SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

JEFFERSON AND BEST SITE
BUFFALO, NEW YORK

May 2023 T0562-023-001

Prepared for:

CB Emmanuel

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PHASE II ENVIRONMENTAL INVESTIGATION REPORT

JEFFERSON AND BEST SITE

BUFFALO, NEW YORK

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1.0 INTRODUCTION

1.1 Background and Site Description

TurnKey Environmental Restoration, LLC (TurnKey) performed a Phase II Environmental Investigation for CB Emmanuel at the Jefferson and Best Site addressed as 1003 - 1045 Jefferson Avenue, 94 - 120 Earl Place, and 403 - 411 Best Street, located in the City of Buffalo, Erie County, New York (Site).

The Site, consisting of nine parcels totaling 3.1-acres, is supplied with/has access to municipal sanitary sewer, electric, natural-gas and public water, and is located in a highly developed commercial and residential area (see Figure 1). As shown on Figure 2, the Site is vacant/underutilized land and is currently developed with three buildings (such are vacant commercial buildings). TurnKey understands that the Site is currently slated for redevelopment as an affordable housing project.

Historical research completed by TurnKey, which included review of historic Sanborn maps, has revealed that the Site was previously used for a variety of commercial/industrial operations, between at least 1926 and at least 1950, including automotive painting, automotive repair, laundry/drycleaning, an oil warehouse, a machine shop, sign painting and manufacturing, ice housing, bottling with bottle washing, and pasteurizing. One gasoline underground storage tank (UST) was identified on the north-central part of the Site from at least 1926 through at least 1950. An additional gasoline UST was identified off-site within the Jefferson Avenue right-of-way (east adjacent to a former sheet metal shop and auto painting operation) from at least 1926 through at least 1950.

Previous Phase II activities by others, which are further discussed below, identified elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) and metals in fill, and elevated volatile organic compounds (VOCs) in groundwater and sub-slab air samples.

The purpose of TurnKey's supplemental Phase II investigation was to provide additional coverage of subsurface conditions across the Site parcels with collection and laboratory analysis of additional soil/fill samples. In addition to the soil/fill investigation, a geophysical survey (EM-61) was performed across accessible exterior portions of the Site to identify subsurface metallic anomalies potentially associated with USTs, utilities, and other buried metallic objects.

Additional information relative to the work completed at the Site by TurnKey and others is provided below.

1.2 Previous Studies

LiRo Engineers, Inc. (LiRo) completed a Phase II Environmental Subsurface Investigation at the Site for Local Initiatives Support Corporation and documented the findings in a report dated February 28, 2022. LiRo identified the history of the Site as an automotive paint and repair shop and a historic dry cleaner. As part of LiRo's investigation, a total of 12 soil borings (LB-01 through LB-12) were completed across the Site to depths between 6 fbgs and 16 fbgs. Subsurface lithology was described as fill materials (consisting of mixtures of brick, cinders, coal and wood) ranging from 1 foot below ground surface (fbgs) to 6.6 fbgs, overlying native soils (red brown silt and clays). Groundwater, encountered at 9 of 12 soil borings, reportedly ranged between 4 fbgs and 8 fbgs. LiRo identified elevