19 10:15 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7440-38-2	
Barium	**173**	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7440-39-3	
Cadmium	ND	ug/L	2.0	1	11/10/19 09:07	11/12/19 23:59	7440-43-9	
Chromium	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7440-47-3	
Lead	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7782-49-2	
Silver	ND	ug/L	10.0	1	11/10/19 09:07	11/12/19 23:59	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/12/19 21:32	11/13/19 10:13	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	83-32-9	1d
Acenaphthylene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	208-96-8	1d
Anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	120-12-7	1d
Benzo(a)anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	56-55-3	1d
Benzo(a)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	50-32-8	1d
Benzo(b)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	205-99-2	1d
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	191-24-2	1d
Benzo(k)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	207-08-9	1d
Chrysene	ND	ug/L	0.48	1	11/11/19 09:05	11/11/19 16:56	218-01-9	1d
Dibenz(a,h)anthracene	ND	ug/L	0.088	1	11/11/19 09:05	11/11/19 16:56	53-70-3	1d
Fluoranthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	206-44-0	1d
Fluorene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	86-73-7	1d
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 16:56	193-39-5	1d
2-Methylnaphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	91-57-6	1d
Naphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	91-20-3	1d
Phenanthrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	85-01-8	1d
Pyrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 16:56	129-00-0	1d
Surrogates								
2-Fluorobiphenyl (S)	85	%.	10-83	1	11/11/19 09:05	11/11/19 16:56	321-60-8	S3
p-Terphenyl-d14 (S)	105	%.	28-125	1	11/11/19 09:05	11/11/19 16:56	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Butylbenzylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	85-68-7	1d
4-Chloro-3-methylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	59-50-7	1d
4-Chloroaniline	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	106-47-8	1d
bis(2-Chloroethoxy)methane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	111-91-1	1d
bis(2-Chloroethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	111-44-4	1d
bis(2chloro1methylethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	108-60-1	1d
2-Chloronaphthalene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	91-58-7	1d
2-Chlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	95-57-8	1d
2,4-Dichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	120-83-2	1d
Diethylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	84-66-2	1d
2,4-Dimethylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	105-67-9	1d
Di-n-butylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	84-74-2	1d

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW4 **Lab ID: 50241094002** Collected: 11/06/19 10:15 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
2,4-Dinitrophenol	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:17	51-28-5	1d
2,4-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	121-14-2	1d
2,6-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	606-20-2	1d
Di-n-octylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	117-84-0	1d
bis(2-Ethylhexyl)phthalate	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:17	117-81-7	1d
Hexachlorocyclopentadiene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	77-47-4	1d
Hexachloroethane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	67-72-1	1d
Isophorone	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	78-59-1	1d
2-Methylphenol(o-Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	95-48-7	1d
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17		1d
Nitrobenzene	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:17	98-95-3	1d
N-Nitroso-di-n-propylamine	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:17	621-64-7	1d
N-Nitrosodiphenylamine	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	86-30-6	1d
Phenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	108-95-2	1d
2,4,5-Trichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:17	95-95-4	1d
2,4,6-Trichlorophenol	ND	ug/L	8.6	1	11/11/19 09:05	11/11/19 17:17	88-06-2	1d
Surrogates								
Nitrobenzene-d5 (S)	67	%.	15-115	1	11/11/19 09:05	11/11/19 17:17	4165-60-0	
Phenol-d5 (S)	29	%.	10-65	1	11/11/19 09:05	11/11/19 17:17	4165-62-2	
2-Fluorophenol (S)	44	%.	10-82	1	11/11/19 09:05	11/11/19 17:17	367-12-4	
2,4,6-Tribromophenol (S)	69	%.	29-134	1	11/11/19 09:05	11/11/19 17:17	118-79-6	
8260/5030 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	100	1		11/13/19 21:52	67-64-1	
Benzene	ND	ug/L	5.0	1		11/13/19 21:52	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/13/19 21:52	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/13/19 21:52	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/13/19 21:52	74-83-9	CL,H7
2-Butanone (MEK)	ND	ug/L	25.0	1		11/13/19 21:52	78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		11/13/19 21:52	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/13/19 21:52	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/13/19 21:52	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/13/19 21:52	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/13/19 21:52	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/13/19 21:52	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/13/19 21:52	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		11/13/19 21:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:52	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/13/19 21:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/13/19 21:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/13/19 21:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 21:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/13/19 21:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/13/19 21:52	142-28-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW4 **Lab ID: 50241094002** Collected: 11/06/19 10:15 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
cis-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 21:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 21:52	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/13/19 21:52	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/13/19 21:52	97-63-2	
n-Hexane	ND	ug/L	5.0	1		11/13/19 21:52	110-54-3	N2
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/13/19 21:52	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/13/19 21:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/13/19 21:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/13/19 21:52	1634-04-4	
Styrene	ND	ug/L	5.0	1		11/13/19 21:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 21:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 21:52	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/13/19 21:52	127-18-4	
Toluene	ND	ug/L	5.0	1		11/13/19 21:52	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/13/19 21:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/13/19 21:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/13/19 21:52	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/13/19 21:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/13/19 21:52	75-69-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/13/19 21:52	95-63-6	
Vinyl acetate	ND	ug/L	50.0	1		11/13/19 21:52	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		11/13/19 21:52	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/13/19 21:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%.	80-122	1		11/13/19 21:52	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		11/13/19 21:52	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		11/13/19 21:52	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW1 **Lab ID: 50241094003** Collected: 11/06/19 11:03 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7440-38-2	
Barium	**64.3**	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7440-39-3	
Cadmium	ND	ug/L	2.0	1	11/10/19 09:07	11/13/19 00:01	7440-43-9	
Chromium	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7440-47-3	
Lead	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7782-49-2	
Silver	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:01	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/12/19 21:32	11/13/19 10:15	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	83-32-9	1d
Acenaphthylene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	208-96-8	1d
Anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	120-12-7	1d
Benzo(a)anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	56-55-3	1d
Benzo(a)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	50-32-8	1d
Benzo(b)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	205-99-2	1d
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	191-24-2	1d
Benzo(k)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	207-08-9	1d
Chrysene	ND	ug/L	0.48	1	11/11/19 09:05	11/11/19 17:08	218-01-9	1d
Dibenz(a,h)anthracene	ND	ug/L	0.088	1	11/11/19 09:05	11/11/19 17:08	53-70-3	1d
Fluoranthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	206-44-0	1d
Fluorene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	86-73-7	1d
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:08	193-39-5	1d
2-Methylnaphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	91-57-6	1d
Naphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	91-20-3	1d
Phenanthrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	85-01-8	1d
Pyrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:08	129-00-0	1d
Surrogates								
2-Fluorobiphenyl (S)	76	%.	10-83	1	11/11/19 09:05	11/11/19 17:08	321-60-8	
p-Terphenyl-d14 (S)	97	%.	28-125	1	11/11/19 09:05	11/11/19 17:08	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Butylbenzylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	85-68-7	1d
4-Chloro-3-methylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	59-50-7	1d
4-Chloroaniline	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	106-47-8	1d
bis(2-Chloroethoxy)methane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	111-91-1	1d
bis(2-Chloroethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	111-44-4	1d
bis(2chloro1methylethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	108-60-1	1d
2-Chloronaphthalene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	91-58-7	1d
2-Chlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	95-57-8	1d
2,4-Dichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	120-83-2	1d
Diethylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	84-66-2	1d
2,4-Dimethylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	105-67-9	1d
Di-n-butylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	84-74-2	1d

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW1 **Lab ID: 50241094003** Collected: 11/06/19 11:03 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
2,4-Dinitrophenol	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:33	51-28-5	1d
2,4-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	121-14-2	1d
2,6-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	606-20-2	1d
Di-n-octylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	117-84-0	1d
bis(2-Ethylhexyl)phthalate	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:33	117-81-7	1d
Hexachlorocyclopentadiene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	77-47-4	1d
Hexachloroethane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	67-72-1	1d
Isophorone	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	78-59-1	1d
2-Methylphenol(o-Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	95-48-7	1d
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33		1d
Nitrobenzene	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:33	98-95-3	1d
N-Nitroso-di-n-propylamine	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:33	621-64-7	1d
N-Nitrosodiphenylamine	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	86-30-6	1d
Phenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	108-95-2	1d
2,4,5-Trichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:33	95-95-4	1d
2,4,6-Trichlorophenol	ND	ug/L	8.6	1	11/11/19 09:05	11/11/19 17:33	88-06-2	1d
Surrogates								
Nitrobenzene-d5 (S)	62	%.	15-115	1	11/11/19 09:05	11/11/19 17:33	4165-60-0	
Phenol-d5 (S)	27	%.	10-65	1	11/11/19 09:05	11/11/19 17:33	4165-62-2	
2-Fluorophenol (S)	40	%.	10-82	1	11/11/19 09:05	11/11/19 17:33	367-12-4	
2,4,6-Tribromophenol (S)	61	%.	29-134	1	11/11/19 09:05	11/11/19 17:33	118-79-6	
8260/5030 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	100	1		11/13/19 22:25	67-64-1	
Benzene	ND	ug/L	5.0	1		11/13/19 22:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/13/19 22:25	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/13/19 22:25	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/13/19 22:25	74-83-9	CL,H7
2-Butanone (MEK)	ND	ug/L	25.0	1		11/13/19 22:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		11/13/19 22:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/13/19 22:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/13/19 22:25	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/13/19 22:25	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/13/19 22:25	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/13/19 22:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/13/19 22:25	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		11/13/19 22:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:25	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:25	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/13/19 22:25	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/13/19 22:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/13/19 22:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/13/19 22:25	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/13/19 22:25	142-28-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW1 **Lab ID: 50241094003** Collected: 11/06/19 11:03 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
cis-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 22:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 22:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/13/19 22:25	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/13/19 22:25	97-63-2	
n-Hexane	ND	ug/L	5.0	1		11/13/19 22:25	110-54-3	N2
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/13/19 22:25	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/13/19 22:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/13/19 22:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/13/19 22:25	1634-04-4	
Styrene	ND	ug/L	5.0	1		11/13/19 22:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 22:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 22:25	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/13/19 22:25	127-18-4	
Toluene	ND	ug/L	5.0	1		11/13/19 22:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/13/19 22:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/13/19 22:25	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/13/19 22:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/13/19 22:25	75-69-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/13/19 22:25	95-63-6	
Vinyl acetate	ND	ug/L	50.0	1		11/13/19 22:25	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		11/13/19 22:25	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/13/19 22:25	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		11/13/19 22:25	1868-53-7	
4-Bromofluorobenzene (S)	101	%.	85-114	1		11/13/19 22:25	460-00-4	
Toluene-d8 (S)	99	%.	85-114	1		11/13/19 22:25	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW3 **Lab ID: 50241094004** Collected: 11/06/19 11:50 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7440-38-2	
Barium	**97.3**	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7440-39-3	
Cadmium	ND	ug/L	2.0	1	11/10/19 09:07	11/13/19 00:03	7440-43-9	
Chromium	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7440-47-3	
Lead	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7439-92-1	
Selenium	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7782-49-2	
Silver	ND	ug/L	10.0	1	11/10/19 09:07	11/13/19 00:03	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	2.0	1	11/12/19 21:32	11/13/19 10:18	7439-97-6	
8270 100mL Combo RV	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	83-32-9	1d
Acenaphthylene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	208-96-8	1d
Anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	120-12-7	1d
Benzo(a)anthracene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	56-55-3	1d
Benzo(a)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	50-32-8	1d
Benzo(b)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	205-99-2	1d
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	191-24-2	1d
Benzo(k)fluoranthene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	207-08-9	1d
Chrysene	ND	ug/L	0.48	1	11/11/19 09:05	11/11/19 17:19	218-01-9	1d
Dibenz(a,h)anthracene	ND	ug/L	0.088	1	11/11/19 09:05	11/11/19 17:19	53-70-3	1d
Fluoranthene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	206-44-0	1d
Fluorene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	86-73-7	1d
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	11/11/19 09:05	11/11/19 17:19	193-39-5	1d
2-Methylnaphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	91-57-6	1d
Naphthalene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	91-20-3	1d
Phenanthrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	85-01-8	1d
Pyrene	ND	ug/L	0.95	1	11/11/19 09:05	11/11/19 17:19	129-00-0	1d
Surrogates								
2-Fluorobiphenyl (S)	89	%.	10-83	1	11/11/19 09:05	11/11/19 17:19	321-60-8	S3
p-Terphenyl-d14 (S)	99	%.	28-125	1	11/11/19 09:05	11/11/19 17:19	1718-51-0	
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Butylbenzylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	85-68-7	1d
4-Chloro-3-methylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	59-50-7	1d
4-Chloroaniline	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	106-47-8	1d
bis(2-Chloroethoxy)methane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	111-91-1	1d
bis(2-Chloroethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	111-44-4	1d
bis(2chloro1methylethyl) ether	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	108-60-1	1d
2-Chloronaphthalene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	91-58-7	1d
2-Chlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	95-57-8	1d
2,4-Dichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	120-83-2	1d
Diethylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	84-66-2	1d
2,4-Dimethylphenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	105-67-9	1d
Di-n-butylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	84-74-2	1d

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW3 **Lab ID: 50241094004** Collected: 11/06/19 11:50 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 SVOC Combo Water	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
2,4-Dinitrophenol	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:50	51-28-5	1d
2,4-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	121-14-2	1d
2,6-Dinitrotoluene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	606-20-2	1d
Di-n-octylphthalate	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	117-84-0	1d
bis(2-Ethylhexyl)phthalate	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:50	117-81-7	1d
Hexachlorocyclopentadiene	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	77-47-4	1d
Hexachloroethane	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	67-72-1	1d
Isophorone	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	78-59-1	1d
2-Methylphenol(o-Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	95-48-7	1d
3&4-Methylphenol(m&p Cresol)	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50		1d
Nitrobenzene	ND	ug/L	4.8	1	11/11/19 09:05	11/11/19 17:50	98-95-3	1d
N-Nitroso-di-n-propylamine	ND	ug/L	47.6	1	11/11/19 09:05	11/11/19 17:50	621-64-7	1d
N-Nitrosodiphenylamine	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	86-30-6	1d
Phenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	108-95-2	1d
2,4,5-Trichlorophenol	ND	ug/L	9.5	1	11/11/19 09:05	11/11/19 17:50	95-95-4	1d
2,4,6-Trichlorophenol	ND	ug/L	8.6	1	11/11/19 09:05	11/11/19 17:50	88-06-2	1d
Surrogates								
Nitrobenzene-d5 (S)	74	%.	15-115	1	11/11/19 09:05	11/11/19 17:50	4165-60-0	
Phenol-d5 (S)	27	%.	10-65	1	11/11/19 09:05	11/11/19 17:50	4165-62-2	
2-Fluorophenol (S)	40	%.	10-82	1	11/11/19 09:05	11/11/19 17:50	367-12-4	
2,4,6-Tribromophenol (S)	73	%.	29-134	1	11/11/19 09:05	11/11/19 17:50	118-79-6	
8260/5030 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	100	1		11/13/19 22:58	67-64-1	
Benzene	ND	ug/L	5.0	1		11/13/19 22:58	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/13/19 22:58	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/13/19 22:58	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/13/19 22:58	74-83-9	CL,H7
2-Butanone (MEK)	ND	ug/L	25.0	1		11/13/19 22:58	78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		11/13/19 22:58	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/13/19 22:58	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/13/19 22:58	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/13/19 22:58	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/13/19 22:58	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/13/19 22:58	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/13/19 22:58	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		11/13/19 22:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:58	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/13/19 22:58	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/13/19 22:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/13/19 22:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 22:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/13/19 22:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/13/19 22:58	142-28-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: BFM-MW3 **Lab ID: 50241094004** Collected: 11/06/19 11:50 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
cis-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 22:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 22:58	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/13/19 22:58	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/13/19 22:58	97-63-2	
n-Hexane	ND	ug/L	5.0	1		11/13/19 22:58	110-54-3	N2
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/13/19 22:58	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/13/19 22:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/13/19 22:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/13/19 22:58	1634-04-4	
Styrene	ND	ug/L	5.0	1		11/13/19 22:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 22:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 22:58	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/13/19 22:58	127-18-4	
Toluene	ND	ug/L	5.0	1		11/13/19 22:58	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/13/19 22:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/13/19 22:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/13/19 22:58	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/13/19 22:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/13/19 22:58	75-69-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/13/19 22:58	95-63-6	
Vinyl acetate	ND	ug/L	50.0	1		11/13/19 22:58	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		11/13/19 22:58	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/13/19 22:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		11/13/19 22:58	1868-53-7	
4-Bromofluorobenzene (S)	102	%.	85-114	1		11/13/19 22:58	460-00-4	
Toluene-d8 (S)	101	%.	85-114	1		11/13/19 22:58	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: TRIP BLANK **Lab ID: 50241094005** Collected: 11/06/19 08:00 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	100	1		11/13/19 20:46	67-64-1	
Benzene	ND	ug/L	5.0	1		11/13/19 20:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		11/13/19 20:46	75-27-4	
Bromoform	ND	ug/L	5.0	1		11/13/19 20:46	75-25-2	
Bromomethane	ND	ug/L	5.0	1		11/13/19 20:46	74-83-9	CL,H7
2-Butanone (MEK)	ND	ug/L	25.0	1		11/13/19 20:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		11/13/19 20:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		11/13/19 20:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		11/13/19 20:46	108-90-7	
Chloroethane	ND	ug/L	5.0	1		11/13/19 20:46	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/13/19 20:46	67-66-3	
Chloromethane	ND	ug/L	5.0	1		11/13/19 20:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		11/13/19 20:46	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		11/13/19 20:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 20:46	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		11/13/19 20:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		11/13/19 20:46	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		11/13/19 20:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		11/13/19 20:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		11/13/19 20:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 20:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		11/13/19 20:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		11/13/19 20:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1		11/13/19 20:46	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 20:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.1	1		11/13/19 20:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		11/13/19 20:46	100-41-4	
Ethyl methacrylate	ND	ug/L	100	1		11/13/19 20:46	97-63-2	
n-Hexane	ND	ug/L	5.0	1		11/13/19 20:46	110-54-3	N2
Isopropylbenzene (Cumene)	ND	ug/L	5.0	1		11/13/19 20:46	98-82-8	
Methylene Chloride	ND	ug/L	5.0	1		11/13/19 20:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		11/13/19 20:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	4.0	1		11/13/19 20:46	1634-04-4	
Styrene	ND	ug/L	5.0	1		11/13/19 20:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 20:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		11/13/19 20:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		11/13/19 20:46	127-18-4	
Toluene	ND	ug/L	5.0	1		11/13/19 20:46	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	1		11/13/19 20:46	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		11/13/19 20:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		11/13/19 20:46	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		11/13/19 20:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		11/13/19 20:46	75-69-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1		11/13/19 20:46	95-63-6	
Vinyl acetate	ND	ug/L	50.0	1		11/13/19 20:46	108-05-4	
Vinyl chloride	ND	ug/L	2.0	1		11/13/19 20:46	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		11/13/19 20:46	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Sample: TRIP BLANK **Lab ID: 50241094005** Collected: 11/06/19 08:00 Received: 11/08/19 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5030 MSV	Analytical Method: EPA 8260							
Surrogates								
Dibromofluoromethane (S)	103	%.	80-122	1		11/13/19 20:46	1868-53-7	
4-Bromofluorobenzene (S)	100	%.	85-114	1		11/13/19 20:46	460-00-4	
Toluene-d8 (S)	100	%.	85-114	1		11/13/19 20:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

QC Batch: 532214 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

METHOD BLANK: 2456638 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	2.0	11/13/19 10:01	

LABORATORY CONTROL SAMPLE: 2456639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2456640 2456641

Parameter	Units	50241029003 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	4.6	4.1	92	82	75-125	11	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

QC Batch: 531931 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

METHOD BLANK: 2455280 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	11/13/19 00:44	
Barium	ug/L	ND	10.0	11/13/19 00:44	
Cadmium	ug/L	ND	2.0	11/13/19 00:44	
Chromium	ug/L	ND	10.0	11/13/19 00:44	
Lead	ug/L	ND	10.0	11/13/19 00:44	
Selenium	ug/L	ND	10.0	11/13/19 00:44	
Silver	ug/L	ND	10.0	11/13/19 00:44	

LABORATORY CONTROL SAMPLE: 2455281

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	983	98	80-120	
Barium	ug/L	1000	967	97	80-120	
Cadmium	ug/L	1000	1040	104	80-120	
Chromium	ug/L	1000	1000	100	80-120	
Lead	ug/L	1000	1040	104	80-120	
Selenium	ug/L	1000	1000	100	80-120	
Silver	ug/L	500	510	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2455282 2455283

Parameter	Units	50241057006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	11.9	1000	1000	1030	1040	102	102	75-125	1	20	
Barium	ug/L	865	1000	1000	1890	1890	102	103	75-125	0	20	
Cadmium	ug/L	<2.0	1000	1000	1070	1080	107	108	75-125	1	20	
Chromium	ug/L	<10.0	1000	1000	1010	1010	101	101	75-125	0	20	
Lead	ug/L	<10.0	1000	1000	1050	1050	105	105	75-125	0	20	
Selenium	ug/L	<10.0	1000	1000	1040	1040	103	104	75-125	1	20	
Silver	ug/L	<10.0	500	500	523	524	105	105	75-125	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2455284 2455285

Parameter	Units	50241057008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	49.8	1000	1000	1030	1020	98	97	75-125	1	20	
Barium	ug/L	407	1000	1000	1340	1330	94	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2455284 2455285

Parameter	Units	50241057008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	<2.0	1000	1000	1040	1020	103	102	75-125	1	20	
Chromium	ug/L	<10.0	1000	1000	971	961	97	96	75-125	1	20	
Lead	ug/L	<10.0	1000	1000	1010	1000	101	100	75-125	1	20	
Selenium	ug/L	<10.0	1000	1000	1000	989	100	99	75-125	2	20	
Silver	ug/L	<10.0	500	500	505	499	101	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

QC Batch: 532502 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004, 50241094005

METHOD BLANK: 2457526 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004, 50241094005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,1,1-Trichloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,1,2-Trichloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,1-Dichloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,1-Dichloroethene	ug/L	ND	5.0	11/13/19 20:13	
1,2,4-Trichlorobenzene	ug/L	ND	5.0	11/13/19 20:13	
1,2,4-Trimethylbenzene	ug/L	ND	5.0	11/13/19 20:13	
1,2-Dichlorobenzene	ug/L	ND	5.0	11/13/19 20:13	
1,2-Dichloroethane	ug/L	ND	5.0	11/13/19 20:13	
1,2-Dichloropropane	ug/L	ND	5.0	11/13/19 20:13	
1,3-Dichloropropane	ug/L	ND	5.0	11/13/19 20:13	
1,4-Dichlorobenzene	ug/L	ND	5.0	11/13/19 20:13	
2-Butanone (MEK)	ug/L	ND	25.0	11/13/19 20:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	11/13/19 20:13	
Acetone	ug/L	ND	100	11/13/19 20:13	
Benzene	ug/L	ND	5.0	11/13/19 20:13	
Bromodichloromethane	ug/L	ND	5.0	11/13/19 20:13	
Bromoform	ug/L	ND	5.0	11/13/19 20:13	
Bromomethane	ug/L	ND	5.0	11/13/19 20:13	
Carbon disulfide	ug/L	ND	10.0	11/13/19 20:13	
Carbon tetrachloride	ug/L	ND	5.0	11/13/19 20:13	
Chlorobenzene	ug/L	ND	5.0	11/13/19 20:13	
Chloroethane	ug/L	ND	5.0	11/13/19 20:13	
Chloroform	ug/L	ND	5.0	11/13/19 20:13	
Chloromethane	ug/L	ND	5.0	11/13/19 20:13	
cis-1,2-Dichloroethene	ug/L	ND	5.0	11/13/19 20:13	
cis-1,3-Dichloropropene	ug/L	ND	4.1	11/13/19 20:13	
Dibromochloromethane	ug/L	ND	5.0	11/13/19 20:13	
Dibromomethane	ug/L	ND	5.0	11/13/19 20:13	
Dichlorodifluoromethane	ug/L	ND	5.0	11/13/19 20:13	
Ethyl methacrylate	ug/L	ND	100	11/13/19 20:13	
Ethylbenzene	ug/L	ND	5.0	11/13/19 20:13	
Isopropylbenzene (Cumene)	ug/L	ND	5.0	11/13/19 20:13	
Methyl-tert-butyl ether	ug/L	ND	4.0	11/13/19 20:13	
Methylene Chloride	ug/L	ND	5.0	11/13/19 20:13	
n-Hexane	ug/L	ND	5.0	11/13/19 20:13	N2
Styrene	ug/L	ND	5.0	11/13/19 20:13	
Tetrachloroethene	ug/L	ND	5.0	11/13/19 20:13	
Toluene	ug/L	ND	5.0	11/13/19 20:13	
trans-1,2-Dichloroethene	ug/L	ND	5.0	11/13/19 20:13	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

METHOD BLANK: 2457526 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004, 50241094005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	4.1	11/13/19 20:13	
Trichloroethene	ug/L	ND	5.0	11/13/19 20:13	
Trichlorofluoromethane	ug/L	ND	5.0	11/13/19 20:13	
Vinyl acetate	ug/L	ND	50.0	11/13/19 20:13	
Vinyl chloride	ug/L	ND	2.0	11/13/19 20:13	
Xylene (Total)	ug/L	ND	10.0	11/13/19 20:13	
4-Bromofluorobenzene (S)	%.	99	85-114	11/13/19 20:13	
Dibromofluoromethane (S)	%.	102	80-122	11/13/19 20:13	
Toluene-d8 (S)	%.	98	85-114	11/13/19 20:13	

LABORATORY CONTROL SAMPLE: 2457527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.1	102	78-120	
1,1,1-Trichloroethane	ug/L	50	55.5	111	72-127	
1,1,2,2-Tetrachloroethane	ug/L	50	49.7	99	70-124	
1,1,2-Trichloroethane	ug/L	50	51.7	103	79-121	
1,1-Dichloroethane	ug/L	50	52.6	105	70-119	
1,1-Dichloroethene	ug/L	50	56.5	113	71-126	
1,2,4-Trichlorobenzene	ug/L	50	52.9	106	68-130	
1,2,4-Trimethylbenzene	ug/L	50	50.7	101	79-117	
1,2-Dichlorobenzene	ug/L	50	51.8	104	78-114	
1,2-Dichloroethane	ug/L	50	49.3	99	68-119	
1,2-Dichloropropane	ug/L	50	52.9	106	79-126	
1,3-Dichloropropane	ug/L	50	52.6	105	82-124	
1,4-Dichlorobenzene	ug/L	50	52.3	105	77-111	
2-Butanone (MEK)	ug/L	250	284	113	62-140	
4-Methyl-2-pentanone (MIBK)	ug/L	250	268	107	60-143	
Acetone	ug/L	250	234	94	44-156	
Benzene	ug/L	50	52.3	105	78-117	
Bromodichloromethane	ug/L	50	49.8	100	72-121	
Bromoform	ug/L	50	50.2	100	66-117	
Bromomethane	ug/L	50	77.4	155	20-176	
Carbon disulfide	ug/L	50	55.2	110	65-124	
Carbon tetrachloride	ug/L	50	52.7	105	68-132	
Chlorobenzene	ug/L	50	50.2	100	79-113	
Chloroethane	ug/L	50	47.5	95	62-140	
Chloroform	ug/L	50	51.4	103	73-118	
Chloromethane	ug/L	50	49.3	99	36-132	
cis-1,2-Dichloroethene	ug/L	50	52.1	104	74-122	
cis-1,3-Dichloropropene	ug/L	50	52.0	104	79-126	
Dibromochloromethane	ug/L	50	50.6	101	75-121	
Dibromomethane	ug/L	50	51.8	104	75-123	
Dichlorodifluoromethane	ug/L	50	48.7	97	27-172	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

LABORATORY CONTROL SAMPLE: 2457527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethyl methacrylate	ug/L	200	208	104	72-134	
Ethylbenzene	ug/L	50	51.8	104	80-118	
Isopropylbenzene (Cumene)	ug/L	50	50.0	100	82-120	
Methyl-tert-butyl ether	ug/L	50	56.5	113	72-128	
Methylene Chloride	ug/L	50	50.9	102	70-121	
n-Hexane	ug/L	50	55.4	111	58-149	N2
Styrene	ug/L	50	51.6	103	80-119	
Tetrachloroethene	ug/L	50	49.0	98	76-124	
Toluene	ug/L	50	50.6	101	78-116	
trans-1,2-Dichloroethene	ug/L	50	54.4	109	73-121	
trans-1,3-Dichloropropene	ug/L	50	49.3	99	73-126	
Trichloroethene	ug/L	50	50.4	101	76-120	
Trichlorofluoromethane	ug/L	50	57.9	116	60-138	
Vinyl acetate	ug/L	200	204	102	29-200	
Vinyl chloride	ug/L	50	50.6	101	70-136	
Xylene (Total)	ug/L	150	155	103	79-119	
4-Bromofluorobenzene (S)	%.			97	85-114	
Dibromofluoromethane (S)	%.			101	80-122	
Toluene-d8 (S)	%.			101	85-114	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

QC Batch: 532121 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH Low Volume
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

METHOD BLANK: 2456381 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Methylnaphthalene	ug/L	ND	1.0	11/11/19 16:11	
Acenaphthene	ug/L	ND	1.0	11/11/19 16:11	
Acenaphthylene	ug/L	ND	1.0	11/11/19 16:11	
Anthracene	ug/L	ND	0.10	11/11/19 16:11	
Benzo(a)anthracene	ug/L	ND	0.10	11/11/19 16:11	
Benzo(a)pyrene	ug/L	ND	0.10	11/11/19 16:11	
Benzo(b)fluoranthene	ug/L	ND	0.10	11/11/19 16:11	
Benzo(g,h,i)perylene	ug/L	ND	0.10	11/11/19 16:11	
Benzo(k)fluoranthene	ug/L	ND	0.10	11/11/19 16:11	
Chrysene	ug/L	ND	0.50	11/11/19 16:11	
Dibenz(a,h)anthracene	ug/L	ND	0.092	11/11/19 16:11	
Fluoranthene	ug/L	ND	1.0	11/11/19 16:11	
Fluorene	ug/L	ND	1.0	11/11/19 16:11	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	11/11/19 16:11	
Naphthalene	ug/L	ND	1.0	11/11/19 16:11	
Phenanthrene	ug/L	ND	1.0	11/11/19 16:11	
Pyrene	ug/L	ND	1.0	11/11/19 16:11	
2-Fluorobiphenyl (S)	%.	81	10-83	11/11/19 16:11	
p-Terphenyl-d14 (S)	%.	113	28-125	11/11/19 16:11	

LABORATORY CONTROL SAMPLE: 2456382

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/L	10	8.0	80	18-98	
Acenaphthene	ug/L	10	7.9	79	21-102	
Acenaphthylene	ug/L	10	8.2	82	23-118	
Anthracene	ug/L	10	9.9	99	29-119	
Benzo(a)anthracene	ug/L	10	10.2	102	36-131	
Benzo(a)pyrene	ug/L	10	9.7	97	31-121	
Benzo(b)fluoranthene	ug/L	10	11.4	114	32-130	
Benzo(g,h,i)perylene	ug/L	10	8.8	88	23-118	
Benzo(k)fluoranthene	ug/L	10	8.8	88	33-127	
Chrysene	ug/L	10	9.2	92	41-118	
Dibenz(a,h)anthracene	ug/L	10	9.4	94	25-121	
Fluoranthene	ug/L	10	10.5	105	36-128	
Fluorene	ug/L	10	10.0	100	26-114	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.4	94	26-119	
Naphthalene	ug/L	10	7.3	73	19-97	
Phenanthrene	ug/L	10	9.8	98	32-115	
Pyrene	ug/L	10	10.0	100	36-123	

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

LABORATORY CONTROL SAMPLE: 2456382

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			77	10-83	
p-Terphenyl-d14 (S)	%.			100	28-125	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

QC Batch: 532120 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: 8270 Water Scan LV
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

METHOD BLANK: 2456379 Matrix: Water
Associated Lab Samples: 50241094001, 50241094002, 50241094003, 50241094004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-Trichlorophenol	ug/L	ND	10.0	11/11/19 16:10	
2,4,6-Trichlorophenol	ug/L	ND	9.0	11/11/19 16:10	
2,4-Dichlorophenol	ug/L	ND	10.0	11/11/19 16:10	
2,4-Dimethylphenol	ug/L	ND	10.0	11/11/19 16:10	
2,4-Dinitrophenol	ug/L	ND	50.0	11/11/19 16:10	
2,4-Dinitrotoluene	ug/L	ND	10.0	11/11/19 16:10	
2,6-Dinitrotoluene	ug/L	ND	10.0	11/11/19 16:10	
2-Chloronaphthalene	ug/L	ND	10.0	11/11/19 16:10	
2-Chlorophenol	ug/L	ND	10.0	11/11/19 16:10	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	11/11/19 16:10	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	11/11/19 16:10	
4-Chloro-3-methylphenol	ug/L	ND	10.0	11/11/19 16:10	
4-Chloroaniline	ug/L	ND	10.0	11/11/19 16:10	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	11/11/19 16:10	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	11/11/19 16:10	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	11/11/19 16:10	
bis(2chloro1methylethyl) ether	ug/L	ND	10.0	11/11/19 16:10	
Butylbenzylphthalate	ug/L	ND	10.0	11/11/19 16:10	
Di-n-butylphthalate	ug/L	ND	10.0	11/11/19 16:10	
Di-n-octylphthalate	ug/L	ND	10.0	11/11/19 16:10	
Diethylphthalate	ug/L	ND	10.0	11/11/19 16:10	
Hexachlorocyclopentadiene	ug/L	ND	10.0	11/11/19 16:10	
Hexachloroethane	ug/L	ND	10.0	11/11/19 16:10	
Isophorone	ug/L	ND	10.0	11/11/19 16:10	
N-Nitroso-di-n-propylamine	ug/L	ND	50.0	11/11/19 16:10	
N-Nitrosodiphenylamine	ug/L	ND	10.0	11/11/19 16:10	
Nitrobenzene	ug/L	ND	5.0	11/11/19 16:10	
Phenol	ug/L	ND	10.0	11/11/19 16:10	
2,4,6-Tribromophenol (S)	%.	59	29-134	11/11/19 16:10	
2-Fluorophenol (S)	%.	31	10-82	11/11/19 16:10	
Nitrobenzene-d5 (S)	%.	62	15-115	11/11/19 16:10	
Phenol-d5 (S)	%.	23	10-65	11/11/19 16:10	

LABORATORY CONTROL SAMPLE: 2456380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene	ug/L	100	63.0	63	10-142	
2-Chlorophenol	ug/L	100	58.4	58	18-105	
4-Chloro-3-methylphenol	ug/L	100	71.9	72	18-127	
N-Nitroso-di-n-propylamine	ug/L	100	65.2	65	20-120	

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

LABORATORY CONTROL SAMPLE: 2456380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenol	ug/L	100	27.8	28	10-62	
2,4,6-Tribromophenol (S)	%.			61	29-134	
2-Fluorophenol (S)	%.			40	10-82	
Nitrobenzene-d5 (S)	%.			63	15-115	
Phenol-d5 (S)	%.			27	10-65	

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
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

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.

LABORATORIES

PASI-I	Pace Analytical Services - Indianapolis

BATCH QUALIFIERS

Batch: 532120

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 532121

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1d	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
H7	Re-extraction or re-analysis could not be performed within method holding time.
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.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

METHOD CROSS REFERENCE TABLE

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Parameter	Matrix	Analytical Method	Preparation Method
6010 MET ICP	Water	SW-846 6010B	SW-846 3010A
7470 Mercury	Water	SW-846 7470A	SW-846 7470A
8260/5030 MSV	Water	SW-846 8260C	SW-846 5030B
8270 100mL Combo RV	Water	SW-846 8270C	SW-846 3510C
8270 SVOC Combo Water	Water	SW-846 8270C	SW-846 3510C

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bexley Ferndale Mayfield VAP
Pace Project No.: 50241094

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50241094001	**BFM-MW2**	EPA 3010	531931	EPA 6010	532644
50241094002	**BFM-MW4**	EPA 3010	531931	EPA 6010	532644
50241094003	**BFM-MW1**	EPA 3010	531931	EPA 6010	532644
50241094004	**BFM-MW3**	EPA 3010	531931	EPA 6010	532644
50241094001	**BFM-MW2**	EPA 7470	532214	EPA 7470	532676
50241094002	**BFM-MW4**	EPA 7470	532214	EPA 7470	532676
50241094003	**BFM-MW1**	EPA 7470	532214	EPA 7470	532676
50241094004	**BFM-MW3**	EPA 7470	532214	EPA 7470	532676
50241094001	**BFM-MW2**	EPA 3510	532121	EPA 8270 by SIM	532307
50241094002	**BFM-MW4**	EPA 3510	532121	EPA 8270 by SIM	532307
50241094003	**BFM-MW1**	EPA 3510	532121	EPA 8270 by SIM	532307
50241094004	**BFM-MW3**	EPA 3510	532121	EPA 8270 by SIM	532307
50241094001	**BFM-MW2**	EPA 3510	532120	EPA 8270	532306
50241094002	**BFM-MW4**	EPA 3510	532120	EPA 8270	532306
50241094003	**BFM-MW1**	EPA 3510	532120	EPA 8270	532306
50241094004	**BFM-MW3**	EPA 3510	532120	EPA 8270	532306
50241094001	**BFM-MW2**	EPA 8260	532502		
50241094002	**BFM-MW4**	EPA 8260	532502		
50241094003	**BFM-MW1**	EPA 8260	532502		
50241094004	**BFM-MW3**	EPA 8260	532502		
50241094005	**TRIP BLANK**	EPA 8260	532502		

Pace Analytical

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 A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Pandey Enviornmental, LLC	Report To: Nick Vallera	Attention: Accounts Payable	
Address: 4100 Horizons Drive	Copy To:	Company Name: Pandey	Regulatory Agency: VAP
Columbus, OH 43220		Address:	
Email: nvallera@pandeyenvironmental.com	Purchase Order #:	Pace Quote:	State / Location: OH
Phone: Fax:	Project Name: Bexley Ferndale ~~VAP~~ Mayfield VAP	Pace Project Manager: kenneth.hunt@pacelabs.com,	
Requested Due Date: Standard	Project #:	Pace Profile #: 5556	

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	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: VOC by 8260	SVOC 8270	RCRA 8 Metals	SVOC/PAH combo Water	Residual Chlorine (Y/N)	50241094
1	BFM-MW2	WT	G			11-6-19	9:21		6	X		X	X						X		X	X		001
2	BFM-MW4	WT	G				10:15		6	X		X	X						X		X	X		002
3	BFM-MW1	WT	G				11:03		6	X		X	X						X		X	X		003
4	BFM-MW3	WT	G				11:50		6	X		X	X						X		X	X		004
5	TRIP BLANK	WT							3				X						X					005
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
VAP	[signature]	11-6-19	12:00	[signature] PACE	11-7-19	908	
	[signature] PACE	11-7-19	1700	Fedex PACE	11-7-19	1700	
	Fedex			[signature]	11/8/19	0855	0.3

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Vallera

SIGNATURE of SAMPLER: [signature] DATE Signed: 11-6-19

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 #: 50241094

Date/Time and Initials of person examining contents: TM 11/8/21 1020

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: 1260 8112 3846

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 (E) Ice Type: ☑ Wet ☐ Blue ☐ None | Samples collected today and on ice: ☐ Yes ☐ No ☑ N/A

Cooler Temperature: 0.8/0.9 (Initial/Corrected) Temp should be above freezing to 6°C

Ice Visible in Sample Containers? ☐ Yes ☑ No ☐ N/A

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)?		N/A				

Comments:

COC PAGE ____ of ____

Sample Container Count

WO# : 50241094

50241094

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								1													
2																													
3																													
4																													
5																													
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

Affidavit of VAP Certified Laboratory

[For VAP certified laboratories to attest to "certified data" under OAC 3745-300-13(N) and OAC 3745-300-04(A). Note that Ohio EPA is to receive a legible copy of the CL's affidavit. The entity that received the CL's analytical report under affidavit may retain the CL's affidavit original.]

State of Indiana)
) ss:
County of Marion)

I, Anne Troyer, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen years old and competent to testify herein.

2. I am employed by Pace Analytical Services - Indianapolis ("the laboratory") as Quality Assurance Analyst. I am authorized to submit this affidavit on behalf of the laboratory.

3. The purpose of this submission is to support a request for a no further action letter or other aspects of a voluntary action, under Ohio's Voluntary Action Program (VAP) as set forth in Ohio Revised Code Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.

4. Pace Analytical Services - Indianapolis performed analyses for Pandey Environmental, LLC for a voluntary action at property known as Bexley Ferndale Mayfield.

5. This affidavit applies to and is submitted with the following information, data, documents or reports for the property:

Document ID	Date of Document
50241094	November 15, 2019

6. Pace Analytical Services - Indianapolis was a VAP certified laboratory pursuant to OAC 3745-300-04 when it performed the analyses referenced herein.

7. All analyses under this affidavit consist of VAP "certified data" as described in OAC 3745-300-04(A) - - unless paragraph b., below, specifies the exceptions:

   a. The laboratory performed the analyses within its current VAP certification, number CL0065. The laboratory was certified for each analyte, parameter group and method used at the time that it performed the analyses – see Method Cross Reference Table. The analyses were performed consistent with the laboratory's standard operating procedures and quality assurance program plan as approved under OAC 3745-300-04.

   b. Exceptions, if any: Any soil moisture performed by method SM 2540G used for dry weight correction of data or any analysis used for batch QC on matrix spikes, matrix spike duplicates or sample duplicates that are not associated with the referenced project number identified in item 5 above.

8. The information, data, documents and reports identified under this affidavit are true, accurate and complete.

50241094

Further affiant sayeth naught.

Signature of Affiant

Sworn to before me and subscribed in my presence this 22nd day of November, 2019.

Melissa Lynn Albertson
Notary Public Seal State of Indiana
Marion County
Commission # 710839
My Commission Expires 02/25/2026

Notary Public

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

January 06, 2020

Nick Vallera
Pandey Environmental
4100 Horizons Drive
Ste 205
Columbus, OH 43220

RE: Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Dear Nick Vallera:
Enclosed are the analytical results for sample(s) received by the laboratory on November 11, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised on January 6, 2020, to correct the sample collection date for sample 10499055003.

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

Sincerely,

Carolynne Trout

Carolynne Trout
carolynne.trout@pacelabs.com
1(612)607-6351
Project Manager

Enclosures

cc: Jason Martin, Pandey Environmental

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10499055001	**960 Ferndale-SG1**	Air	11/06/19 15:37	11/11/19 10:50
10499055002	**914 Mayfield-SV1**	Air	11/06/19 15:31	11/11/19 10:50
10499055003	**924 Mayfield-SV1**	Air	11/06/19 16:05	11/11/19 10:50
10499055004	**934 Ferndale-SV1**	Air	11/06/19 15:42	11/11/19 10:50
10499055005	**940 Ferndale-SV1**	Air	11/06/19 15:45	11/11/19 10:50
10499055006	**929 Ferndale-SV1**	Air	11/06/19 15:27	11/11/19 10:50
10499055007	**920 Ferndale-SV1**	Air	11/07/19 15:00	11/11/19 10:50
10499055008	**Unused Can 1077**	Air		11/11/19 10:50

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SAMPLE ANALYTE COUNT

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10499055001	**960 Ferndale-SG1**	TO-15	CH1	53
10499055002	**914 Mayfield-SV1**	TO-15	CH1	53
10499055003	**924 Mayfield-SV1**	TO-15	CH1	53
10499055004	**934 Ferndale-SV1**	TO-15	CH1	53
10499055005	**940 Ferndale-SV1**	TO-15	CH1	53
10499055006	**929 Ferndale-SV1**	TO-15	CH1	53
10499055007	**920 Ferndale-SV1**	TO-15	CH1	53

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 960 Ferndale-SG1 **Lab ID: 10499055001** Collected: 11/06/19 15:37 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	ND	ug/m3	3.7	1.52		11/16/19 23:53	67-64-1	
Benzene	ND	ug/m3	0.49	1.52		11/16/19 23:53	71-43-2	
Benzyl chloride	ND	ug/m3	4.0	1.52		11/16/19 23:53	100-44-7	
Bromodichloromethane	ND	ug/m3	2.1	1.52		11/16/19 23:53	75-27-4	
Bromoform	ND	ug/m3	8.0	1.52		11/16/19 23:53	75-25-2	
Bromomethane	ND	ug/m3	1.2	1.52		11/16/19 23:53	74-83-9	
1,3-Butadiene	ND	ug/m3	0.68	1.52		11/16/19 23:53	106-99-0	
2-Butanone (MEK)	ND	ug/m3	4.6	1.52		11/16/19 23:53	78-93-3	
Carbon disulfide	ND	ug/m3	0.96	1.52		11/16/19 23:53	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.9	1.52		11/16/19 23:53	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	1.52		11/16/19 23:53	108-90-7	
Chloroethane	ND	ug/m3	0.81	1.52		11/16/19 23:53	75-00-3	
Chloroform	ND	ug/m3	0.75	1.52		11/16/19 23:53	67-66-3	
Chloromethane	ND	ug/m3	0.64	1.52		11/16/19 23:53	74-87-3	
Cyclohexane	ND	ug/m3	2.7	1.52		11/16/19 23:53	110-82-7	
Dibromochloromethane	ND	ug/m3	2.6	1.52		11/16/19 23:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.2	1.52		11/16/19 23:53	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.9	1.52		11/16/19 23:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.9	1.52		11/16/19 23:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.7	1.52		11/16/19 23:53	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.52		11/16/19 23:53	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	1.52		11/16/19 23:53	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.62	1.52		11/16/19 23:53	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	1.52		11/16/19 23:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.52		11/16/19 23:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.52		11/16/19 23:53	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	1.52		11/16/19 23:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	1.52		11/16/19 23:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	1.52		11/16/19 23:53	10061-02-6	
Ethyl acetate	ND	ug/m3	1.1	1.52		11/16/19 23:53	141-78-6	
Ethylbenzene	**1.7**	ug/m3	1.3	1.52		11/16/19 23:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	8.2	1.52		11/16/19 23:53	87-68-3	
n-Hexane	ND	ug/m3	1.1	1.52		11/16/19 23:53	110-54-3	
Methylene Chloride	**6.0**	ug/m3	5.4	1.52		11/16/19 23:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.3	1.52		11/16/19 23:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.6	1.52		11/16/19 23:53	1634-04-4	
Naphthalene	ND	ug/m3	4.0	1.52		11/16/19 23:53	91-20-3	
Styrene	ND	ug/m3	1.3	1.52		11/16/19 23:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	1.52		11/16/19 23:53	79-34-5	
Tetrachloroethene	**3.9**	ug/m3	1.0	1.52		11/16/19 23:53	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.91	1.52		11/16/19 23:53	109-99-9	
Toluene	ND	ug/m3	1.2	1.52		11/16/19 23:53	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	11.5	1.52		11/16/19 23:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.7	1.52		11/16/19 23:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.84	1.52		11/16/19 23:53	79-00-5	
Trichloroethene	ND	ug/m3	0.83	1.52		11/16/19 23:53	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.7	1.52		11/16/19 23:53	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 960 Ferndale-SG1 **Lab ID: 10499055001** Collected: 11/06/19 15:37 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	ND	ug/m3	1.5	1.52		11/16/19 23:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.5	1.52		11/16/19 23:53	108-67-8	
Vinyl acetate	ND	ug/m3	2.7	1.52		11/16/19 23:53	108-05-4	
Vinyl chloride	ND	ug/m3	0.40	1.52		11/16/19 23:53	75-01-4	
m&p-Xylene	**12.6**	ug/m3	2.7	1.52		11/16/19 23:53	179601-23-1	
o-Xylene	**5.4**	ug/m3	1.3	1.52		11/16/19 23:53	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 914 Mayfield-SV1 **Lab ID: 10499055002** Collected: 11/06/19 15:31 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**219**	ug/m3	9.7	4.04		11/17/19 00:23	67-64-1	
Benzene	**22.0**	ug/m3	1.3	4.04		11/17/19 00:23	71-43-2	
Benzyl chloride	ND	ug/m3	10.6	4.04		11/17/19 00:23	100-44-7	
Bromodichloromethane	ND	ug/m3	5.5	4.04		11/17/19 00:23	75-27-4	
Bromoform	ND	ug/m3	21.2	4.04		11/17/19 00:23	75-25-2	
Bromomethane	ND	ug/m3	3.2	4.04		11/17/19 00:23	74-83-9	
1,3-Butadiene	ND	ug/m3	1.8	4.04		11/17/19 00:23	106-99-0	
2-Butanone (MEK)	ND	ug/m3	12.1	4.04		11/17/19 00:23	78-93-3	
Carbon disulfide	ND	ug/m3	2.6	4.04		11/17/19 00:23	75-15-0	
Carbon tetrachloride	ND	ug/m3	5.2	4.04		11/17/19 00:23	56-23-5	
Chlorobenzene	ND	ug/m3	3.8	4.04		11/17/19 00:23	108-90-7	
Chloroethane	ND	ug/m3	2.2	4.04		11/17/19 00:23	75-00-3	
Chloroform	ND	ug/m3	2.0	4.04		11/17/19 00:23	67-66-3	
Chloromethane	ND	ug/m3	1.7	4.04		11/17/19 00:23	74-87-3	
Cyclohexane	**13.5**	ug/m3	7.1	4.04		11/17/19 00:23	110-82-7	
Dibromochloromethane	ND	ug/m3	7.0	4.04		11/17/19 00:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	3.2	4.04		11/17/19 00:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	4.9	4.04		11/17/19 00:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	4.9	4.04		11/17/19 00:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	12.4	4.04		11/17/19 00:23	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	4.1	4.04		11/17/19 00:23	75-71-8	
1,1-Dichloroethane	ND	ug/m3	3.3	4.04		11/17/19 00:23	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.7	4.04		11/17/19 00:23	107-06-2	
1,1-Dichloroethene	ND	ug/m3	3.3	4.04		11/17/19 00:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	3.3	4.04		11/17/19 00:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	3.3	4.04		11/17/19 00:23	156-60-5	
1,2-Dichloropropane	ND	ug/m3	3.8	4.04		11/17/19 00:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	3.7	4.04		11/17/19 00:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3.7	4.04		11/17/19 00:23	10061-02-6	
Ethyl acetate	ND	ug/m3	3.0	4.04		11/17/19 00:23	141-78-6	
Ethylbenzene	**24.6**	ug/m3	3.6	4.04		11/17/19 00:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	21.9	4.04		11/17/19 00:23	87-68-3	
n-Hexane	**42.8**	ug/m3	2.9	4.04		11/17/19 00:23	110-54-3	
Methylene Chloride	**74.0**	ug/m3	14.3	4.04		11/17/19 00:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	16.8	4.04		11/17/19 00:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	14.8	4.04		11/17/19 00:23	1634-04-4	
Naphthalene	ND	ug/m3	10.7	4.04		11/17/19 00:23	91-20-3	
Styrene	ND	ug/m3	3.5	4.04		11/17/19 00:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2.8	4.04		11/17/19 00:23	79-34-5	
Tetrachloroethene	ND	ug/m3	2.8	4.04		11/17/19 00:23	127-18-4	
Tetrahydrofuran	ND	ug/m3	2.4	4.04		11/17/19 00:23	109-99-9	
Toluene	**128**	ug/m3	3.1	4.04		11/17/19 00:23	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	30.5	4.04		11/17/19 00:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	4.5	4.04		11/17/19 00:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	2.2	4.04		11/17/19 00:23	79-00-5	
Trichloroethene	ND	ug/m3	2.2	4.04		11/17/19 00:23	79-01-6	
Trichlorofluoromethane	ND	ug/m3	4.6	4.04		11/17/19 00:23	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 914 Mayfield-SV1 **Lab ID: 10499055002** Collected: 11/06/19 15:31 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**38.2**	ug/m3	4.0	4.04		11/17/19 00:23	95-63-6	
1,3,5-Trimethylbenzene	**10.9**	ug/m3	4.0	4.04		11/17/19 00:23	108-67-8	
Vinyl acetate	ND	ug/m3	7.2	4.04		11/17/19 00:23	108-05-4	
Vinyl chloride	ND	ug/m3	1.1	4.04		11/17/19 00:23	75-01-4	
m&p-Xylene	**113**	ug/m3	7.2	4.04		11/17/19 00:23	179601-23-1	
o-Xylene	**41.0**	ug/m3	3.6	4.04		11/17/19 00:23	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 924 Mayfield-SV1 **Lab ID: 10499055003** Collected: 11/06/19 16:05 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**57.8**	ug/m3	3.5	1.44		11/17/19 00:53	67-64-1	
Benzene	**7.6**	ug/m3	0.47	1.44		11/17/19 00:53	71-43-2	
Benzyl chloride	ND	ug/m3	3.8	1.44		11/17/19 00:53	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.44		11/17/19 00:53	75-27-4	
Bromoform	ND	ug/m3	7.6	1.44		11/17/19 00:53	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.44		11/17/19 00:53	74-83-9	
1,3-Butadiene	ND	ug/m3	0.65	1.44		11/17/19 00:53	106-99-0	
2-Butanone (MEK)	**5.4**	ug/m3	4.3	1.44		11/17/19 00:53	78-93-3	
Carbon disulfide	ND	ug/m3	0.91	1.44		11/17/19 00:53	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.8	1.44		11/17/19 00:53	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.44		11/17/19 00:53	108-90-7	
Chloroethane	ND	ug/m3	0.77	1.44		11/17/19 00:53	75-00-3	
Chloroform	ND	ug/m3	0.71	1.44		11/17/19 00:53	67-66-3	
Chloromethane	ND	ug/m3	0.60	1.44		11/17/19 00:53	74-87-3	
Cyclohexane	**4.9**	ug/m3	2.5	1.44		11/17/19 00:53	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.44		11/17/19 00:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.1	1.44		11/17/19 00:53	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	1.44		11/17/19 00:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	1.44		11/17/19 00:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.4	1.44		11/17/19 00:53	106-46-7	
Dichlorodifluoromethane	**2.5**	ug/m3	1.5	1.44		11/17/19 00:53	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	1.44		11/17/19 00:53	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.59	1.44		11/17/19 00:53	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	1.44		11/17/19 00:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		11/17/19 00:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		11/17/19 00:53	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	1.44		11/17/19 00:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	1.44		11/17/19 00:53	10061-01-5	
trans-1,3-Dichloropropene	**9.8**	ug/m3	1.3	1.44		11/17/19 00:53	10061-02-6	
Ethyl acetate	ND	ug/m3	1.1	1.44		11/17/19 00:53	141-78-6	
Ethylbenzene	**15.6**	ug/m3	1.3	1.44		11/17/19 00:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	7.8	1.44		11/17/19 00:53	87-68-3	
n-Hexane	**13.4**	ug/m3	1.0	1.44		11/17/19 00:53	110-54-3	
Methylene Chloride	**5.8**	ug/m3	5.1	1.44		11/17/19 00:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.0	1.44		11/17/19 00:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.3	1.44		11/17/19 00:53	1634-04-4	
Naphthalene	ND	ug/m3	3.8	1.44		11/17/19 00:53	91-20-3	
Styrene	ND	ug/m3	1.2	1.44		11/17/19 00:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	1.44		11/17/19 00:53	79-34-5	
Tetrachloroethene	ND	ug/m3	0.99	1.44		11/17/19 00:53	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.86	1.44		11/17/19 00:53	109-99-9	
Toluene	**53.7**	ug/m3	1.1	1.44		11/17/19 00:53	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	10.9	1.44		11/17/19 00:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.6	1.44		11/17/19 00:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.80	1.44		11/17/19 00:53	79-00-5	
Trichloroethene	ND	ug/m3	0.79	1.44		11/17/19 00:53	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.6	1.44		11/17/19 00:53	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 924 Mayfield-SV1 **Lab ID: 10499055003** Collected: 11/06/19 16:05 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**37.8**	ug/m3	1.4	1.44		11/17/19 00:53	95-63-6	
1,3,5-Trimethylbenzene	**10**	ug/m3	1.4	1.44		11/17/19 00:53	108-67-8	
Vinyl acetate	ND	ug/m3	2.6	1.44		11/17/19 00:53	108-05-4	
Vinyl chloride	ND	ug/m3	0.37	1.44		11/17/19 00:53	75-01-4	
m&p-Xylene	**75.4**	ug/m3	2.5	1.44		11/17/19 00:53	179601-23-1	
o-Xylene	**28.0**	ug/m3	1.3	1.44		11/17/19 00:53	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 934 Ferndale-SV1 **Lab ID: 10499055004** Collected: 11/06/19 15:42 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**304**	ug/m3	3.5	1.46		11/17/19 01:23	67-64-1	
Benzene	**12.3**	ug/m3	0.47	1.46		11/17/19 01:23	71-43-2	
Benzyl chloride	ND	ug/m3	3.8	1.46		11/17/19 01:23	100-44-7	
Bromodichloromethane	ND	ug/m3	2.0	1.46		11/17/19 01:23	75-27-4	
Bromoform	ND	ug/m3	7.7	1.46		11/17/19 01:23	75-25-2	
Bromomethane	ND	ug/m3	1.2	1.46		11/17/19 01:23	74-83-9	
1,3-Butadiene	ND	ug/m3	0.66	1.46		11/17/19 01:23	106-99-0	
2-Butanone (MEK)	**38.3**	ug/m3	4.4	1.46		11/17/19 01:23	78-93-3	
Carbon disulfide	**1.3**	ug/m3	0.92	1.46		11/17/19 01:23	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.9	1.46		11/17/19 01:23	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	1.46		11/17/19 01:23	108-90-7	
Chloroethane	ND	ug/m3	0.78	1.46		11/17/19 01:23	75-00-3	
Chloroform	ND	ug/m3	0.72	1.46		11/17/19 01:23	67-66-3	
Chloromethane	**2.6**	ug/m3	0.61	1.46		11/17/19 01:23	74-87-3	
Cyclohexane	**11.7**	ug/m3	2.6	1.46		11/17/19 01:23	110-82-7	
Dibromochloromethane	ND	ug/m3	2.5	1.46		11/17/19 01:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.1	1.46		11/17/19 01:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	1.46		11/17/19 01:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.8	1.46		11/17/19 01:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.5	1.46		11/17/19 01:23	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.46		11/17/19 01:23	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	1.46		11/17/19 01:23	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.60	1.46		11/17/19 01:23	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.2	1.46		11/17/19 01:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.46		11/17/19 01:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.46		11/17/19 01:23	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	1.46		11/17/19 01:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	1.46		11/17/19 01:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.3	1.46		11/17/19 01:23	10061-02-6	
Ethyl acetate	ND	ug/m3	1.1	1.46		11/17/19 01:23	141-78-6	
Ethylbenzene	**20.1**	ug/m3	1.3	1.46		11/17/19 01:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	7.9	1.46		11/17/19 01:23	87-68-3	
n-Hexane	**30.3**	ug/m3	1.0	1.46		11/17/19 01:23	110-54-3	
Methylene Chloride	**7.3**	ug/m3	5.2	1.46		11/17/19 01:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.1	1.46		11/17/19 01:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.3	1.46		11/17/19 01:23	1634-04-4	
Naphthalene	ND	ug/m3	3.9	1.46		11/17/19 01:23	91-20-3	
Styrene	ND	ug/m3	1.3	1.46		11/17/19 01:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.0	1.46		11/17/19 01:23	79-34-5	
Tetrachloroethene	ND	ug/m3	1.0	1.46		11/17/19 01:23	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.88	1.46		11/17/19 01:23	109-99-9	
Toluene	**68.4**	ug/m3	1.1	1.46		11/17/19 01:23	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	11.0	1.46		11/17/19 01:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.6	1.46		11/17/19 01:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.81	1.46		11/17/19 01:23	79-00-5	
Trichloroethene	ND	ug/m3	0.80	1.46		11/17/19 01:23	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.7	1.46		11/17/19 01:23	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 934 Ferndale-SV1 **Lab ID: 10499055004** Collected: 11/06/19 15:42 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**47.3**	ug/m3	1.5	1.46		11/17/19 01:23	95-63-6	
1,3,5-Trimethylbenzene	**12.3**	ug/m3	1.5	1.46		11/17/19 01:23	108-67-8	
Vinyl acetate	ND	ug/m3	2.6	1.46		11/17/19 01:23	108-05-4	
Vinyl chloride	ND	ug/m3	0.38	1.46		11/17/19 01:23	75-01-4	
m&p-Xylene	**91.6**	ug/m3	2.6	1.46		11/17/19 01:23	179601-23-1	
o-Xylene	**34.1**	ug/m3	1.3	1.46		11/17/19 01:23	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 940 Ferndale-SV1 **Lab ID: 10499055005** Collected: 11/06/19 15:45 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**19.5**	ug/m3	3.9	1.61		11/17/19 01:53	67-64-1	
Benzene	**10.2**	ug/m3	0.52	1.61		11/17/19 01:53	71-43-2	
Benzyl chloride	ND	ug/m3	4.2	1.61		11/17/19 01:53	100-44-7	
Bromodichloromethane	ND	ug/m3	2.2	1.61		11/17/19 01:53	75-27-4	
Bromoform	ND	ug/m3	8.5	1.61		11/17/19 01:53	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.61		11/17/19 01:53	74-83-9	
1,3-Butadiene	ND	ug/m3	0.72	1.61		11/17/19 01:53	106-99-0	
2-Butanone (MEK)	**8.2**	ug/m3	4.8	1.61		11/17/19 01:53	78-93-3	
Carbon disulfide	ND	ug/m3	1.0	1.61		11/17/19 01:53	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.1	1.61		11/17/19 01:53	56-23-5	
Chlorobenzene	ND	ug/m3	1.5	1.61		11/17/19 01:53	108-90-7	
Chloroethane	ND	ug/m3	0.86	1.61		11/17/19 01:53	75-00-3	
Chloroform	ND	ug/m3	0.80	1.61		11/17/19 01:53	67-66-3	
Chloromethane	ND	ug/m3	0.68	1.61		11/17/19 01:53	74-87-3	
Cyclohexane	**6.3**	ug/m3	2.8	1.61		11/17/19 01:53	110-82-7	
Dibromochloromethane	ND	ug/m3	2.8	1.61		11/17/19 01:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.3	1.61		11/17/19 01:53	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.61		11/17/19 01:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.61		11/17/19 01:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.9	1.61		11/17/19 01:53	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.6	1.61		11/17/19 01:53	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	1.61		11/17/19 01:53	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.66	1.61		11/17/19 01:53	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 01:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 01:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 01:53	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.5	1.61		11/17/19 01:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.61		11/17/19 01:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	1.61		11/17/19 01:53	10061-02-6	
Ethyl acetate	ND	ug/m3	1.2	1.61		11/17/19 01:53	141-78-6	
Ethylbenzene	**17.7**	ug/m3	1.4	1.61		11/17/19 01:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	8.7	1.61		11/17/19 01:53	87-68-3	
n-Hexane	**18.3**	ug/m3	1.2	1.61		11/17/19 01:53	110-54-3	
Methylene Chloride	**8.0**	ug/m3	5.7	1.61		11/17/19 01:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.7	1.61		11/17/19 01:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.9	1.61		11/17/19 01:53	1634-04-4	
Naphthalene	ND	ug/m3	4.3	1.61		11/17/19 01:53	91-20-3	
Styrene	ND	ug/m3	1.4	1.61		11/17/19 01:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	1.61		11/17/19 01:53	79-34-5	
Tetrachloroethene	ND	ug/m3	1.1	1.61		11/17/19 01:53	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.97	1.61		11/17/19 01:53	109-99-9	
Toluene	**65.9**	ug/m3	1.2	1.61		11/17/19 01:53	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	12.1	1.61		11/17/19 01:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.8	1.61		11/17/19 01:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.89	1.61		11/17/19 01:53	79-00-5	
Trichloroethene	ND	ug/m3	0.88	1.61		11/17/19 01:53	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.8	1.61		11/17/19 01:53	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 940 Ferndale-SV1 **Lab ID: 10499055005** Collected: 11/06/19 15:45 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**49.0**	ug/m3	1.6	1.61		11/17/19 01:53	95-63-6	
1,3,5-Trimethylbenzene	**13.2**	ug/m3	1.6	1.61		11/17/19 01:53	108-67-8	
Vinyl acetate	ND	ug/m3	2.9	1.61		11/17/19 01:53	108-05-4	
Vinyl chloride	ND	ug/m3	0.42	1.61		11/17/19 01:53	75-01-4	
m&p-Xylene	**91.3**	ug/m3	2.8	1.61		11/17/19 01:53	179601-23-1	
o-Xylene	**33.8**	ug/m3	1.4	1.61		11/17/19 01:53	95-47-6	

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 929 Ferndale-SV1 **Lab ID: 10499055006** Collected: 11/06/19 15:27 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**32.3**	ug/m3	4.2	1.75		11/17/19 02:23	67-64-1	
Benzene	**10.2**	ug/m3	0.57	1.75		11/17/19 02:23	71-43-2	
Benzyl chloride	ND	ug/m3	4.6	1.75		11/17/19 02:23	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.75		11/17/19 02:23	75-27-4	
Bromoform	ND	ug/m3	9.2	1.75		11/17/19 02:23	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.75		11/17/19 02:23	74-83-9	
1,3-Butadiene	ND	ug/m3	0.79	1.75		11/17/19 02:23	106-99-0	
2-Butanone (MEK)	**6.2**	ug/m3	5.2	1.75		11/17/19 02:23	78-93-3	
Carbon disulfide	ND	ug/m3	1.1	1.75		11/17/19 02:23	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.2	1.75		11/17/19 02:23	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.75		11/17/19 02:23	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.75		11/17/19 02:23	75-00-3	
Chloroform	ND	ug/m3	0.87	1.75		11/17/19 02:23	67-66-3	
Chloromethane	ND	ug/m3	0.74	1.75		11/17/19 02:23	74-87-3	
Cyclohexane	**6.0**	ug/m3	3.1	1.75		11/17/19 02:23	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.75		11/17/19 02:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.4	1.75		11/17/19 02:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.75		11/17/19 02:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.75		11/17/19 02:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	5.4	1.75		11/17/19 02:23	106-46-7	
Dichlorodifluoromethane	**2.6**	ug/m3	1.8	1.75		11/17/19 02:23	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.75		11/17/19 02:23	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.72	1.75		11/17/19 02:23	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.75		11/17/19 02:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.75		11/17/19 02:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.75		11/17/19 02:23	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.75		11/17/19 02:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.75		11/17/19 02:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.75		11/17/19 02:23	10061-02-6	
Ethyl acetate	ND	ug/m3	1.3	1.75		11/17/19 02:23	141-78-6	
Ethylbenzene	**20.4**	ug/m3	1.5	1.75		11/17/19 02:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	9.5	1.75		11/17/19 02:23	87-68-3	
n-Hexane	**16.9**	ug/m3	1.3	1.75		11/17/19 02:23	110-54-3	
Methylene Chloride	**20.0**	ug/m3	6.2	1.75		11/17/19 02:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.3	1.75		11/17/19 02:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	6.4	1.75		11/17/19 02:23	1634-04-4	
Naphthalene	ND	ug/m3	4.7	1.75		11/17/19 02:23	91-20-3	
Styrene	ND	ug/m3	1.5	1.75		11/17/19 02:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.75		11/17/19 02:23	79-34-5	
Tetrachloroethene	ND	ug/m3	1.2	1.75		11/17/19 02:23	127-18-4	
Tetrahydrofuran	ND	ug/m3	1.0	1.75		11/17/19 02:23	109-99-9	
Toluene	**73.7**	ug/m3	1.3	1.75		11/17/19 02:23	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	13.2	1.75		11/17/19 02:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.75		11/17/19 02:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.97	1.75		11/17/19 02:23	79-00-5	
Trichloroethene	ND	ug/m3	0.96	1.75		11/17/19 02:23	79-01-6	
Trichlorofluoromethane	ND	ug/m3	2.0	1.75		11/17/19 02:23	75-69-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 929 Ferndale-SV1 **Lab ID: 10499055006** Collected: 11/06/19 15:27 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**45.5**	ug/m3	1.7	1.75		11/17/19 02:23	95-63-6	
1,3,5-Trimethylbenzene	**12.6**	ug/m3	1.7	1.75		11/17/19 02:23	108-67-8	
Vinyl acetate	ND	ug/m3	3.1	1.75		11/17/19 02:23	108-05-4	
Vinyl chloride	ND	ug/m3	0.46	1.75		11/17/19 02:23	75-01-4	
m&p-Xylene	**101**	ug/m3	3.1	1.75		11/17/19 02:23	179601-23-1	
o-Xylene	**36.8**	ug/m3	1.5	1.75		11/17/19 02:23	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 920 Ferndale-SV1 **Lab ID: 10499055007** Collected: 11/07/19 15:00 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
Acetone	**27.2**	ug/m3	3.9	1.61		11/17/19 02:53	67-64-1	
Benzene	**7.6**	ug/m3	0.52	1.61		11/17/19 02:53	71-43-2	
Benzyl chloride	ND	ug/m3	4.2	1.61		11/17/19 02:53	100-44-7	
Bromodichloromethane	ND	ug/m3	2.2	1.61		11/17/19 02:53	75-27-4	
Bromoform	ND	ug/m3	8.5	1.61		11/17/19 02:53	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.61		11/17/19 02:53	74-83-9	
1,3-Butadiene	ND	ug/m3	0.72	1.61		11/17/19 02:53	106-99-0	
2-Butanone (MEK)	**10.2**	ug/m3	4.8	1.61		11/17/19 02:53	78-93-3	
Carbon disulfide	ND	ug/m3	1.0	1.61		11/17/19 02:53	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.1	1.61		11/17/19 02:53	56-23-5	
Chlorobenzene	ND	ug/m3	1.5	1.61		11/17/19 02:53	108-90-7	
Chloroethane	ND	ug/m3	0.86	1.61		11/17/19 02:53	75-00-3	
Chloroform	ND	ug/m3	0.80	1.61		11/17/19 02:53	67-66-3	
Chloromethane	ND	ug/m3	0.68	1.61		11/17/19 02:53	74-87-3	
Cyclohexane	**7.5**	ug/m3	2.8	1.61		11/17/19 02:53	110-82-7	
Dibromochloromethane	ND	ug/m3	2.8	1.61		11/17/19 02:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.3	1.61		11/17/19 02:53	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.61		11/17/19 02:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.61		11/17/19 02:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	4.9	1.61		11/17/19 02:53	106-46-7	
Dichlorodifluoromethane	**2.5**	ug/m3	1.6	1.61		11/17/19 02:53	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	1.61		11/17/19 02:53	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.66	1.61		11/17/19 02:53	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 02:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 02:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.3	1.61		11/17/19 02:53	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.5	1.61		11/17/19 02:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.61		11/17/19 02:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	1.61		11/17/19 02:53	10061-02-6	
Ethyl acetate	ND	ug/m3	1.2	1.61		11/17/19 02:53	141-78-6	
Ethylbenzene	**21.3**	ug/m3	1.4	1.61		11/17/19 02:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/m3	8.7	1.61		11/17/19 02:53	87-68-3	
n-Hexane	**18.5**	ug/m3	1.2	1.61		11/17/19 02:53	110-54-3	
Methylene Chloride	**9.0**	ug/m3	5.7	1.61		11/17/19 02:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	6.7	1.61		11/17/19 02:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	5.9	1.61		11/17/19 02:53	1634-04-4	
Naphthalene	ND	ug/m3	4.3	1.61		11/17/19 02:53	91-20-3	
Styrene	ND	ug/m3	1.4	1.61		11/17/19 02:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	1.61		11/17/19 02:53	79-34-5	
Tetrachloroethene	ND	ug/m3	1.1	1.61		11/17/19 02:53	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.97	1.61		11/17/19 02:53	109-99-9	
Toluene	**66.5**	ug/m3	1.2	1.61		11/17/19 02:53	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	12.1	1.61		11/17/19 02:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.8	1.61		11/17/19 02:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.89	1.61		11/17/19 02:53	79-00-5	
Trichloroethene	ND	ug/m3	0.88	1.61		11/17/19 02:53	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.8	1.61		11/17/19 02:53	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Sample: 920 Ferndale-SV1 **Lab ID: 10499055007** Collected: 11/07/19 15:00 Received: 11/11/19 10:50 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15	Analytical Method: TO-15							
1,2,4-Trimethylbenzene	**54.5**	ug/m3	1.6	1.61		11/17/19 02:53	95-63-6	
1,3,5-Trimethylbenzene	**14.4**	ug/m3	1.6	1.61		11/17/19 02:53	108-67-8	
Vinyl acetate	ND	ug/m3	2.9	1.61		11/17/19 02:53	108-05-4	
Vinyl chloride	ND	ug/m3	0.42	1.61		11/17/19 02:53	75-01-4	
m&p-Xylene	**108**	ug/m3	2.8	1.61		11/17/19 02:53	179601-23-1	
o-Xylene	**37.9**	ug/m3	1.4	1.61		11/17/19 02:53	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

QC Batch: 645373 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15
Associated Lab Samples: 10499055001, 10499055002, 10499055003, 10499055004, 10499055005, 10499055006, 10499055007

METHOD BLANK: 3474352 Matrix: Air
Associated Lab Samples: 10499055001, 10499055002, 10499055003, 10499055004, 10499055005, 10499055006, 10499055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	0.56	11/16/19 13:10	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.35	11/16/19 13:10	
1,1,2-Trichloroethane	ug/m3	ND	0.28	11/16/19 13:10	
1,1-Dichloroethane	ug/m3	ND	0.41	11/16/19 13:10	
1,1-Dichloroethene	ug/m3	ND	0.40	11/16/19 13:10	
1,2,4-Trichlorobenzene	ug/m3	ND	3.8	11/16/19 13:10	
1,2,4-Trimethylbenzene	ug/m3	ND	0.50	11/16/19 13:10	
1,2-Dibromoethane (EDB)	ug/m3	ND	0.39	11/16/19 13:10	
1,2-Dichlorobenzene	ug/m3	ND	0.61	11/16/19 13:10	
1,2-Dichloroethane	ug/m3	ND	0.21	11/16/19 13:10	
1,2-Dichloropropane	ug/m3	ND	0.47	11/16/19 13:10	
1,3,5-Trimethylbenzene	ug/m3	ND	0.50	11/16/19 13:10	
1,3-Butadiene	ug/m3	ND	0.22	11/16/19 13:10	
1,3-Dichlorobenzene	ug/m3	ND	0.61	11/16/19 13:10	
1,4-Dichlorobenzene	ug/m3	ND	1.5	11/16/19 13:10	
2-Butanone (MEK)	ug/m3	ND	1.5	11/16/19 13:10	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	2.1	11/16/19 13:10	
Acetone	ug/m3	ND	1.2	11/16/19 13:10	
Benzene	ug/m3	ND	0.16	11/16/19 13:10	
Benzyl chloride	ug/m3	ND	1.3	11/16/19 13:10	
Bromodichloromethane	ug/m3	ND	0.68	11/16/19 13:10	
Bromoform	ug/m3	ND	2.6	11/16/19 13:10	
Bromomethane	ug/m3	ND	0.39	11/16/19 13:10	
Carbon disulfide	ug/m3	ND	0.32	11/16/19 13:10	
Carbon tetrachloride	ug/m3	ND	0.64	11/16/19 13:10	
Chlorobenzene	ug/m3	ND	0.47	11/16/19 13:10	
Chloroethane	ug/m3	ND	0.27	11/16/19 13:10	
Chloroform	ug/m3	ND	0.25	11/16/19 13:10	
Chloromethane	ug/m3	ND	0.21	11/16/19 13:10	
cis-1,2-Dichloroethene	ug/m3	ND	0.40	11/16/19 13:10	
cis-1,3-Dichloropropene	ug/m3	ND	0.46	11/16/19 13:10	
Cyclohexane	ug/m3	ND	0.88	11/16/19 13:10	
Dibromochloromethane	ug/m3	ND	0.86	11/16/19 13:10	
Dichlorodifluoromethane	ug/m3	ND	0.50	11/16/19 13:10	
Ethyl acetate	ug/m3	ND	0.37	11/16/19 13:10	
Ethylbenzene	ug/m3	ND	0.44	11/16/19 13:10	
Hexachloro-1,3-butadiene	ug/m3	ND	2.7	11/16/19 13:10	
m&p-Xylene	ug/m3	ND	0.88	11/16/19 13:10	
Methyl-tert-butyl ether	ug/m3	ND	1.8	11/16/19 13:10	
Methylene Chloride	ug/m3	ND	1.8	11/16/19 13:10	
n-Hexane	ug/m3	ND	0.36	11/16/19 13:10	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

METHOD BLANK: 3474352 Matrix: Air
Associated Lab Samples: 10499055001, 10499055002, 10499055003, 10499055004, 10499055005, 10499055006, 10499055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Naphthalene	ug/m3	ND	1.3	11/16/19 13:10	
o-Xylene	ug/m3	ND	0.44	11/16/19 13:10	
Styrene	ug/m3	ND	0.43	11/16/19 13:10	
Tetrachloroethene	ug/m3	ND	0.34	11/16/19 13:10	
Tetrahydrofuran	ug/m3	ND	0.30	11/16/19 13:10	
Toluene	ug/m3	ND	0.38	11/16/19 13:10	
trans-1,2-Dichloroethene	ug/m3	ND	0.40	11/16/19 13:10	
trans-1,3-Dichloropropene	ug/m3	ND	0.46	11/16/19 13:10	
Trichloroethene	ug/m3	ND	0.27	11/16/19 13:10	
Trichlorofluoromethane	ug/m3	ND	0.57	11/16/19 13:10	
Vinyl acetate	ug/m3	ND	0.89	11/16/19 13:10	
Vinyl chloride	ug/m3	ND	0.13	11/16/19 13:10	

LABORATORY CONTROL SAMPLE: 3474353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	65.2	118	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	85.6	123	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	66.5	120	70-130	
1,1-Dichloroethane	ug/m3	41.1	47.9	116	70-130	
1,1-Dichloroethene	ug/m3	40.3	43.3	107	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	86.6	115	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	59.4	119	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	94.2	121	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	74.9	123	70-132	
1,2-Dichloroethane	ug/m3	41.1	49.0	119	70-130	
1,2-Dichloropropane	ug/m3	47	54.3	116	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	58.9	118	70-132	
1,3-Butadiene	ug/m3	22.5	25.9	115	65-130	
1,3-Dichlorobenzene	ug/m3	61.1	75.1	123	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	76.1	124	70-134	
2-Butanone (MEK)	ug/m3	30	30.4	101	70-130	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	47.6	114	70-131	
Acetone	ug/m3	121	124	102	67-130	
Benzene	ug/m3	32.5	36.8	113	70-130	
Benzyl chloride	ug/m3	52.6	70.2	133	70-130	CH,L3
Bromodichloromethane	ug/m3	68.1	85.2	125	70-130	
Bromoform	ug/m3	105	165	157	70-132	CH,L3
Bromomethane	ug/m3	39.5	41.9	106	69-130	
Carbon disulfide	ug/m3	31.6	36.6	116	56-137	
Carbon tetrachloride	ug/m3	64	87.2	136	66-131	CH,L3
Chlorobenzene	ug/m3	46.8	55.1	118	70-130	
Chloroethane	ug/m3	26.8	32.1	120	70-130	
Chloroform	ug/m3	49.6	58.3	118	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

LABORATORY CONTROL SAMPLE: 3474353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/m3	21	22.1	105	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	47.2	117	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	55.3	120	70-133	
Cyclohexane	ug/m3	35	41.0	117	68-132	
Dibromochloromethane	ug/m3	86.6	119	137	70-130	CH,L3
Dichlorodifluoromethane	ug/m3	50.3	56.6	113	70-130	
Ethyl acetate	ug/m3	36.6	42.6	116	69-130	
Ethylbenzene	ug/m3	44.1	51.9	117	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	120	111	66-137	
m&p-Xylene	ug/m3	88.3	101	115	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	42.6	116	70-130	
Methylene Chloride	ug/m3	177	197	112	65-130	
n-Hexane	ug/m3	35.8	41.8	117	66-130	
Naphthalene	ug/m3	53.3	57.6	108	56-130	
o-Xylene	ug/m3	44.1	50.0	113	70-130	
Styrene	ug/m3	43.3	54.2	125	69-136	
Tetrachloroethene	ug/m3	68.9	78.3	114	70-130	
Tetrahydrofuran	ug/m3	30	37.4	125	68-131	
Toluene	ug/m3	38.3	43.4	113	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	46.5	115	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	59.8	130	70-134	
Trichloroethene	ug/m3	54.6	66.8	122	70-130	
Trichlorofluoromethane	ug/m3	57.1	62.8	110	65-130	
Vinyl acetate	ug/m3	35.8	53.9	151	61-133	CH,L3
Vinyl chloride	ug/m3	26	28.0	108	70-130	

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
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

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

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

Pace Analytical Services, LLC
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(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bexley Ferndale-Mayfield-Revised Report
Pace Project No.: 10499055

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10499055001	**960 Ferndale-SG1**	TO-15	645373		
10499055002	**914 Mayfield-SV1**	TO-15	645373		
10499055003	**924 Mayfield-SV1**	TO-15	645373		
10499055004	**934 Ferndale-SV1**	TO-15	645373		
10499055005	**940 Ferndale-SV1**	TO-15	645373		
10499055006	**929 Ferndale-SV1**	TO-15	645373		
10499055007	**920 Ferndale-SV1**	TO-15	645373		

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AIR: CHAIN-OF-CUSTODY /

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WO# : 10499055

10499055

47784

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: PANDEY Environmental	Report To: Nick Vallera	Attention:
Address: 4100 Horizons Dr. Columbus, OH 43220	Copy To:	Company Name:
		Address:
Email To: nvallera@pandeyenvironmental	Purchase Order No.:	Pace Quote Reference:
Phone: 614-444-5878 Fax:	Project Name: Bexley Ferndale-Mayfield Properties	Pace Project Manager/Sales Rep. Carolynne Trout
Requested Due Date/TAT: STD	Project Number:	Pace Profile #: 35515

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☒ Other VAP

Location of Sampling by State: OH

Reporting Units: ug/m³ ☒ mg/m³ ☐ PPBV ☐ PPMV ☐ Other ☐

Report Level: II. ☐ III. ☐ IV. ☐ Other ☐

'Section D Required Client Information

AIR SAMPLE ID

Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	960 Ferndale - SG1	SLC	0	11-6-19	8:17	11-6-19	3:37	-28	-4	2318	0373					X					001
2	914 Mayfield - SV1		0		7:44		3:31	-30	-23	2755	2426					X					002
3	924 Mayfield - SV1		0		7:49		4:05	-30	-2	3618	0067					X					003
4	934 Ferndale - SV1		0		7:59		3:42	-27	-1	3557	0320					X					004
5	940 Ferndale - SV1		0		8:08		3:45	-29	-4	0531	1840					X					005
6	929 Ferndale - SV1		0		8:27		3:27	-30	-7	0808	1017					X					006
7	920 Ferndale - SV1	SLC	0	11-7-19	7:49	11-7-19	3:00	-29	-4	3371	1861					X					007
8																					
9																					
10																					
11																					
12																					

Comments: VAP

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	11-7-19	4:00	PACE	11/11/19	1050

SAMPLE CONDITIONS

—	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Vallera

SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY): 11/07/19

ORIGINAL

Pace Analytical®	Document Name: Air Sample Condition Upon Receipt	Document Revised: 14Oct2019 Page 1 of 1
	Document No.: F-MN-A-106-rev.19	Issuing Authority:

Air Sample Condition Upon Receipt

Client Name: Pandey Environmental

Project #:

WO#: 10499055

PM: CT1 **Due Date: 11/18/19**

CLIENT: Pandey

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Pace ☐SpeeDee ☐Commercial **See Exception** ☐

Tracking Number: 1083 0281 9358, 9369

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No

Packing Material: ☐Bubble Wrap ☐Bubble Bags ☒Foam ☐None ☐Tin Can ☐Other:_____ **Temp Blank rec:** ☐Yes ☒No

Temp. (TO17 and TO13 samples only) (°C): X **Corrected Temp (°C):** X **Thermometer Used:** ☐G87A9170600254 ☐G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** X **Date & Initials of Person Examining Contents:** 11/12/19 CMS

Type of ice Received ☐Blue ☐Wet ☒None

		Comments:
Chain of Custody Present?	☒Yes ☐No	1.
Chain of Custody Filled Out?	☒Yes ☐No	2.
Chain of Custody Relinquished?	☒Yes ☐No	3.
Sampler Name and/or Signature on COC?	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time?	☒Yes ☐No	5.
Short Hold Time Analysis (<72 hr)?	☐Yes ☒No	6.
Rush Turn Around Time Requested?	☐Yes ☒No	7.
Sufficient Volume?	☒Yes ☐No	8.
Correct Containers Used? -Pace Containers Used?	☒Yes ☐No ☒Yes ☐No	9.
Containers Intact?	☒Yes ☐No	10.
Media: (Air Can) Airbag Filter TDT Passive		11. Individually Certified Cans Y (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒Yes ☐No	12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒Yes ☐No	13.

Gauge # ☒10AIR26 ☐10AIR34 ☐10AIR35 ☐4097

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
960	2318	0373	-3.5	~~-5~~					
914	2755	2426	-20	~~-5~~					
924	3618	0067	-2	~~-5~~					
934	3557	0320	-2.5	~~-5~~					
940	0531	1840	-5	~~-5~~					
929	0808	1017	-7	~~-5~~					
920	3371	1861	-5	~~-5~~					
UNUSED	3361	0026	-30	———					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Carolyne Trout **Date:** 11/12/19

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)

Affidavit of VAP Certified Laboratory
(April 2017 Template)

[For VAP certified laboratories to attest to "certified data" under OAC 3745-300-04(A) and 3745-300-13. Note that Ohio EPA is to receive a legible copy of the CL's affidavit. The entity that received the CL's analytical report under affidavit may retain the CL's affidavit original.]

State of Minnesota)
) ss:
County of Hennepin)

I, Jerry Thao, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen years old and competent to testify herein.

2. I am employed by Pace Analytical Services, LLC ("the laboratory") as Quality Assurance Analyst II. I am authorized to submit this affidavit on behalf of the laboratory.

3. The purpose of this submission is to support a request for a no further action letter or other aspects of a voluntary action, under Ohio's Voluntary Action Program (VAP) as set forth in Ohio Revised Code Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.

4. Pace Analytical Services, LLC performed analyses for Pandey Environmental for a voluntary action at property known as Bexley Ferndale-Mayfield.

5. This affidavit applies to and is submitted with the following information, data, documents or reports for the property:

Document	Date of Document
10499055 (REVISED)	January 6, 2020

6. Pace Analytical Service, LLC was a VAP certified laboratory pursuant to OAC 3745-300-04 when it performed the analyses referenced herein.

7. All analyses under this affidavit consist of VAP "certified data" as described in OAC 3745-300-04(A) - - unless paragraph b., below, specifies the exceptions:

   a. The laboratory performed the analyses within its current VAP certification. The laboratory was certified for each analyte, parameter group and method used at the time that it performed the analyses. The analyses were performed consistent with the laboratory's standard operating procedures and quality assurance program plan as approved under OAC 3745-300-04.

   b. Exceptions, if any: None

8 The information, data, documents and reports identified under this affidavit are true, accurate and complete.

Further affiant sayeth naught.

Signature of Affiant

Sworn to before me and subscribed in my presence this 7 day of Jan, 2020.

Notary Public

SCOTT C UNZE
NOTARY PUBLIC - MINNESOTA
MY COMMISSION EXPIRES 01/31/24

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VAP
-10499055
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Mr. Nick Vallera

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Columbus, OH 43220-5181

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2970 0000 7459 4544

APPENDIX B
FIELD SHEETS

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 924 Mayfield Place	Bore ID: BFM-SB1
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 40F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					0	50	0 to 0.5: Brown topsoil, rootlets, slightly moist. 0.5 to 2: Black-brown SAND & GRAVEL with FILL, asphalt cuttings, brick, glass, slag, clay tile, dry.
				2'	0	50	Black-brown SAND & GRAVEL with FILL, dry.
				4'	0	75	Black-brown SAND & GRAVEL with FILL, slag, brick, glass, dry.
				6'	0	25	Black-brown SAND & GRAVEL with FILL, slag, brick, glass, dry.
				8'	0	100	8 to 8.25: Black-brown SAND & GRAVEL with FILL, dry. 8.25 to 10: Brown SILTY CLAY, medium stiff, slightly moist.
				10'	0	100	Brown SILTY CLAY, medium stiff, slightly moist.
				12'	0	100	Brown sandy SILTY CLAY, some gravel, stiff, dry.
				14'	0	100	Lite brown SANDY SILTY CLAY with some gravel, very moist.

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 924 Mayfield Place	Bore ID: BFM-SB1
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 40F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Brown silty SAND & GRAVEL, medium to coarse grained gravel with very fine grained sand and silt, saturated.
				18'	N/A	100	Dark brown SILTY SAND & GRAVEL, some white rock fragments, moist.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 914 Mayfield Place	Bore ID: BFM-SB2
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 39F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					1	100	0 to 0.5: Brown topsoil, grass, rootlets, slightly moist. 0.5 to 2: Brown SAND & GRAVEL with FILL, asphalt cuttings, dry.
				2'	0	100	Brown SAND & GRAVEL with FILL, trace slag, trace glass shards, dry.
				4'	0	50	Dark brown SAND & GRAVEL with FILL, trace metal fragments, trace slag, dry.
				6'	0	50	Dark brown SAND & GRAVEL with FILL, trace metal fragments, trace slag, dry.
				8'	0	100	8 to 8.5: Brown SAND & GRAVEL with brick fragments, dry. 8.5 to 10: Brown SILTY CLAY, medium stiff, slightly moist.
				10'	0	100	Lite brown SANDY SILTY CLAY, soft, moist.
				12'	0	100	Brown SANDY SILTY CLAY, trace gravel, very moist.
				14'	0	100	Brown SANDY SILTY CLAY, some gravel, very moist.

Notes:
TOTAL DEPTH: 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 914 Mayfield Place	Bore ID: BFM-SB2
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 39F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Lite brown silty SAND & GRAVEL, wet.
				18'	N/A	100	Gray-brown fine to medium grained SAND & GRAVEL, wet.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 929 Ferndale Place	Bore ID: BFM-SB3
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 52F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					0	100	0 to 0.5: Brown topsoil, rootlets, slightly moist. 0.5 to 2: Dark brown SAND & GRAVEL with FILL, glass, slag, brick, cinders, dry.
				2'	0	100	Dark brown SAND & GRAVEL with FILL, dry.
				4'	0	25	Dark brown SAND & GRAVEL with FILL (glass, slag, brick, cinders), dry.
				6'	0	25	Brown sandy SILTY CLAY with glass shards, dry.
				8'	0	100	Lite brown SILTY CLAY with trace gravel, moist.
				10'	0	100	Lite brown SILTY CLAY, becoming sandier towards 12'.
				12'	0	100	Lite brown sandy SILTY CLAY with trace gravel, stiff, dry.
				14'	0	100	14 to 15: Lite brown sandy SILTY CLAY, stiff, dry. 15 to 16: Brown fine to medium-grained SAND & GRAVEL, very moist.

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 929 Ferndale Place	Bore ID: BFM-SB3
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 52F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Dark brown fine to medium-grained SAND & GRAVEL, wet.
				18'	N/A	100	Dark brown fine to medium-grained SAND & GRAVEL, wet to saturated.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 920 Ferndale Place	Bore ID: BFM-SB4
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 52F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					0	50	0 to 1: Brown topsoil, rootlets, dry. 1 to 2: Dark brown silty clay with SAND, trace glass, trace cinders, dry.
				2'	0	50	Gray-brown SAND & GRAVEL, fine-grained, loose, dry.
				4'	0	100	Brown SAND & GRAVEL, fine-grained, not dense, no fill, dry.
				6'	0	100	Brown SAND & GRAVEL, fine-grained, not dense, dry.
				8'	0	100	Brown compact SAND & GRAVEL, stiff, dry.
				10'	0	100	Brown SILTY SAND & GRAVEL, crumbly, stiff, dry.
				12'	0	100	Brown SILTY SAND & GRAVEL, moist.
				14'	N/A	100	Brown fine to medium grained SAND & GRAVEL, wet to saturated.

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 920 Ferndale Place	Bore ID: BFM-SB4
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 52F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Lite brown silty SAND & GRAVEL, wet.
				18'			
					N/A	100	Lite brown silty SAND & GRAVEL, wet.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 926 Ferndale Place	Bore ID: BFM-SB5
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
■	■	■	■		0	50	0 to 1: Brown topsoil, rootlets, dry. 1 to 2: Brown SAND & GRAVEL, trace brick fragments, loose, dry.
■	■	■		2'	0	50	Brown SAND & GRAVEL, loose, dry.
■	■	■	■	4'	0	50	Brown SAND & GRAVEL with some FILL, trace glass, trace cinders, loose, dry.
■	■	■		6'	0	50	Brown SAND & GRAVEL, transitioning to brown stiff sand & gravel, dry.
■	■	■		8'	0	100	Brown SILTY SAND, fine-grained, trace brick fragments, crumbly, stiff, dry.
■	■	■		10'	0	100	Brown silty fine-grained SAND, no fill, crumbly, stiff,dry.
■	■	■		12'	0	100	Brown SILTY CLAY, stiff, dry.
■	■	■		14'	0	50	Brown SILTY CLAY, transitioning to wet fine-grained sand at 16'.

Notes:
TOTAL DEPTH: 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 926 Ferndale Place	Bore ID: BFM-SB5
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Brown fine to medium-grained SAND & GRAVEL, saturated.
				18'			
					N/A	100	Brown fine to medium-grained SILTY SAND & GRAVEL, wet to saturated.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 934 Ferndale Place	Bore ID: BFM-SB6
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					0	100	0 to 1: Brown topsoil, rootlets, slightly moist. 1 to 2: Brown SAND & GRAVEL, brick fragments, cinders, loose, dry.
				2'	0	100	Brown SAND & GRAVEL, little brick fragments, dry.
				4'	0	100	Black-brown SAND & GRAVEL, coal fragments, loose, dry.
				6'	0	100	Dark brown SILTY SAND, stiff, dry.
				8'	0	100	Dark brown SILTY SAND, stiff, dry.
				10'	0	100	Dark brown SILTY SAND, stiff, dry.
				12'	0	100	Lite brown sandy SILTY CLAY with trace gravel, medium stiff, moist.
				14'	0	100	Lite brown sandy SILTY CLAY, becoming sandier, very moist.

Notes:
TOTAL DEPTH: 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 934 Ferndale Place	Bore ID: BFM-SB6
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Brown silty SAND & GRAVEL, wet.
				18'			
					N/A	100	Brown silty SAND & GRAVEL, very moist to wet.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

ENVIRONMENTAL SOIL BORE LOG

Site: 940 Ferndale Place	Bore ID: BFM-SB7
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
■	■	■	■		0	50	0 to 1: Brown topsoil, slightly moist, some rootlets. 1 to 2: Brown SAND & GRAVEL with FILL, glass, brick fragments, slag, dry.
■	■	■		2'	0	50	Brown SAND & GRAVEL with FILL, glass and brick fragments, loose, dry.
■	■	■	■	4'	0	50	Brown SAND & GRAVEL with FILL, glass & coal fragments, dry.
■	■	■		6'	0	50	Brown SAND & GRAVEL with FILL material, little recovery.
■	■	■		8'	0	100	8 to 8.25: Brown SAND & GRAVEL (same as above). 8.25 to 10: Dark brown SILTY CLAY, medium stiff, slightly moist.
■	■	■		10'	0	100	Brown sandy SILTY CLAY, stiff, dry.
■	■	■		12'	0	100	Lite brown sandy SILTY CLAY, medium stiff, moist, trace gravel.
■	■	■		14'	N/A	100	Brown silty SAND & GRAVEL, fine to medium-grained, wet.

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 940 Ferndale Place	Bore ID: BFM-SB7
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
					N/A	100	Brown SAND & GRAVEL (some crushed rock including granite fragments), wet.
				18'	N/A	100	Brown silty SAND & GRAVEL, very moist, dense.
				20'			
				22'			
				24'			
				26'			
				28'			
				30'			

Notes:
TOTAL DEPTH: 20

ENVIRONMENTAL SOIL BORE LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 960 Ferndale Place	Bore ID: BFM-SB8
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather: 56F, Clear	Auger Diam: 4.25"
Co-located MW: BFM-MW4	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description
■	■	■	■		0	100	Asphalt Surface 0 to 1: Subbase SAND & GRAVEL, dry. 1 to 2: Brown SAND & GRAVEL, dry.
■	■	■		2'	0	100	Brown SAND & GRAVEL, stiff, dry.
■	■	■		4'	0	100	Brown SAND & GRAVEL, fine-grained sand, stiff, dry.
■	■	■	■	6'	0	100	Brown SILTY CLAY, medium stiff, slightly moist.
■	■	■	■	8'	0	100	Brown SILTY CLAY, medium stiff, moist.
■	■	■		10'	0	100	Brown silty SAND & GRAVEL, dense, wet.
■	■	■	■	12'	N/A	100	Gray SILTY CLAY with SAND & GRAVEL, very moist.
■	■	■	■	14'	N/A	100	Brown silty SAND & GRAVEL, wet. Encountering gray rock at 16' with rig refusal.

Notes:
TOTAL DEPTH: 16

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 924 Mayfield Place	Bore ID: BFM-MW1
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 45F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					0	100	0 to 0.5: Brown topsoil, soft, rootlets, slightly moist. 0.5 to 2: Brown silty SAND & GRAVEL with FILL, glass, slag, trace wood, moist.	GROUT
				2'	0	100	Dark brown to black SAND & GRAVEL with FILL, brick fragments, slag, glass, dry.	GROUT
				4'	0	25	Dark brown to black SAND & GRAVEL with FILL, brick fragments, slag, glass, dry.	GROUT
				6'	0	25	Dark brown to black SAND & GRAVEL with FILL, little recovery.	GROUT
				8'	0	100	Brown SILTY CLAY, native (no fill), medium stiff, crumbly, dry.	GROUT
				10'	0	100	10 to 11: Brown sandy SILTY CLAY, dry. 11 to 12: Lite brown SANDY SILTY CLAY, trace gravel, slightly moist.	GROUT
				12'	0	100	Brown SANDY SILTY CLAY with gravel, very moist.	SAND
				14'	0	100	Brown poorly sorted silty clay with SAND & GRAVEL, very moist.	SAND

Notes:
Well Depth: 24 Co-located soil bore depth: Screened Interval: 14 to 24

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 924 Mayfield Place	Bore ID: BFM-MW1
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 45F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					N/A	100	Brown silty SAND & GRAVEL, wet.	
				18'				
					N/A	100	Brown silty SAND & GRAVEL (gravel size is approx. 0.5-1" diameter), wet.	
				20'				
				22'				
				24'				
				26'				
				28'				
				30'				

Notes:
Well Depth: 24 Co-located soil bore depth: Screened Interval: 14 to 24

MONITORING WELL LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 926 Ferndale Place	Bore ID: BFM-MW2
Date Drilled: 11/5/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					0	50	Brown topsoil, rootlets, slightly moist.	GROUT
				2'	0	50	Brown silty SAND & GRAVEL, trace asphalt, cuttings.	GROUT
				4'	0	50	Lite brown SAND & GRAVEL, loose, dry.	GROUT
				6'	0	50	Brown SILTY SAND, stiff, crumbly, dry.	GROUT
				8'	0	100	Brown SILTY CLAY, stiff, sandy, dry.	
				10'	0	100	Brown sandy SILTY CLAY, white rock fragments at 12', dry.	
				12'	N/A	100	Brown fine to medium grained SAND & GRAVEL, wet.	SAND
				14'	N/A	100	Brown fine to medium grained SAND & GRAVEL, wet to saturated.	SAND

Notes:
Well Depth: 20 Co-located soil bore depth: Screened Interval: 10 to 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 926 Ferndale Place	Bore ID: BFM-MW2
Date Drilled: 11/5/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					N/A	100	Brown silty SAND & GRAVEL, wet.	
				18'	N/A	100	Brown silty SAND & GRAVEL, very moist.	
				20'				
				22'				
				24'				
				26'				
				28'				
				30'				

Notes:
Well Depth: 20 Co-located soil bore depth: Screened Interval: 10 to 20

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 940 Ferndale Place	Bore ID: BFM-MW3
Date Drilled: 11/5/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					0	50	0 to 1: Brown topsoil, rootlers, slightly moist. 1 to 2: Brown SAND & GRAVEL, trace coal fragments.	
				2'	0	100	Brown SAND & GRAVEL, trace brick & coal, slightly moist.	GROUT
				4'	0	100	4 to 5: Brown SAND & GRAVEL, trace FILL. 5 to 6: Brown silty SAND, stiff, slightly moist.	
				6'	0	100	Brown silty SAND, fine-grained, stiff, dry.	
				8'	0	100	Brown silty SAND, fine-grained, stiff, dry.	
				10'	0	100	Brown silty SAND, fine-grained, stiff, dry.	
				12'	N/A	100	Brown silty SAND & GRAVEL, fine to medium-grained, wet.	SAND
				14'	N/A	100	Brown silty SAND & GRAVEL, fine to medium-grained, wet.	

Notes:
Well Depth: 20 Co-located soil bore depth: Screened Interval: 10 to 20

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 940 Ferndale Place	Bore ID: BFM-MW3
Date Drilled: 11/5/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					N/A	100	Brown silty SAND & GRAVEL, dense, very moist.	
				18'	N/A	100	Brown silty SAND & GRAVEL, dense, very moist to wet.	
				20'				
				22'				
				24'				
				26'				
				28'				
				30'				

Notes:
Well Depth: 20 Co-located soil bore depth: Screened Interval: 10 to 20

MONITORING WELL LOG

PANDEY ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

Site: 960 Ferndale Place	Bore ID: BFM-MW4
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV / Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					0	100	Asphalt Surface 0 to 1: Subbase SAND & GRAVEL, dry. 1 to 2: Brown SAND & GRAVEL, dry.	
				2'	0	100	Brown SAND & GRAVEL, stiff, dry.	GROUT
				4'	0	100	Brown SAND & GRAVEL, fine-grained sand, stiff, dry.	
				6'	0	100	Brown SILTY CLAY, medium stiff, slightly moist.	
				8'	0	100	Brown SILTY CLAY, medium stiff, moist.	
				10'	0	100	Brown silty SAND & GRAVEL, dense, wet.	
				12'	N/A	100	Gray SILTY CLAY with SAND & GRAVEL, very moist.	SAND
				14'	N/A	100	Brown silty SAND & GRAVEL, wet. Encountering gray rock at 16'.	

Notes:
Well Depth: 18 Co-located soil bore depth: Screened Interval: 8 to 18

PANDEY
ENVIRONMENTAL, LLC
4100 Horizons Drive Suite, 205
Columbus, Ohio 43220 614-444-8078

MONITORING WELL LOG

Site: 960 Ferndale Place	Bore ID: BFM-MW4
Date Drilled: 11/4/2019	Drill Rig: Geoprobe 6620 DT
Weather Cond.: 50F, Clear	Auger Diam: 4.25" ID / 8.5" OD
Co-located Soil Bore:	Sampler Type: Dual-Tube Acetate Liner
Location:	Logged By: NOV
	Sampler Size: 4'

Auger	Split Spoon	Soil Sample	Sample Sent	Depth	VOC (ppm)	% Recovery	Description	Well Construction Details
					N/A	100	Rock and SAND & GRAVEL, wet. Rig is encountering auger refusal.	
				18'				
				20'				
				22'				
				24'				
				26'				
				28'				
				30'				

Notes:
Well Depth: 18 Co-located soil bore depth: Screened Interval: 8 to 18

PANDEY
ENVIRONMENTAL, LLC

DEVELOPMENT LOG

Well Number: BFM-MW1

Project Name: Bexley Ferndale-Mayfield Properties - 924 Mayfield Pl.

Date: 11/5/2019

Total Well Depth: 22.77 feet

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: Good

Purging Method: Electric Submersible Pump

Well Volume: =0.1632 gal/ft X 11.4 ft. = 1.86048 gallons 7.042683 liters

Time	Volume (Gallons)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. mS	Salinity	DO	ORP	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.1 units**	**+/- 3%**				**+/- 10% when above 10 NTUs. Call project manager if turbidity does not drop below 50 NTUs.**	
1:35	0	11.37	*(start of pumping)*							
Purged 10 gallons of very turbid water										
1:45	10	-	15.26	7.35	1.02	0.655	10.24	259	961	Turbid
1:48	15	-	14.96	7.49	1.02	0.654	4.49	220	364	Cloudy
1:51	20	-	14.81	7.45	1	0.638	4.25	194	418	Cloudy
1:54	25	-	14.86	7.39	1.02	0.655	8.22	163	399	Cloudy
1:57	30	-	14.83	7.42	1.01	0.65	4.72	159	208	Clear
2:00	35	-	14.85	7.21	1.01	0.644	3.82	143	145	Clear
2:03	40	-	14.79	7.25	1.02	0.657	3.31	168	137	Clear
2:06	45	-	14.82	7.23	1.01	0.643	7.87	161	134	Clear

PANDEY
ENVIRONMENTAL, LLC

DEVELOPMENT LOG

Well Number: BFM-MW2

Project Name: Bexley Ferndale-Mayfield Properties - 926 Ferndale Pl.

Date: 11/5/2019

Total Well Depth: 20.2 feet

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: Good

Purging Method: Electric Submersible Pump

Well Volume: =0.1632 gal/ft X 8.28 ft. = 1.351296 gallons 5.115212 liters

Time	Volume (Gallons)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. µS	Salinity	DO	ORP	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.1 units**	**+/- 3%**				**+/- 10% when above 10 NTUs. Call project manager if turbidity does not drop below 50 NTUs.**	
11:11	0	11.92	*(start of pumping)*							
Purged 5 gallons of very turbid water										
11:30	5	-	14.8	7.4	994	0.636	8.72	202	1000	Turbid
11:33	7	-	15.51	7.1	968	0.619	6.91	225	1000	Cloudy
11:36	8	-	15.63	7.15	968	0.62	6.83	238	1000	Cloudy
11:39	9	-	15.85	7.13	969	0.62	6.29	249	771	Slightly Cloudy
11:42	10	-	16.01	7.07	962	0.616	6.36	256	708	Slightly Cloudy
11:45	11	-	16.02	7.11	955	0.612	6.29	259	610	Slightly Cloudy
11:48	12	-	15.73	7.21	954	0.61	6.49	255	583	Slightly Cloudy
11:51	13	-	15.71	7.2	955	0.604	6.17	258	554	Slightly Cloudy
11:55	14	-	15.98	7.22	960	0.61	5.26	261	539	Slightly Cloudy

PANDEY
ENVIRONMENTAL, LLC

DEVELOPMENT LOG

Well Number: BFM-MW3

Project Name: Bexley Ferndale-Mayfield Properties - 940 Ferndale Pl.

Date: 11/5/2019

Total Well Depth: 20.46 feet

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: Good

Purging Method: Electric Submersible Pump

Well Volume: =0.1632 gal/ft X 9.02 ft. = 1.472064 gallons 5.572368 liters

Time	Volume (Gallons)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. µS	Salinity	DO	ORP	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.1 units**	**+/- 3%**				**+/- 10% when above 10 NTUs. Call project manager if turbidity does not drop below 50 NTUs.**	
12:47	0	11.44	*(start of pumping)*							
Purged 5 gallons of very turbid water										
1:01	5	-	15.34	7.1	823	0.527	7.83	246	974	Turbid
1:04	7	-	15.66	7.13	822	0.526	6.19	240	467	Cloudy
1:07	8	-	15.76	7.09	822	0.525	6.21	237	460	Slightly Cloudy
1:10	9	-	15.6	7.18	820	0.524	6	237	380	Slightly Cloudy
1:13	10	-	15.65	7.3	818	0.521	5.88	234	256	Clear
1:16	11	-	15.75	7.31	820	0.526	5.92	242	260	Clear
1:19	12	-	15.73	7.32	819	0.523	6.24	246	245	Clear

PANDEY
ENVIRONMENTAL, LLC

DEVELOPMENT LOG

Well Number: BFM-MW4

Project Name: Bexley Ferndale-Mayfield Properties - 960 Ferndale Pl.

Date: 11/5/2019

Total Well Depth: 18.3 feet

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: Good

Purging Method: Electric Submersible Pump

Well Volume: =0.1632 gal/ft X 9.99 ft. = 1.630368 gallons 6.171614 liters

Time	Volume (Gallons)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. mS	Salinity	DO	ORP	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.1 units**	**+/- 3%**				**+/- 10% when above 10 NTUs. Call project manager if turbidity does not drop below 50 NTUs.**	
9:31	0	8.31	*(start of pumping)*							
Purged 20 gallons of very turbid water										
9:49	20	-	16.23	7.01	1.38	0.874	9.15	136	1000	Turbid
9:52	25	-	16.87	6.81	1.33	0.85	7.16	116	1000	Turbid
9:55	30	-	17.21	6.83	1.3	0.841	5.99	102	No Reading	Cloudy
9:58	33	-	17.42	6.86	1.28	0.822	5.44	98	No Reading	Cloudy
10:01	35	-	17.93	6.8	1.25	0.801	8.45	97	No Reading	Cloudy
10:04	39	-	18.08	6.85	1.25	0.8	6.33	95	No Reading	Slightly Cloudy
10:07	43	-	18.1	6.95	1.27	0.814	6.02	86	634	Slightly Cloudy
10:10	47	-	18.18	6.98	1.27	0.815	8.44	82	533	Slightly Cloudy
10:13	50	-	18.31	6.95	1.27	0.814	6.93	66	557	Slightly Cloudy
10:16	53	-	18.48	6.96	1.27	0.796	5.96	55	600	Slightly Cloudy

PANDEY
ENVIRONMENTAL, LLC

Project Name: Bexley Ferndale-Mayfield Properties - Mayfield Pl. 924

Well Number: BFM-MW1

Weather: 44F, Clear

Date: 11/6/2019

Total Well Depth: 22.77 feet

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: good

Purging Method: Peristaltic Pump

Sampling Method: Peristaltic Pump

Well Volume: =0.1632 gal/ft) 11.37 ft. = 1.855584 gallons 7.02414953 liters

Sample Number: BFM-MW1

Time	Volume (Liters)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. mS	TDS g/L	DO mg/L	ORP mV	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.2 units**	**+/- 3%**	**+/- 10%**	**+/- 0.2 mg/L or +/- 10%**	**+/- 20 mV**	**+/- 10% when above 10 NTUs**	
10:29	0	11.4	*(start of pumping)*							
10:33	0.2	11.42	14.23	7.56	1.1	0.705	9.77	277	116	Clear
10:36	1	11.42	14.7	7.21	1.09	0.7	5.7	195	96.4	Clear
10:39	1.7	11.42	14.73	7.17	1.09	0.698	4.81	120	87.6	Clear
10:42	2.2	11.42	14.72	7.16	1.09	0.696	4.66	100	83.2	Clear
10:45	3	11.42	14.68	7.16	1.08	0.69	4.4	86	79.9	Clear
10:48	3.8	11.42	14.63	7.16	1.07	0.683	4.14	75	70.2	Clear
10:51	4.5	11.42	16.59	7.16	1.06	0.679	3.96	70	68.1	Clear
10:54	5.2	11.42	14.61	7.15	1.06	0.677	3.77	65	61	Clear
10:57	6	11.42	14.59	7.16	1.05	0.674	3.65	61	56.4	Clear
11:00	6.7	11.42	14.6	7.15	1.05	0.674	3.56	57	54.7	Clear
11:03	7.3	11.42	14.58	7.16	1.05	0.674	3.44	53	52.6	Clear

Sample Parameters: VOCs, SVOCs & Metals **Pump / Sample Collection Depth:** Middle of Screen **Chain of Custody Number:**

Comments:

Sampled By: NOV

PANDEY
ENVIRONMENTAL, LLC

Project Name: Bexley Ferndale-Mayfield Properties - Ferndale Pl. 926
Weather: 34F, Clear
Total Well Depth: 20.2 feet
Water Level Measuring Device: Electronic Water Level Indicator
Well Construction: 2" Sch. 40 PVC
Purging Method: Peristaltic Pump
Well Volume: =0.1632 gal/ft) 8.26 ft. = 1.348032 gallons 5.10285621 liters

Well Number: BFM-MW2
Date: 11/6/2019
Reference: Top of PVC Riser Pipe - North Side
Immiscible Layer(s): N/A **Thickness:** N/A feet
Condition of Well: good
Sampling Method: Peristaltic Pump
Sample Number: BFM-MW2

Time	Volume (Liters)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. µS	TDS g/L	DO mg/L	ORP mV	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.2 units**	**+/- 3%**	**+/- 10%**	**+/- 0.2 mg/L or +/- 10%**	**+/- 20 mV**	**+/- 10% when above 10 NTUs**	
8:48	0	11.94	*(start of pumping)*							
8:54	0.2	12.01	9.44	7.44	980	0.614	7.4	295	99.7	Clear
8:57	1	12.02	13.53	7.02	938	0.601	5.33	98	152	Clear
9:00	1.8	12.02	14.1	6.92	954	0.61	4.84	108	140	Clear
9:03	2.3	12.02	14.52	6.88	959	0.613	4.73	158	115	Clear
9:06	2.9	12.02	14.67	6.84	965	0.618	4.96	182	113	Clear
9:09	3.6	12.02	14.84	6.82	969	0.62	5.5	205	110	Clear
9:12	4.4	12.02	15.14	6.83	969	0.62	6.14	12	107	Clear
9:15	5.2	12.02	15.19	6.85	968	0.62	9.01	216	97.1	Clear
9:18	6	12.02	15.26	6.88	969	0.62	8.5	218	94.5	Clear
9:21	6.8	12.02	15.39	6.93	969	0.62	8.6	220	89.9	Clear

Sample Parameters: VOCs, SVOCs & Metals
Pump / Sample Collection Depth: Middle of Screen
Chain of Custody Number:

Comments:
Sampled By: NOV

PANDEY
ENVIRONMENTAL, LLC

Project Name: Bexley Ferndale-Mayfield Properties - Ferndale Pl. 940

Weather: 52F, Clear

Total Well Depth: 20.46 feet

Well Number: BFM-MW3

Date: 11/6/2019

Reference: Top of PVC Riser Pipe - North Side

Water Level Measuring Device: Electronic Water Level Indicator

Immiscible Layer(s): N/A **Thickness:** N/A feet

Well Construction: 2" Sch. 40 PVC

Condition of Well: good

Purging Method: Peristaltic Pump

Sampling Method: Peristaltic Pump

Well Volume: =0.1632 gal/ft) 8.96 ft. = 1.462272 gallons 5.53530165 liters

Sample Number: BFM-MW3

Time	Volume (Liters)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. µS	TDS g/L	DO mg/L	ORP mV	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.2 units**	**+/- 3%**	**+/- 10%**	**+/- 0.2 mg/L or +/- 10%**	**+/- 20 mV**	**+/- 10% when above 10 NTUs**	
11:18	0	11.5	*(start of pumping)*							
11:20	0.2	11.56	15.1	7.23	859	0.549	8.41	7	102	Clear
11:23	1	11.57	15.89	7.23	854	0.547	5.37	-83	93.1	Clear
11:26	2	11.57	16.09	7.32	852	0.545	4.54	-51	48.4	Clear
11:29	2.5	11.6	16.14	7.37	849	0.544	4.5	-23	36.7	Clear
11:32	3.1	11.6	16.25	7.47	844	0.54	4.35	17	28.4	Clear
11:35	4	11.6	16.35	7.51	839	0.537	4.39	62	23.4	Clear
11:38	4.8	11.6	16.44	7.55	834	0.534	4.32	100	21.2	Clear
11:41	5.5	11.6	16.5	7.58	830	0.531	4.32	125	19	Clear
11:44	6.2	11.6	16.56	7.59	825	0.528	4.38	149	17.9	Clear
11:47	7	11.6	16.64	7.6	824	0.527	4.35	152	17	Clear
11:50	7.7	11.6	16.69	7.6	822	0.526	4.29	165	16.8	Clear

Sample Parameters: VOCs, SVOCs & Metals

Pump / Sample Collection Depth: Middle of Screen

Chain of Custody Number:

Comments:

Sampled By: NOV

PANDEY
ENVIRONMENTAL, LLC

Project Name: Bexley Ferndale-Mayfield Properties - Ferndale Pl. 960
Weather: 38F, Clear
Total Well Depth: 18.3 feet
Water Level Measuring Device: Electronic Water Level Indicator
Well Construction: 2" Sch. 40 PVC
Purging Method: Peristaltic Pump
Well Volume: =0.1632 gal/ft) 9.67 ft. = 1.578144 gallons 5.97392489 liters

Well Number: BFM-MW4
Date: 11/6/2019
Reference: Top of PVC Riser Pipe - North Side
Immiscible Layer(s): N/A **Thickness:** N/A feet
Condition of Well: good
Sampling Method: Peristaltic Pump
Sample Number: BFM-MW4

Time	Volume (Liters)	Water Level (Ft from TOC)	Temp. °C	pH	Spec. Cond. mS	TDS g/L	DO mg/L	ORP mV	Turbidity (NTUs)	Color / Comments
**Stabilization needed for 3 consecutive readings taken every 3-5 minutes -----> **		**+/- 0.3 feet**	**+/- 0.5°c**	**+/- 0.2 units**	**+/- 3%**	**+/- 10%**	**+/- 0.2 mg/L or +/- 10%**	**+/- 20 mV**	**+/- 10% when above 10 NTUs**	
9:43	0	8.63	*(start of pumping)*							
9:48	0.2	8.65	14.53	7.03	1.12	0.716	8.95	296	353	Clear
9:51	1.5	8.65	16.02	6.96	1.16	0.743	6.21	264	436	Slightly Cloudy
9:54	2.4	8.65	16.18	6.97	1.19	0.76	5.8	237	385	Slightly Cloudy
9:57	3.1	8.65	16.42	6.99	1.27	0.811	5.42	220	321	Clear
10:00	4	8.65	16.58	6.99	1.27	0.811	5.17	203	300	Clear
10:03	4.7	8.65	16.59	7.02	1.21	0.777	4.95	187	364	Clear
10:06	5.5	8.65	16.7	7.02	1.24	0.795	4.81	180	399	Clear
10:09	6.2	8.65	16.73	7.03	1.24	0.794	4.71	170	333	Clear
10:12	7	8.65	16.74	7.05	1.25	0.795	4.67	161	340	Clear
10:15	7.9	8.65	16.8	7.06	1.25	0.796	4.59	152	324	Clear

Sample Parameters: VOCs, SVOCs & Metals
Pump / Sample Collection Depth: Middle of Screen
Chain of Custody Number:

Comments:
Sampled By: NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:960 Ferndale-SG1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	2318
Site Address:	960 Ferndale Place	Regulator #	373
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	
		Other:	Soil-Gas

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 8:05	Initial Canister Vacuum:	-28
Start Time:	Date: 11/6/2019	Time: 8:17	Final Canister Pressure:	-4
End Time:	Date: 11/6/2019	Time: 3:37	Interior Temperature:	NA
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	32F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	18.1%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Probe installed on the southwestern portion of the property, next to the staircase leading to the house.

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:940 Ferndale - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	531
Site Address:	940 Ferndale Place	Regulator #	1840
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 8:00	Initial Canister Vacuum:	-29
Start Time:	Date: 11/6/2019	Time: 8:08	Final Canister Pressure:	-4
End Time:	Date: 11/6/2019	Time: 3:45	Interior Temperature:	~60
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	31F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	19.8%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:934 Ferndale - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	3557
Site Address:	934 Ferndale Place	Regulator #	320
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 7:55	Initial Canister Vacuum:	-27
Start Time:	Date: 11/6/2019	Time: 7:59	Final Canister Pressure:	-1
End Time:	Date: 11/6/2019	Time: 3:42	Interior Temperature:	~60
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	31F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	18.9%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:929 Ferndale - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	808
Site Address:	929 Ferndale Place	Regulator #	1017
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 8:20	Initial Canister Vacuum:	-30
Start Time:	Date: 11/6/2019	Time: 8:27	Final Canister Pressure:	-7
End Time:	Date: 11/6/2019	Time: 3:27	Interior Temperature:	~58
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	32F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	19.2%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:924 Mayfield - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	3618
Site Address:	924 Mayfield Place	Regulator #	67
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 7:44	Initial Canister Vacuum:	-30
Start Time:	Date: 11/6/2019	Time: 7:49	Final Canister Pressure:	-2
End Time:	Date: 11/6/2019	Time: 4:05	Interior Temperature:	~60
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	31F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	19.60%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:920 Ferndale - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	3371
Site Address:	920 Ferndale Place	Regulator #	1861
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/7/2019	Time: 7:40	Initial Canister Vacuum:	-29
Start Time:	Date: 11/7/2019	Time: 7:49	Final Canister Pressure:	-4
End Time:	Date: 11/7/2019	Time: 3:00	Interior Temperature:	~65
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	40F, Rainy

Sub-Slab Screening Info:

PID	0 ppm
O_2	19.30%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 46	Low: 29	
Average Wind Direction:	NW		
Average Wind Speed (mph):	10		
Barometric Pressure (in. Hg):	34.14		Rising
Average Humidity (%):	88		

Notes:

Sampled By:
NOV

PANDEY

ENVIRONMENTAL, LLC

SOIL VAPOR: SUMMA CANISTER SAMPLING

Sample ID:914 Mayfield - SV1

Site Location:	Bexley Ferndale-Mayfield Properties	Canister ID#	2755
Site Address:	914 Mayfield Place	Regulator #	2426
	Bexley, Ohio 43209		
LAT:		Ambient:	
LONG:		Sub-Slab:	X
		Other:	

Sampling Information

Sample Setup:	Date: 11/6/2019	Time: 7:30	Initial Canister Vacuum:	-30
Start Time:	Date: 11/6/2019	Time: 7:44	Final Canister Pressure:	-23
End Time:	Date: 11/6/2019	Time: 3:31	Interior Temperature:	~60
Delivery:	Date: 11/7/2019	Time: 4:00	Weather:	31F, Clear

Sub-Slab Screening Info:

PID	0 ppm
O_2	19.00%
CO_2	0 ppm
H_2S	0 ppm
LEL	0%

Meteorological Conditions

Ambient Temp:	High: 51	Low: 30	
Average Wind Direction:	SSE		
Average Wind Speed (mph):	5		
Barometric Pressure (in. Hg):	29.58		Falling
Average Humidity (%):	45		

Notes:

Sampled By:
NOV

APPENDIX C
RESUMES OF ENVIRONMENTAL PROFESSIONALS

Atul Pandey, P.E., C.P., M.S.

President

Mr. Pandey is the President and CEO of PANDEY Environmental, LLC. His area of expertise includes site assessment, remediation, brownfield redevelopment, and urban conservation. Mr. Pandey has more than 20 years of experience performing Phase I, II, and III site assessments, underground storage tank removals, closure, assessment, and corrective action, RCRA closures and corrective actions, Ohio EPA Voluntary Action Program No Further Action Letters, Clean Ohio Fund Site Assessments and general site assessment and remediation tasks. Clients have included municipalities, federal and state agencies, commercial and industrial realtors, bankers, insurance companies and real estate developers.

Mr. Pandey has worked for Ohio EPA, where he developed the Ohio EPA VAP Generic Leaching Guidance Document used by the Voluntary Action Program. He also worked in Ohio EPA's Southwest District Office of Division of Solid and Infectious Waste Management, located in Dayton, Ohio.

Prior to forming PANDEY Environmental, LLC in 2002, Mr. Pandey technically and administratively supervised a multi-disciplinary team of seven professionals at a private consulting firm. Projects included Phase I and II environmental site assessments, underground storage tank closures, corrective actions, risk assessments, RCRA closures and corrective actions, landfill groundwater monitoring and assessment programs, and Voluntary Action Program projects.

Mr. Pandey has also authored multiple publications.

EDUCATION:

University of Cincinnati, Ohio
Master of Science in Environmental Engineering, 1993
Thesis Title: Effect of Swelling Percentages on the Shear Strength of Compacted Clay Liners

University of Delhi, India
Bachelor of Science in Civil Engineering, 1991
Emphasis: Environmental Engineering

CERTIFICATIONS

- Registered Professional Engineer, States of Ohio and South Carolina, Environmental Engineering
- State of Ohio Voluntary Action Program, Certified Professional, Certification #CP224
- Qualified as an Environmental Professional under "All Appropriate Inquires" (AAI) Rule
- 40 hour HAZWOPER certified (29 CFR 1910.120)

CAREER HIGHLIGHTS/ACCOMPLISHMENTS

- Issued twenty-one (21) VAP NFA letters, twenty (20) of which have received Covenants Not to Sue (one NFA was recently issued and the CNS is pending Ohio EPA review).
- Prepared five (5) successful Urban Setting Designation Requests.

- Authored Ohio EPA VAP Generic Leaching Guidance Document; this document is currently being used in the state of Ohio by VAP Certified Professionals as a standard to evaluate leaching of vadose zone contaminants under VAP and RCRA programs.
- Selected by the Ohio EPA in April 2005 to represent all Ohio EPA Certified Professionals (Brownfield Licensed Professionals) to the Hazardous Waste division of the Ohio EPA. This prestigious recognition was made due to extensive experience with multiple programs of the Ohio EPA including the Voluntary Action Program (Brownfields Program), and programs under the Division of Hazardous Waste and the Division of Solid Waste.

PROFESSIONAL EXPERIENCE

10/02 to present *President, PANDEY Environmental, LLC*

Mr. Pandey founded PANDEY Environmental, LLC to provide fast, reliable, and expert environmental site assessment services to commercial and industrial clients at a competitive price. Services provided by the consulting company include but are not limited to Phase I, II Environmental Site Assessments, Underground Storage Tank Removal, Closure, and Corrective Action, Voluntary Action Program Site Assessments, Clean Ohio Fund Application Preparation and Site Assessments, Expert Witness Services, Risk Assessment Services, Fate and Transport Modeling, and VAP Certified Professional Services.

11/98 to 9/02 *Vice President/Senior Engineer, Smalley & Associates, Inc.*

Duties and responsibilities included supervising a multi-disciplinary team of 7 professionals that were involved in various projects ranging from Phase I and II environmental site assessment, underground storage tank closure, corrective action, and risk assessment, RCRA closures and corrective action, landfill groundwater monitoring and assessment programs, and Voluntary Action Program projects; Also responsible for professional development of these individuals.

Duties also included managing the operations of a full service Ohio EPA VAP certified analytical laboratory and drilling crew. Additional responsibilities included business development and client interface for Ohio VAP and RCRA projects.

In this position, issued eleven (11) No Further Action letters under Voluntary Action Program to Ohio EPA for the following properties; all of these properties have successfully obtained VAP Covenants Not to Sue.

11/96 to 11/98 *Environmental Engineer, Ohio EPA Voluntary Action Program*

General responsibilities included assessment of No Further Action Letters prepared by Certified Professionals conducting voluntary actions at properties with hazardous substances and petroleum contamination; determining RCRA corrective action eligibility of the properties for the Voluntary Action Program, and assessing leaching of petroleum constituents and other contaminants; providing technical assistance to Certified Professionals, volunteers, and other parties interested in voluntary action; managing field audits of properties that have received Covenants Not to Sue.

At the Ohio EPA's Division of Solid and Infectious Waste Management, general responsibilities included reviewing and evaluating Permit to Install applications and detail plans for all types of solid and

infectious waste facilities making recommendations for approval or denial; directing the inspectors in conducting the solid waste compliance monitoring program; providing technical assistance to local governments , citizens, industry, and others regarding solid and infectious waste management; also spoke at public meetings on solid waste permitting issues.

1/92 to 11/96 Project Engineer, Science Applications International Corporation

Responsibilities as a project engineer included project management and team support, budget control, report preparation, negotiations with state and federal regulatory agencies, vendor and consultant oversight, and working on site remediation and compliance issues. Select project experience includes:

- Identified, screened, and evaluated remedial technologies for RCRA CMS or CERCLA RI/FS; conducted the same for four solid waste management units at Portsmouth US DOE site with soil and/or groundwater contamination; also negotiated corrective action scope with regulatory agencies and co-authored the CMS reports.
- Managed and supervised a $500,000 contract for conducting a pilot scale treatability study of measuring enhancements to groundwater flow using an innovative technology (pneumatic fracturing) ; developed work plan, support plans (HSP, QAPjP, SAP), and summary report.
- Managed a $200,000 project dealing with a field and laboratory investigation to establish adsorptive and natural attenuation characteristics at a superfund site.
- Developed a database to facilitate air emissions reporting and permitting for over 250 sources in accordance with Title V requirements of the Clean Air Act for a synthetic organic chemical manufacturer in southern Ohio; created data architecture, conducted the beta-test on the database software, and created chemical process-specific user's guides.
- Facilitated compliance with RCRA Subtitle CC regulations at a chemical manufacturer's facility; also prepared the SARA 313, fee emission, and Title V reports for the facility.
- Served as Technical Advisor to the State of Ohio, Environmental Protection Agency's modeling subgroup of the generic standards subcommittee charged with the development of generic deep soil cleanup levels across the state in accordance with the requirements of Senate Bill 221 (Brownfields); conducted all of the modeling on this project using an unsaturated soil zone leaching model (SESOIL); also authored the associated technical guidance documents.
- Constructed and calibrated groundwater flow models using MAGNAS3 and FRAC3DVS codes for groundwater plumes at the US DOE site; evaluated remedial alternatives with these models.

PUBLICATIONS

Pandey, A., Hetrick, D.M., and Khan, A., Innovative Approach Proposed for Evaluating Risks due to Soil Contamination, SESOIL - A Decade, Amherst Scientific Publishers, 1996.

Pandey, A., Cherry, E., Steigerwald, V., and Pickrel, C., Groundwater Protection and Soil Remediation, Fifth Annual Business and Industry's Environmental Symposium - Conference Proceedings, Cincinnati, 1996.

Pandey, A. et al., Innovative Approach Developed for Deriving Leach-Based Soil Cleanup Values Protective of Groundwater, 12th Annual Conference on Contaminated Soils, University of Massachusetts at Amherst, 1997.

Hetrick, D. and Pandey, A., A methodology for establishing cleanup objectives in the saturated soil zone using sensitivity and uncertainty analysis for chemical fate and transport, Journal of Soil Contamination, 8(5):559-576, 1999

ENGINEERING & MODELING SOFTWARE

Proficient with a wide range of environmental modeling software including MODFLOW, MAGNAS3, FRAC3DVS, MT3D, SAS, SURFER, GeoEAS, HELP, SESOIL, CHEMFLO, VLEACH, RITZ, PESTAN, Summers, AT123D, EnCompass, GARDS, SIMS, HonRuler, TANKS, and STARSHIP (Title V); advanced knowledge of Microsoft EXCEL and SURFER programs.

Also taught 3-day modeling course entitled “Application of SESOIL in Ohio EPA’s Voluntary Action Program” in June, 1999 to Certified Professionals and other consultants.

Nick Vallera

Project Manager

Mr. Vallera performs and manages Phase I and II investigations (ASTM & VAP), BUSTR investigations, remedial project design, planning & oversight, soils management oversite, soil vapor extraction activities, project proposals, scheduling and cost estimates. He also performs Operation & Maintenance activities along with analytical data review and database management. He is proficient in field aspects of environmental site assessment and remediation where he performs multiple types of sampling, works closely with property owners and clients, determines analytical analyses, manages data, and ensures that project objectives are met. He is also proficient in the technical writing of environmental assessments, Soils Management Plans, BUSTR Reporting, Urban Setting Designations (USDs), No Further Action Letters (NFAs), project proposals and regulatory agency reports.

EDUCATION:

The Ohio State University, Columbus, Ohio
Master of Education, Major in Secondary Science Education; 2012

The Ohio State University, Columbus, Ohio
Bachelor of Science, Major in Geology; 2011

SPECIALIZED TRAINING/ PROFESSIONAL AFFILIATIONS:

- Ohio EPA VAP Soil Classification Training
- Ohio Department of Transportation (ODOT) Soil and Rock Classification Training
- 40 Hour OSHA HAZWOPER Certified
- 10 Hour OSHA Construction Certified
- Hess UBU Training
- Miner Safety and Health Administration (MSHA) Certified
- Safeland: Oil and Gas Safety Training
- National Groundwater Association (NGWA) Member

CAREER HIGHLIGHTS/ACCOMPLISHMENTS

- Prepared a Soils Management Plan and Groundwater Disposal Plan for the redevelopment of a contaminated VAP property located in downtown Columbus (future CREW Stadium site). Plans were designed to outline how environmental media should be handled during construction / excavation activities and included visual representations / models of lithological cross sections. This allowed the Developer to easily and visually ascertain where contamination was concentrated to a vertical and horizontal extent across the ~20 acre site.
- Designed and performed an underground injection remediation at a VAP property in downtown Columbus to address groundwater and soil gas contamination. Project was designed and performed in the field while meeting strict deadlines for Developers in order to improve subsurface media conditions prior to beginning redevelopment.
- Performed VAP investigations at multiple residential properties in Bexley, Ohio. Project was unique as it included investigating a number of houses & apartments which were located on a former unlicensed landfill; designed and performed VAP investigations along with subsequent implementation of remedies.

- Performed large-scale sampling plan and activities for a VAP property in south Columbus including indoor air monitoring, and the design /implementation and installation of a Soil Vapor Extraction (SVE) System. Optimized SVE system to collect harmful subslab vapors and treat the vapors through a thermal oxidizer for release into the atmosphere to successfully remediate indoor air at this facility.
- Completed a BUSTR Closure Report for an abandoned gas station property in Alliance, Ohio. Performed the UST removal oversight, coordination of activities, collection of samples in accordance with BUSTR technical guidance, disposal of waste, and preparation of the closure report ultimately resulting with obtaining an NFA for the site.
- Performed oversite, planning and sampling activities at the Former Van Dorn Property, a Clean Ohio (CORF) project, which included a remedial excavation, testing / analyzing of the excavated area, associated remedial reporting, follow-up testing and incorporation of all data into larger NFA letter for the property. Completed and obtained an NFA Letter for the Property.
- Completed an Urban Setting Designation (USD) request for a 5+ acre industrial property located in South Columbus, as well as completed the USD verification for two (2) industrial properties.
- Developed and prepared multiple project proposals for municipal clients which included a summary of the project understanding, scope of work to be performed, proposed sampling and safety plans, schedule of work to be performed and cost estimates.
- Performed BUSTR investigations on three (3) abandoned gas station properties. Included preparation of project proposal, cost estimates, writing sampling plan in accordance with BUSTR rules, performing field exploration, sampling, data analysis and reporting.
- Managed soil movement project involving the testing of multiple sources of backfill materials, excavation of selected soils, management of testing data and necessary technical reporting of findings. Coordinated and oversaw proper transportation of over 75,000 cubic yards of soil. Directly worked and coordinated with construction managers and site superintendents throughout project.
- Managed and oversaw the handling of two large soil oversite projects, a remedial excavation project, three (3) VAP Phase I investigations, two (2) Limited VAP Phase II investigations, and the developing of a Remedial Action Plan for a VAP project simultaneously while meeting deadlines for all of the projects to the Client's satisfaction.
- Worked with subcontractors to identify, delineate and excavate contaminated environmental media and coordinated the removal and manifesting of the media. Included management of total tonnage and daily logs of removal to ensure the project remained within proper limits / funding.
- Managed, coordinated with, and oversaw other personnel that were performing soils movement or remedial oversite projects.
- Performed emergency assessment of a property with high risk soil-gas contamination to surrounding receptors. Installed monitoring wells and nested soil-gas probes around the property as well as developed a "nearest receptor figure" to determine the risk of soil-gas contamination reaching residential receptors around a brownfield property. This included coordinating field work, performing field installation, measurements of nearest receptors, and sampling of environmental media under Ohio EPA oversight
- Participated in Ohio Brownfields Conference including networking with subcontractors, clients and government agencies as well as promoting PANDEY's services.

- Performed environmental investigation, sampling plan and reporting for a property that included historical USTs, commercial operations, asbestos containing materials and largely scattered asbestos contamination across the soils on the property. Prepared a remedial action plan and costs associated with remedial activities for the property after determining findings and conclusions for the property.
- Developed and maintained productive / professional relationships with clients (private and municipal), subcontractors and vendors (laboratories and remedial product vendors) acting as a point of contact, lead communicator and coordinator for projects throughout all stages (including proposal, investigation, analytical, reporting and remedial activities).
- Worked on multiple sites under the Ohio Voluntary Action Program (VAP). Work included Phase I and II Environmental Site Assessments, risk assessment, demonstration of background levels, contaminant transport modeling, site specific remediation, and No Further Action Letter issuances.
- Worked and managed project from development stages (requests, proposals, cost estimates, etc.) through field investigation, implementation, analysis and risk assessment reporting on EPA Grant funded project for the Former Mud Run Gun Club in Cuyahoga Falls, Ohio
- Performed soil management oversight, reporting, USD verifying, Phase I Updates and continuous O&M sampling investigations for Ohio VAP Jaeger / Union Tools property in Columbus, Ohio
- Provided oversight for the delineation, soil and groundwater sampling, QA/QC sampling, delivery, and assessment during an emergency crude oil release of 30,000+ gallons.
- Participated in the design, and managing databases for laboratory data received during field sampling events.
- Completed field investigation, data mitigation, GIS figure generation and technical writing of Phase II report, conclusions and recommendation letter for 18 acre property in Chillicothe, Ohio.
- Performed geotechnical drilling and analysis for engineering projects involving the construction of shale/gas oil pads in eastern Ohio.
- Collected data for Clean Ohio project for an idle steel mill plant in Yorkville, Ohio. Included logging and sampling over 140 boreholes, installing, and sampling multiple wells, delineating identified areas and collecting soil-gas and air samples during a multi-month period.
- Provided assistance to asbestos abatement oversight on a project in Chillicothe, Ohio.
- Completed Area Wide Assessments to identify brownfields in a community that produced multiple Phase I and Phase II environmental site assessments.
- Participated in or completed multiple Phase II environmental site assessments following ASTM and/or VAP guidelines.
- Provided oversight of geotechnical installations of dams and barriers to isolate product during an emergency oil spill
- Performed on site monitoring well sampling at South Bend, Indiana site which required the collection of samples at 73 monitoring wells across the city.
- Managed laboratory data and QA/QC collection of all data from South Bend, Indiana city-wide project tracking a TCE plume.

- Participated in Phase I, Phase II, and data collection / organization activities for submission into the Clean Ohio Revitalization Fund program for multiple projects.
- Performed explosive gas monitoring at a city landfill.
- Proficient in the use of the following field equipment: Soil vapor pin installation, SUMMA canister soil gas and air sampling, peristaltic pump, bladder pump, inertia pump, flow though sonde active groundwater parameter monitoring, various groundwater parameter sampling equipment (i.e. turbidimeter, conductivity/temperature/pH meter), Photo Ionization Detector (PID), Multi-gas meter, bailer groundwater sampling, Laser Level for monitoring well and groundwater elevations.

PROFESSIONAL EXPERIENCE

05/19 to Present *Project Manager, PANDEY Environmental, LLC*

Duties include performing ASTM E1527 and VAP compliant Assessments & Reporting, Risk Analysis, Client interaction, managing projects from start to completion, overseeing other employee tasks /duties, managing lab data, managing the implementation remedial activities, and supervising employees, subcontractors and additional personnel utilized for site investigation and remediation activities.

06/15 to 05/19 *Environmental Scientist, PANDEY Environmental, LLC*

Duties include conducting ASTM E1527 and VAP compliant Phase I and Phase II Property assessments, Risk Assessment Reporting, preparing Cost Estimates and Proposals, staying in contact with Clients, managing lab data and database, environmental sampling, implementing remedial activities, and supervising subcontractors utilized for site investigation and remediation activities.

Specific field activities include soil boring, monitoring well, and gas extraction well installations, soil excavations, demolition oversight, skimming oil from groundwater, vapor barrier installations, active and passive gas extraction systems (hazardous gas, hydrogen sulfide and methane), gas monitoring sensor installations and maintenance, underground storage tank removals, in-site groundwater remedial injections, and soil gas sampling.

Other duties include implementing operation & maintenance plans, preparation of figures and maps using ArcGIS, and preparation of plans and reports.

08/13 to 06/15 *Hydrogeologist I, Hull & Associates*

Performed filed work activities on a diversity of projects including: BUSTR, VAP, ASTM, Clean Ohio, shale/oil gas pads and ODOT. Taking detailed notes in the field and bringing information into the office to complete technical report writing and summary reports for environmental assessments and conclusions. Performed routine oversight and monitoring regularly at multiple job sites. Performed field work that involved: Groundwater sampling, soil sampling, air sampling, soil-gas sampling, sediment sampling, waste characterization, wetland delineation, sub-base sampling, rock coring, soil logging, slug testing, Passive Diffusive Bag sampling, product level monitoring and explosive gas monitoring. Writing Phase I and II reports, interviewing clients and performing site reconnaissance.

05/12 to 07/13 *Geoscience & Astronomy Teacher, Evanston Township High*

Performed all duties of a full time teacher. Responsible for developing and teaching senior level science courses specifically in the areas of geology and astronomy. Managed 5 preps of classes and students. Managed student behavior, grading, tracking and database management of student grades. Participated in school team events and extracurricular activities / hosting clubs for students after school.

ENGINEERING & MODELING SOFTWARE

Knowledge of Microsoft Office (including Word, Outlook, Access, Excel, PowerPoint) and Microsoft Access database management. GIS (ESRI ArcMap), Trimble GPS Geoexplorer Units, GeoGraphics boring log generating software and topographic map generation software. Experience with Seasonal Soil compartment model (SESOIL) for water, sediment, and pollutant transport.

APPENDIX D
GROUNDWATER RESOURCES MAP AND ODNR WATER WELL LOGS

Ground Water Resources of FRANKLIN COUNTY

by
James J. Schmidt

1 0 1 2 Miles

1 0 1 2 Kilometers

CONTOUR INTERVAL 10 FEET

— — — — County Line

- - - - - - - - Township Line

Gravel Pit/Quarry

Disturbed Land

Well Yields

AREAS IN WHICH YIELDS OF 500 TO 1000 OR MORE GALLONS PER MINUTE MAY BE DEVELOPED.

Areas having greatest potential for development of municipal and industrial ground water supplies. Extensive test drilling necessary to locate relatively thick, permeable deposits at depths ranging from 60 to 115 feet. Yields in excess of 1000 gallons per minute developed from large diameter wells.

AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE MAY BE DEVELOPED.

Limestone–dolomite bedrock is the principal source of supply in the western third of the county. Yields of as much as 250 gallons per minute are developed at depths of less than 300 feet, with greater yields but usually poorer quality at depths of more than 400 feet. Domestic and small industrial supplies of 15 to 25 gallons per minute are available at depths of 65 to 175 feet. Overlying glacial deposits of sand and gravel may yield as much as 20 gallons per minute at depths of about 90 feet.

Regionally extensive, thick, permeable deposits of sand and gravel may yield as much as 500 gallons per minute to large diameter screened wells. Extensive test drilling is recommended to locate coarse deposits at depths of 30 to 200 feet. Bedrock is non-water-bearing shale.

Ground water is obtained from permeable sand and gravel deposits overlaying limestone bedrock. Wells may be developed at depths of 50 to 120 feet or developed in the bedrock at depths of 225 feet to yield as much as 350 gallons per minute.

AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE MAY BE DEVELOPED.

Lenses of sand and gravel thinly scattered in the thin to thick layers of clayey till which overlies non-water-bearing Mississippian or Devonian shale. Properly constructed screened wells may yield 25 to 100 gallons per minute at average depths of 80 to 135 feet, but ranging in depth to 225.

AREAS IN WHICH YIELDS OF 5 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED.

Ground water supplies developed at depths of 60 to 75 feet in the Mississippian sandstone or sandstone and shale bedrock. Yields seldom exceed 20 gallons per minute, although exceptional yields to large diameter wells have exceeded 100 gallons per minute at depths of about 170 feet.

Thin lenses of sand and gravel sparsely interbedded in thick deposits of clayey till. Yields of 5 to 25 gallons per minute may be developed at depths of 25 to more than 150 feet. Exceptional yields are logged at depths of 130 feet. Thick deposits of fine sand and silty clay often prevent the development of domestic supplies at depths of 200 to 300 feet. Wells in Perry Township not encountering a usable aquifer in the glacial deposits may obtain a ground water supply from the limestone bedrock which occurs at depths of 110 to 260 feet below the surface.

AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED.

Basal portion of shaley sandstone fringe zone of the Berea sandstone yields 4 to 6 gallons per minute from a very limited area at depths of less than 65 feet.

Very limited and often quite shallow glacial deposits of sand and gravel overlying shale bedrock of eroded ancestral drainage channel. Potential yields may not exceed 5 gallons per minute at depths of 15 to 35 feet.

AREAS IN WHICH YIELDS OF LESS THAN 2 GALLONS PER MINUTE MAY BE DEVELOPED.

Devonian and Mississippian shale bedrock yields less than 2 gallons per minute at depths of less than 100 feet. Occasionally, thin lenses of sand and gravel may be encountered near the surface of the weathered shale at depths of 18 to 45 feet and yield as much as 5 gallons per minute. If sand and gravel is not present, home owners rely upon cisterns and additional storage to develop a supply for peak demand. Devonian limestone beneath the shale in Perry and Sharon Townships yield larger supplies. Proper well construction may deter presence of hydrogen sulfide.

Areas which may contain hydrogen sulfide in the limestone bedrock and Berea sandstone. Ground water in the limestone bedrock may also be highly mineralized; however, this water is potable and free of excessive chlorides.

Ancestral buried bedrock channels partially filled with clay and sand and gravel as much as 260 feet overlying limestone bedrock.

Relatively thick lenses of fine silty sand in buried valley deposits.

Well Site Symbols

WELL INFORMATION
(SEE NOTE)

DEPTH (ft.) Total depth of well in feet.
AQUIFER TYPE Water–bearing formation
YIELD (gpm) Amount of water a well produces in gallons per minute.
WELL SITE Approximate well location
75-SS-20
26
DEPTH TO BEDROCK (ft.) Depth to bedrock in feet.

WELL TYPES

- ● Well Site
- ○ Municipal-Industrial Well
- □ Observation Well Site *
- △ Test Well**
- A Chemical Analyses

AQUIFER TYPES

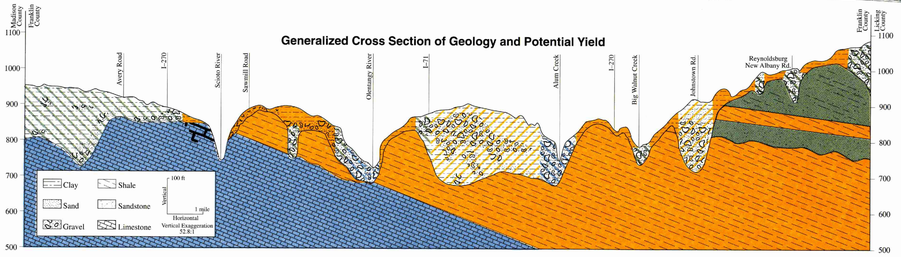
S – Sand
G – Gravel
SG – Sand & Gravel
SS – Sandstone
SH – Shale
LS – Limestone
CL – Clay
FS – Fine Sand

Chemical Analysis Table

Well Site	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Depth	93	230	–	40	92	67	444	175	211	175	180	400	81	86	340	63	214	260	290	98	232	35
Aquifer	LS	LS	S&G	S&G	–	SS	LS	LS	LS	LS	LS	LS	S&G	S&G	LS	SS	LS	LS	LS	S&G	S&G	S&G
Iron	6.1	2.7	5.8	3.0	4.0	2.8	.04	.55	.59	3.6	.58	.77	2.4	4.2	1.0	.39	1.6	1.2	–	2.9	1.9	.75
Hardness as $CaCO^3$	1930	1500	574	452	501	279	2090	443	317	384	530	1730	390	560	620	528	925	1305	745	316	390	302
Dissolved Solids	–	–	–	600	591	364	4950	500	595	519	662	2462	425	740	831	718	1428	1716	986	354	434	390
Sulfate	1520	870	–	155	116	98	1180	102	85	124	229	1451	50	–	400	250	594	942	520	53	28	24
Chloride	–	12	36	21	2.5	4.3	1820	2.0	11	3.0	14	45	7.5	77	1.7	5.2	137	38	5.0	2.4	6.0	2.8
Fluoride	–	–	–	.4	.6	.3	.9	1.1	1.0	2.1	1.1	1.8	.5	.2	1.8	.2	.5	1.4	.6	.1	.4	1.4
Hydrogen Sulfide	–	–	–	–	–	Trace	–	–	1.7	–	–	.7	–	–	–	3.4	3.0	22	–	–	–	–

Chemical constituents as milligrams per liter (mg/l)
A– casing set @ 36 feet.
B– casing set @ 175 feet. (thru Columbus Limestone)
G– sodium 967

Generalized Cross Section of Geology and Potential Yield



*Observation well sites indicate the location of wells used to collect ground water level information. These wells are part of the state observation well network. Hydrographs of the water levels recorded in these and other State observation wells can be obtained through ODNR–Division of Water.

**Test well sites indicate the location of a test well that was part of a regioinal ground water study. Detailed lithologic logs, water quality analysis and pumping test information for these wells may be available from ODNR–Division of Water.

NOTE

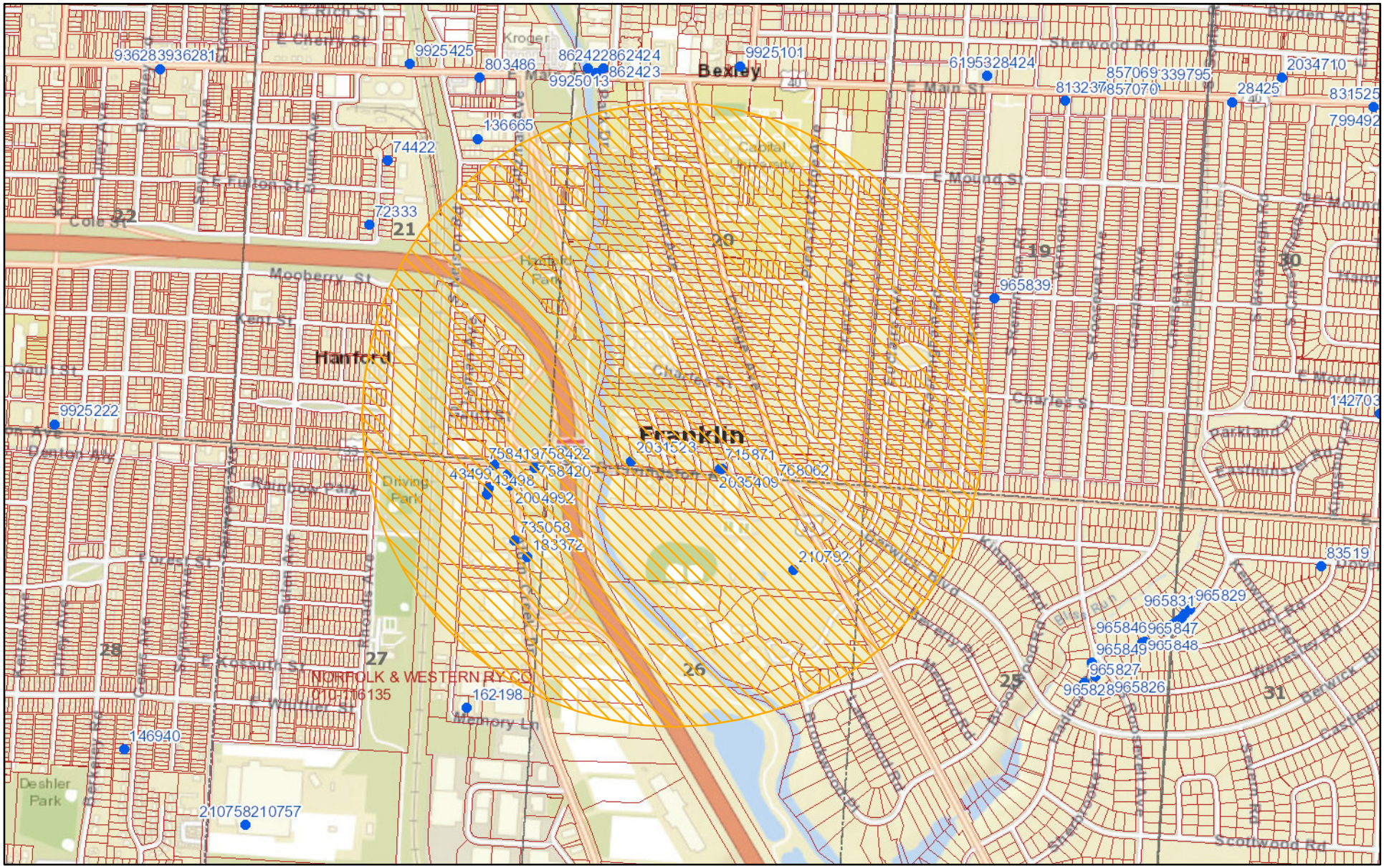
The ground water characteristics have been mapped regionally, based upon interpertations of water well records and the area's geology and hydrology. Mapped well sites were selected as typical for the areas shown.
Information regarding specific sites may be obtained from ODNR–Division of Water.

Published 1958
Revised 1993
Ohio Department of Natural Resources
Division of Water
Ground Water Resources Section
1939 Fountain Square
Columbus, Ohio 43224

David S. Orr, Cartographer

George V. Voinovich
Governor
Frances S. Buchholzer
Director

Ohio Water Wells



Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 210792

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *JEWISH CENTER*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1125 COLLEGE AVE* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: *232* **Location Map Year:** *1989* **Location Area:**
Latitude: *39.945997* **Longitude:** *-82.93686*

CONSTRUCTION DETAILS

Borehole Diameter: 1: **Borehole Depth:** 1: *52 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *10 in.* **Casing Length:** 1: **Casing Thickness:** 1:
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *SHALE*
Date of Completion: *7/10/1959* **Total Depth:** *52 ft.* **Well Use:**
Driller's Name: *G.M. BAKER & SON*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**

COMMENTS:

WELL LOG

Formations	From	To
FILL MATERIAL	0	8
GRAVEL & CLAY	8	26
SAND & CLAY	26	37
GRAVEL & CLAY	37	48
SHALE	48	52

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 768062

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *UNO-VEN*
County: *FRANKLIN* **Township:** *MADISON* **Section Number:**
Address: *2253 LIVINGSTON AVE* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.947960* **Longitude:** *-82.93745*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *18 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *4 in.*
2:
Casing Length: 1: *20 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground: **Aquifer Type:** *SAND & GRAVEL*
Date of Completion: *6/21/1995* **Total Depth:** *18 ft.* **Well Use:**
Driller's Name: *BELASCO DRILLING, INC.*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
SAND & GRAVEL	0	18

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 715871

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *STERLING MOTORS*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *2182 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.948320* **Longitude:** *-82.93905*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *15 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *2 in.*
2:
Casing Length: 1: *15 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground: **Aquifer Type:** *SAND & GRAVEL*
Date of Completion: *5/15/1991* **Total Depth:** *15 ft.* **Well Use:** *MONITOR*
Driller's Name: *BELASCO DRILLING, INC.*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**

COMMENTS:

WELL LOG

Formations	From	To
GRAVELLY FILL MATERIAL	0	1
ASPHALT	0	1
SILTY CLAY	1	8
SAND	8	10
SAND & GRAVEL	10	15

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 2035409

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *DISCOUNT AUTO GLASS*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *2182 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:** *43209*
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.948314* **Longitude:** *-82.938994*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *4.25 in.* **Borehole Depth:** 1: *21 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *2 in.* **Casing Length:** 1: *11 ft.* **Casing Thickness:** 1: *0.154 in.*
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *SAND*
Date of Completion: *10/3/2011* **Total Depth:** *21 ft.* **Well Use:** *MONITOR*
Driller's Name: *ENVIROCORE, LIMITED*
Screen Diameter: *2 in.* **Slot Size:** *0.01 in.* **Screen Length:** *10 ft.*
Type: *MACHINE SLOTTED* **Material:** *PVC*
Set Between: *From: 11 ft. To: 21 ft.*
Gravel Pack Material/Size: *#5 Sand* **Vol/Wt Used:** *150#*
Method of Installation: *Poured (gravity)* **Placed:** *FROM: 9 ft. TO: 21 ft.*
Grout Material/Size: *Bentonite pellets/chunks* **Vol/Wt Used:** *250#*
Method of Installation: *Poured (gravity)* **Placed** *FROM: 1 ft. TO: 9 ft.*

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
BROWN SILTY CLAY	0	9
BROWN-GRAY SAND & SILT	9	11
BROWN SILTY CLAY	11	15
BROWN SILTY CLAY & GRAVEL	15	17
BROWN COARSE SAND	17	21

WATER AT 17 17

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Well log questions - Web site questions - Web policies

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 2031523

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SRW*
County: *FRANKLIN*
Township: *COLUMBUS*
Section Number:
Address: *2080 LIVINGSTON E*
Lot Number:
City:
State: *OH*
Zip Code: *43209*
Location Number:
Location Map Year:
Location Area:
Latitude: *39.948490*
Longitude: *-82.94171*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *8 in.*
2:
Borehole Depth: 1: *23 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *2 in.*
2:
Casing Length: 1: *13 ft.*
2:
Casing Thickness: 1: *0.154 in.*
2:
Casing Height Above Ground: *0*
Aquifer Type: *SAND & GRAVEL*
Date of Completion: *3/7/2011*
Total Depth: *23 ft.*
Driller's Name: *FRONTZ DRILLING, INC.*
Well Use: *MONITOR*
Screen Diameter: *2 in.*
Slot Size: *0.01 in.*
Screen Length: *10 ft.*
Type: *MACHINE SLOTTED*
Material: *PVC*
Set Between: *From: 23 ft. To: 13 ft.*
Gravel Pack Material/Size: *#5*
Vol/Wt Used: *250 LBS*
Method of Installation: *Poured (gravity)*
Placed: *FROM: 23 ft. TO: 11 ft.*
Grout Material/Size: *Bentonite pellets/chunks*
Vol/Wt Used: *150 LBS*
Method of Installation: *Poured (gravity)*
Placed *FROM: 11 ft. TO: 1 ft.*

WELL TEST DETAILS

Static Water Level:
Test Rate:
Associated Reports
Drawdown:
Test Duration:
COMMENTS: *MW-2*

WELL LOG

Formations	From	To
ASPHALT	0	1
BROWN SANDY CLAY	1	8
CONCRETE	8	8.50
BROWN CLAY	8.50	18
BROWN SAND & GRAVEL	18	23

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 758421

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *BP OIL*
County: *FRANKLIN*
Township: *COLUMBUS*
Section Number:
Address: *1971 LIVINGSTON AVE E*
Lot Number:
City:
State: *OH*
Zip Code:
Location Number:
Location Map Year:
Location Area:
Latitude: *39.948340*
Longitude: *-82.94461*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *26 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *4 in.*
2:
Casing Length: 1: *25 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground:
Aquifer Type: *GRAVEL/SAND/CLAY*
Date of Completion: *7/29/1992*
Total Depth: *26 ft.*
Driller's Name: *HULL & ASSOCIATES, DUBLIN*
Well Use: *MONITOR*
Screen Diameter:
Slot Size:
Screen Length:
Type:
Material:
Set Between:
Gravel Pack Material/Size:
Vol/Wt Used:
Method of Installation:
Placed:
Grout Material/Size:
Vol/Wt Used:
Method of Installation:
Placed

WELL TEST DETAILS

Static Water Level: *18.9 ft.*
Test Rate:
Associated Reports
Drawdown:
Test Duration:
COMMENTS:

WELL LOG

Formations	From	To
CEMENT	0	1
BROWN SILTY CLAY	1	3
BROWN SILTY GRAVEL/SAND/CLAY	3	7
DARK GRAY SILTY GRAVEL & CLAY	7	12
GRAY COARSE GRAVEL/SAND/CLAY	12	27

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 758420

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *BP OIL*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1971 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.948340* **Longitude:** *-82.94461*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *26 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *4 in.*
2:
Casing Length: 1: *26 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground: **Aquifer Type:** *GRAVEL/SAND/CLAY*
Date of Completion: *7/29/1992* **Total Depth:** *26 ft.* **Well Use:** *MONITOR*
Driller's Name: *HULL & ASSOCIATES, DUBLIN*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: *19 ft.* **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**

COMMENTS:

WELL LOG

Formations	From	To
CEMENT	0	1
BROWN SILTY CLAY	1	3
BROWN SILTY SAND	3	7
DARK GRAY SILTY GRAVEL & CLAY	7	17
DARK GRAY COARSE GRAVEL/SAND/CLAY	17	22

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 758419

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *BP OIL*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1971 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.948340* **Longitude:** *-82.94461*

CONSTRUCTION DETAILS

Borehole Diameter: 1: **Borehole Depth:** 1: *23 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *4 in.* **Casing Length:** 1: *23 ft.* **Casing Thickness:** 1:
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *SAND*
Date of Completion: *7/29/1992* **Total Depth:** *23 ft.* **Well Use:** *MONITOR*
Driller's Name: *HULL & ASSOCIATES, DUBLIN*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: *19.4 ft.* **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
CEMENT	0	1
BROWN SILTY GRAVEL & CLAY	1	3
BROWN SILTY SAND & CLAY	3	7
BROWN SILTY GRAVEL & CLAY	7	17
HEAVING SAND	17	23
GRAY SAND & GRAVEL	23	27

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 758422

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *BP OIL*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1971 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.948340* **Longitude:** *-82.94461*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *26 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *4 in.*
2:
Casing Length: 1: *25 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground: **Aquifer Type:** *GRAVEL/SAND/CLAY*
Date of Completion: *7/29/1992* **Total Depth:** *26 ft.* **Well Use:** *MONITOR*
Driller's Name: *HULL & ASSOCIATES, DUBLIN*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: *19.3 ft.* **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**

COMMENTS:

WELL LOG

Formations	From	To
CEMENT	0	1
BROWN SILTY GRAVEL & CLAY	1	3
BROWN SILTY GRAVEL/SAND/CLAY	3	7
DARK GRAY SILTY GRAVEL/SAND/CLAY	7	22

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

View Image of Original Well Log

Well Log Number: 2002937

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SHELL*
County: *FRANKLIN*
Township: *FRANKLIN*
Section Number:
Address: *1937 LIVINGSTON AVE*
Lot Number:
City:
State: *OH*
Zip Code:
Location Number:
Location Map Year:
Location Area:
Latitude: *39.9484*
Longitude: *-82.94581*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *6 in.*
2:
Borehole Depth: 1: *22 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *2 in.*
2:
Casing Length: 1: *17 ft.*
2:
Casing Thickness: 1: *0.14 in.*
2:
Casing Height Above Ground: *0*
Aquifer Type: *CLAY*
Date of Completion: *5/10/2006*
Total Depth: *22 ft.*
Driller's Name: *BELASCO DRILLING, INC.*
Well Use: *MONITOR*
Screen Diameter: *2 in.*
Slot Size: *0.01 in.*
Screen Length: *10 ft.*
Type: *MACHINE SLOTTED*
Material: *PVC*
Set Between: *From: 22 ft. To: 12 ft.*
Gravel Pack Material/Size: *SAND*
Vol/Wt Used: *7 BAGS*
Method of Installation: *Poured (gravity)*
Placed: *FROM: 22 ft. TO: 10 ft.*
Grout Material/Size: *Bentonite pellets/chunks*
Vol/Wt Used: *3 BAGS*
Method of Installation: *Poured (gravity)*
Placed *FROM: 10 ft. TO: 1 ft.*

WELL TEST DETAILS

Static Water Level:
Test Rate:
Associated Reports
Drawdown:
Test Duration:
COMMENTS:

WELL LOG

Formations	From	To
LT. GRAY GRAVELLY FILL MATERIAL	0	4
BROWN SILTY CLAY	4	22

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 2002934

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SHELL OIL*
County: *FRANKLIN* **Township:** *FRANKLIN* **Section Number:**
Address: *1937 LIVINGSTON AVE* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.9484* **Longitude:** *-82.94581*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *6 in.* **Borehole Depth:** 1: *22 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *2 in.* **Casing Length:** 1: *17 ft.* **Casing Thickness:** 1: *0.14 in.*
2: 2: 2:
Casing Height Above Ground: *0* **Aquifer Type:** *CLAY*
Date of Completion: *5/10/2006* **Total Depth:** *22 ft.* **Well Use:** *MONITOR*
Driller's Name: *BELASCO DRILLING, INC.*
Screen Diameter: *2 in.* **Slot Size:** *0.01 in.* **Screen Length:** *10 ft.*
Type: *MACHINE SLOTTED* **Material:** *PVC*
Set Between: *From: 22 ft. To: 12 ft.*
Gravel Pack Material/Size: *SAND* **Vol/Wt Used:** *7 BAGS*
Method of Installation: *Poured (gravity)* **Placed:** *FROM: 22 ft. TO: 10 ft.*
Grout Material/Size: *Bentonite pellets/chunks* **Vol/Wt Used:** *3 BAGS*
Method of Installation: *Poured (gravity)* **Placed** *FROM: 10 ft. TO: 1 ft.*

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
LT. BROWN SAND & GRAVEL	0	4
OLIVE SILTY CLAY	4	22

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 2002936

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SHELL OIL*
County: *FRANKLIN* **Township:** *FRANKLIN* **Section Number:**
Address: *1937 LIVINGSTON AVE* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.9484* **Longitude:** *-82.94581*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *6 in.* **Borehole Depth:** 1: *22 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *2 in.* **Casing Length:** 1: *17 ft.* **Casing Thickness:** 1: *0.14 in.*
2: 2: 2:
Casing Height Above Ground: *0* **Aquifer Type:** *CLAY*
Date of Completion: *5/10/2006* **Total Depth:** *22 ft.* **Well Use:** *MONITOR*
Driller's Name: *BELASCO DRILLING, INC.*
Screen Diameter: *2 in.* **Slot Size:** *0.01 in.* **Screen Length:** *10 ft.*
Type: *MACHINE SLOTTED* **Material:** *PVC*
Set Between: *From: 22 ft. To: 12 ft.*
Gravel Pack Material/Size: *SAND* **Vol/Wt Used:** *7 BAGS*
Method of Installation: *Poured (gravity)* **Placed:** *FROM: 22 ft. TO: 10 ft.*
Grout Material/Size: *Bentonite pellets/chunks* **Vol/Wt Used:** *3 BAGS*
Method of Installation: *Poured (gravity)* **Placed** *FROM: 10 ft. TO: 1 ft.*

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
LT. BROWN FILL MATERIAL	0	4
OLIVE SILTY CLAY	4	22

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

View Image of Original Well Log

Well Log Number: 2005003

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SHELL STATION*
County: *FRANKLIN*
Address: *1937 LIVINGSTON AVE E*
City:
Location Number:
Latitude: *39.948160*

Township: *COLUMBUS*
State: *OH*
Location Map Year:
Longitude: *-82.9454*

Section Number:
Lot Number:
Zip Code: *43209*
Location Area:

CONSTRUCTION DETAILS

Borehole Diameter: **1:** *8.25 in.*
2:
Casing Diameter: **1:** *2 in.*
2:
Casing Height Above Ground:
Date of Completion: *9/7/2006*
Driller's Name: *H.A.D. INC.*
Screen Diameter: *2 in.*
Type: *MACHINE SLOTTED*
Set Between: *From: 23 ft. To: 11 ft.*
Gravel Pack Material/Size: *SILICA SAND*
Method of Installation: *Poured (gravity)*
Grout Material/Size: *Bentonite pellets/chunks*
Method of Installation: *Poured (gravity)*

Borehole Depth: **1:** *23 ft.*
2:
Casing Length: **1:** *13 ft.*
2:
Aquifer Type: *SAND*
Total Depth: *23 ft.*

Slot Size: *0.01 in.*
Material: *PVC*

Vol/Wt Used: *400 LBS.*
Placed: *FROM: 23 ft. TO: 11 ft.*
Vol/Wt Used: *250 LBS.*
Placed *FROM: 11 ft. TO: 2 ft.*

Depth to Bedrock:

Casing Thickness: **1:** *0.154 in.*
2:

Well Use: *MONITOR*

Screen Length: *10 ft.*

WELL TEST DETAILS

Static Water Level:
Drawdown:

Test Rate:
Test Duration:

Associated Reports

COMMENTS:

WELL LOG

Formations	From	To
FILL MATERIAL	0	1
BROWN SILTY COBBLES	1	5
BROWN DAMP CLAY	5	10
GRAY CLAY/SAND/GRAVEL	10	15
GRAY FINE SAND	15	20

GRAY SILT 20 23

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Well log questions - Web site questions - Web policies

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 2004992

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *SHELL STATION*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1937 LIVINGSTON AVE E* **Lot Number:**
City: **State:** *OH* **Zip Code:** *43209*
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.947930* **Longitude:** *-82.94534*

CONSTRUCTION DETAILS

Borehole Diameter: 1: *8.25 in.* **Borehole Depth:** 1: *23 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *2 in.* **Casing Length:** 1: *13 ft.* **Casing Thickness:** 1: *0.154 in.*
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *SAND*
Date of Completion: *9/7/2006* **Total Depth:** *23 ft.* **Well Use:** *MONITOR*
Driller's Name: *H.A.D. INC.*
Screen Diameter: *2 in.* **Slot Size:** *0.01 in.* **Screen Length:** *10 ft.*
Type: *MACHINE SLOTTED* **Material:** *PVC*
Set Between: *From: 23 ft. To: 11 ft.*
Gravel Pack Material/Size: *SILICA SAND* **Vol/Wt Used:** *400 LBS.*
Method of Installation: *Poured (gravity)* **Placed:** *FROM: 23 ft. TO: 11 ft.*
Grout Material/Size: *Bentonite pellets/chunks* **Vol/Wt Used:** *250 LBS.*
Method of Installation: *Poured (gravity)* **Placed** *FROM: 11 ft. TO: 2 ft.*

WELL TEST DETAILS

Static Water Level: **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
FILL MATERIAL	0	1
BROWN SILTY CLAY	1	5
BROWN DAMP CLAY	5	10
GRAY DAMP CLAY/SAND/GRAVEL	10	15
GRAY FINE SAND	15	20

GRAY SILT 20 23

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 43499

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *NATIONAL ALUMINUM CO*
County: *FRANKLIN*
Township: *COLUMBUS*
Section Number:
Address: *1133 ALUM CREEK DR*
Lot Number:
City:
State: *OH*
Zip Code:
Location Number: *1904*
Location Map Year: *1945*
Location Area:
Latitude: *39.947876*
Longitude: *-82.945981*

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Borehole Depth: 1: *300 ft.*
2:
Depth to Bedrock:
Casing Diameter: 1: *6 in.*
2:
Casing Length: 1: *70 ft.*
2:
Casing Thickness: 1:
2:
Casing Height Above Ground:
Aquifer Type: *LIMESTONE*
Date of Completion:
Total Depth: *300 ft.*
Well Use:
Driller's Name: *G.M. BAKER & SON*
Screen Diameter:
Slot Size:
Screen Length:
Type:
Material:
Set Between:
Gravel Pack Material/Size:
Vol/Wt Used:
Method of Installation:
Placed:
Grout Material/Size:
Vol/Wt Used:
Method of Installation:
Placed

WELL TEST DETAILS

Static Water Level: *78 ft.*
Test Rate:
Associated Reports
Drawdown:
Test Duration:
COMMENTS:

WELL LOG

Formations	From	To
TOP SOIL	0	4
GRAVEL & CLAY	4	22
SAND & GRAVEL	22	35
DIRTY SAND & GRAVEL	35	37
SAND & CLAY	37	50
FINE SAND	50	65

CLAY	65	68
BLACK SHALE	68	90
SOAPSTONE	90	136
BROWN SHALE	136	180
BROWN LIMESTONE	180	230
GRAY LIMESTONE	230	300

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Well log questions - Web site questions - Web policies

Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 43498

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *NATIONAL ALUMINUM CO*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1133 ALUM CREEK DR* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: *1905* **Location Map Year:** *1945* **Location Area:**
Latitude: *39.947731* **Longitude:** *-82.946033*

CONSTRUCTION DETAILS

Borehole Diameter: 1: **Borehole Depth:** 1: *39 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *12 in.* **Casing Length:** 1: *34 ft.* **Casing Thickness:** 1:
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *SAND & GRAVEL*
Date of Completion: **Total Depth:** *39 ft.* **Well Use:**
Driller's Name: *G.M. BAKER & SON*
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: *17 ft.* **Test Rate:** **Associated Reports**
Drawdown: **Test Duration:**
COMMENTS:

WELL LOG

Formations	From	To
TOP SOIL	0	3
GRAVEL & CLAY	3	24
SAND & GRAVEL	24	39

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

View Image of Original Well Log

Well Log Number: 735058

ORIGINAL OWNER AND LOCATION

Original Owner Name: *PRE-FAB TRANSIT*
County: *FRANKLIN*
Address: *1185 ALUM CREEK RD*
City:
Location Number:
Latitude: *39.946660*

Township: *COLUMBUS*
State: *OH*
Location Map Year:
Longitude: *-82.94521*

Section Number:
Lot Number:
Zip Code:
Location Area:

CONSTRUCTION DETAILS

Borehole Diameter: 1:
2:
Casing Diameter: 1: *4 in.*
2:
Casing Height Above Ground:
Date of Completion: *3/19/1992*
Driller's Name: *MOUNT WATER WELL DRILLING*
Screen Diameter:
Type:
Set Between: *From: 19 ft. To: 29 ft.*
Gravel Pack Material/Size:
Method of Installation:
Grout Material/Size:
Method of Installation:

Borehole Depth: 1: *29 ft.*
2:
Casing Length: 1: *29 ft.*
2:
Aquifer Type: *SAND & GRAVEL*
Total Depth: *29 ft.*
Slot Size:
Material:
Vol/Wt Used:
Placed:
Vol/Wt Used:
Placed

Depth to Bedrock:
Casing Thickness: 1:
2:
Well Use: *MONITOR*
Screen Length: *10 ft.*

WELL TEST DETAILS

Static Water Level: *26 ft.*
Drawdown:
COMMENTS:

Test Rate:
Test Duration:

Associated Reports

WELL LOG

Formations	From	To
FILL MATERIAL	0	12
BROWN GRAVEL & SAND	12	15
GRAY SAND & GRAVEL	15	29

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Water Well Log and Drilling Report

Ohio Department of Natural Resources
Division of Soil and Water
Phone: 614-265-6740 Fax: 614-265-6767

Well Log Number: 183372

View Image of Original Well Log

ORIGINAL OWNER AND LOCATION

Original Owner Name: *NATIONAL ALUMINUM CO*
County: *FRANKLIN* **Township:** *COLUMBUS* **Section Number:**
Address: *1130 ALUM CREEK DR* **Lot Number:**
City: **State:** *OH* **Zip Code:**
Location Number: **Location Map Year:** **Location Area:**
Latitude: *39.9463* **Longitude:** *-82.94481*

CONSTRUCTION DETAILS

Borehole Diameter: 1: **Borehole Depth:** 1: *45 ft.* **Depth to Bedrock:**
2: 2:
Casing Diameter: 1: *8 in.* **Casing Length:** 1: *35 ft.* **Casing Thickness:** 1:
2: 2: 2:
Casing Height Above Ground: **Aquifer Type:** *GRAVEL/SAND/CLAY*
Date of Completion: *3/30/1957* **Total Depth:** *45 ft.* **Well Use:**
Driller's Name:
Screen Diameter: **Slot Size:** **Screen Length:**
Type: **Material:**
Set Between:
Gravel Pack Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed:**
Grout Material/Size: **Vol/Wt Used:**
Method of Installation: **Placed**

WELL TEST DETAILS

Static Water Level: *22 ft.* **Test Rate:** *100 gpm* Associated Reports
Drawdown: *5 ft.* **Test Duration:** *4 hrs.*

COMMENTS:

WELL LOG

Formations	From	To
UNKNOWN	0	20
GRAVEL & CLAY	0	24
SAND & GRAVEL	24	42
GRAVEL/SAND/CLAY	42	45

APPENDIX E
CHEMICALS OF CONCERN TABLES

Appendix E: Chemicals of Concern

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place;

The list below represents specific chemicals of concern for each identified area. It is important to note that laboratory analytical suites are often broader than the lists shown below. For instance, a lab may have many more analytes in its default "VOCs" package than those listed below. As such, the analyses listed below represent a minimum group of analytes for each identified area, and additional analyses may have been performed. Chemical Abstract Service (CAS) numbers are represented in parentheses after each chemical name.

Former Landfill / Dumping Area: On-Site Soils

Metals & Inorganic Analytes

Arsenic, Inorganic (7440-38-2)

Cadmium (7440-43-9)

Chromium, Total (7440-47-3)

Lead and Compounds (7439-92-1)

Mercury and Compounds (7439-97-6)

Selenium (7782-49-2)

Silver (7440-22-4)

Volatile Organic Compounds (VOCs)

Acetone (67-64-1)

Benzene (71-43-2)

Carbon Disulfide (75-15-0)

Carbon Tetrachloride (56-23-5)

Chlorobenzene (108-90-7)

Chloroform (67-66-3)

Chloromethane (74-87-3)

Cumene (98-82-8)

Dichlorobenzene, 1,2- (95-50-1)

Dichlorobenzene, 1,4- (106-46-7)

Dichloroethane, 1,1- (75-34-3)

Dichloroethylene, 1,1- (75-35-4)

Dichloroethylene, 1,2-trans- (156-60-5)

Ethylbenzene (100-41-4)

Methyl Ethyl Ketone (2-Butanone) (78-93-3)

Methyl tert-Butyl Ether (MTBE) (1634-04-4)

Methylene Chloride (75-09-2)

n-butyl benzene (104-51-8)

n-propyl benzene (103-65-1)

Sec-butyl benzene (135-98-8)

Tetrachloroethylene (127-18-4)

Toluene (108-88-3)

Trichloroethane, 1,1,1- (71-55-6)

Trichloroethane, 1,1,2- (79-00-5)

Trichloroethylene (79-01-6)

Trihalomethanes, Total (TotTHM)

Trimethylbenzene, 1,2,4- (95-63-6)

Trimethylbenzene, 1,3,5 (108-67-8)

Vinyl Chloride (75-01-4)

Xylenes (1330-20-7)

Semi-Volatile Organic Compounds (SVOCs)

Acenaphthene (83-32-9)

Acenaphthylene (208-96-8)

Anthracene (120-12-7)

Benz[a]anthracene (56-55-3)

Benzo(g,h,i)perylene (191-24-2)

Benzo[a]pyrene (50-32-8)

Benzo[b]fluoranthene (205-99-2)

Benzo[k]fluoranthene (207-08-9)

Appendix E: Chemicals of Concern

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place;

The list below represents specific chemicals of concern for each identified area. It is important to note that laboratory analytical suites are often broader than the lists shown below. For instance, a lab may have many more analytes in its default "VOCs" package than those listed below. As such, the analyses listed below represent a minimum group of analytes for each identified area, and additional analyses may have been performed. Chemical Abstract Service (CAS) numbers are represented in parentheses after each chemical name.

Former Landfill / Dumping Area: On-Site Soils

Semi-Volatile Organic Compounds (SVOCs)

Butyl Benzyl Phthlate (85-68-7)

Dibenz[a,h]anthracene (53-70-3)

Fluoranthene (206-44-0)

Indeno[1,2,3-cd]pyrene (193-39-5)

Naphthalene (91-20-3)

Phenol (108-95-2)

Bis(2-ethylhexyl)phthalate (117-81-7)

Chrysene (218-01-9)

Dibutyl Phthalate (84-74-2)

Fluorene (86-73-7)

Methylnaphthalene, 2- (91-57-6)

Phenanthrene (85-01-8)

Pyrene (129-00-0)

Appendix E: Chemicals of Concern

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place;

The list below represents specific chemicals of concern for each identified area. It is important to note that laboratory analytical suites are often broader than the lists shown below. For instance, a lab may have many more analytes in its default "VOCs" package than those listed below. As such, the analyses listed below represent a minimum group of analytes for each identified area, and additional analyses may have been performed. Chemical Abstract Service (CAS) numbers are represented in parentheses after each chemical name.

Site-Wide Groundwater: Groundwater

Metals & Inorganic Analytes

Arsenic, Inorganic (7440-38-2)

Cadmium (7440-43-9)

Chromium, Total (7440-47-3)

Lead and Compounds (7439-92-1)

Mercury and Compounds (7439-97-6)

Selenium (7782-49-2)

Silver (7440-22-4)

Volatile Organic Compounds (VOCs)

Acetone (67-64-1)

Benzene (71-43-2)

Carbon Disulfide (75-15-0)

Carbon Tetrachloride (56-23-5)

Chlorobenzene (108-90-7)

Chloroform (67-66-3)

Chloromethane (74-87-3)

Cumene (98-82-8)

Dichlorobenzene, 1,2- (95-50-1)

Dichlorobenzene, 1,4- (106-46-7)

Dichloroethane, 1,1- (75-34-3)

Dichloroethylene, 1,1- (75-35-4)

Dichloroethylene, 1,2-trans- (156-60-5)

Ethylbenzene (100-41-4)

Methyl Ethyl Ketone (2-Butanone) (78-93-3)

Methyl tert-Butyl Ether (MTBE) (1634-04-4)

Methylene Chloride (75-09-2)

n-butyl benzene (104-51-8)

n-propyl benzene (103-65-1)

Sec-butyl benzene (135-98-8)

Tetrachloroethylene (127-18-4)

Toluene (108-88-3)

Trichloroethane, 1,1,1- (71-55-6)

Trichloroethane, 1,1,2- (79-00-5)

Trichloroethylene (79-01-6)

Trihalomethanes, Total (TotTHM)

Trimethylbenzene, 1,2,4- (95-63-6)

Trimethylbenzene, 1,3,5 (108-67-8)

Vinyl Chloride (75-01-4)

Xylenes (1330-20-7)

Semi-Volatile Organic Compounds (SVOCs)

Acenaphthene (83-32-9)

Acenaphthylene (208-96-8)

Anthracene (120-12-7)

Benz[a]anthracene (56-55-3)

Benzo(g,h,i)perylene (191-24-2)

Benzo[a]pyrene (50-32-8)

Benzo[b]fluoranthene (205-99-2)

Benzo[k]fluoranthene (207-08-9)

Appendix E: Chemicals of Concern

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place;

The list below represents specific chemicals of concern for each identified area. It is important to note that laboratory analytical suites are often broader than the lists shown below. For instance, a lab may have many more analytes in its default "VOCs" package than those listed below. As such, the analyses listed below represent a minimum group of analytes for each identified area, and additional analyses may have been performed. Chemical Abstract Service (CAS) numbers are represented in parentheses after each chemical name.

Site-Wide Groundwater: Groundwater

Semi-Volatile Organic Compounds (SVOCs)

Butyl Benzyl Phthlate (85-68-7)

Dibenz[a,h]anthracene (53-70-3)

Fluoranthene (206-44-0)

Indeno[1,2,3-cd]pyrene (193-39-5)

Naphthalene (91-20-3)

Phenol (108-95-2)

Bis(2-ethylhexyl)phthalate (117-81-7)

Chrysene (218-01-9)

Dibutyl Phthalate (84-74-2)

Fluorene (86-73-7)

Methylnaphthalene, 2- (91-57-6)

Phenanthrene (85-01-8)

Pyrene (129-00-0)

APPENDIX F
ANALYSES WITH MDL ABOVE STANDARDS

Table F: Ground Water Analyses with MDL above Standard (by Sample)

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley,

Chemical Name	CAS	Method Detection Limit (MDL)	Reporting Limit (RL)	Standard µg/L (ppb)	Date of Standard	Source
BFM-MW1 (11/6/2019)						
Bis(2-chloro-1-methylethyl) et	108-60-1	3.8	9.5	3.1	8/1/2014	VAP Rule 8 downloaded 8/27/14
Bis(2-chloroethyl)ether	111-44-4	3.7	9.5	0.12	8/1/2014	VAP Rule 8 downloaded 8/27/14
Chloroaniline, p-	106-47-8	3.6	9.5	3.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,4-	121-14-2	5.3	9.5	2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,6-	606-20-2	4.2	9.5	0.42	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitrobenzene	98-95-3	3.9	4.8	1.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitroso-di-N-propylamine, N-	621-64-7	4.1	47.6	0.093	8/1/2014	VAP Rule 8 downloaded 8/27/14
Tetrachloroethane, 1,1,2,2-	79-34-5	0.72	5	0.66	8/1/2014	VAP Rule 8 downloaded 8/27/14
BFM-MW2 (11/6/2019)						
Bis(2-chloro-1-methylethyl) et	108-60-1	3.8	9.5	3.1	8/1/2014	VAP Rule 8 downloaded 8/27/14
Bis(2-chloroethyl)ether	111-44-4	3.7	9.5	0.12	8/1/2014	VAP Rule 8 downloaded 8/27/14
Chloroaniline, p-	106-47-8	3.6	9.5	3.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,4-	121-14-2	5.3	9.5	2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,6-	606-20-2	4.2	9.5	0.42	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitrobenzene	98-95-3	3.9	4.8	1.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitroso-di-N-propylamine, N-	621-64-7	4.1	47.6	0.093	8/1/2014	VAP Rule 8 downloaded 8/27/14
Tetrachloroethane, 1,1,2,2-	79-34-5	0.72	5	0.66	8/1/2014	VAP Rule 8 downloaded 8/27/14
BFM-MW3 (11/6/2019)						
Bis(2-chloro-1-methylethyl) et	108-60-1	3.8	9.5	3.1	8/1/2014	VAP Rule 8 downloaded 8/27/14

Table F: Ground Water Analyses with MDL above Standard (by Sample)

PANDEY
ENVIRONMENTAL, LLC

Bexley Ferndale-Mayfield Properties: Ferndale Place & Mayfield Place; Bexley,

Chemical Name	CAS	Method Detection Limit (MDL)	Reporting Limit (RL)	Standard µg/L (ppb)	Date of Standard	Source
Bis(2-chloroethyl)ether	111-44-4	3.7	9.5	0.12	8/1/2014	VAP Rule 8 downloaded 8/27/14
Chloroaniline, p-	106-47-8	3.6	9.5	3.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,4-	121-14-2	5.3	9.5	2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Dinitrotoluene, 2,6-	606-20-2	4.2	9.5	0.42	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitrobenzene	98-95-3	3.9	4.8	1.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
Nitroso-di-N-propylamine, N-	621-64-7	4.1	47.6	0.093	8/1/2014	VAP Rule 8 downloaded 8/27/14
Tetrachloroethane, 1,1,2,2-	79-34-5	0.72	5	0.66	8/1/2014	VAP Rule 8 downloaded 8/27/14
BFM-MW4 (11/6/2019)						
Bis(2-chloro-1-methylethyl) et	108-60-1	3.8	9.5	3.1	8/1/2014	VAP Rule 8 downloaded 8/27/14
Bis(2-chloroethyl)ether	111-44-4	3.7	9.5	0.12	8/1/2014	VAP Rule 8 downloaded 8/27/14
Chloroaniline, p-	106-47-8	3.6	9.5	3.2	8/1/2014	VAP Rule 8 downloaded 8/27/14
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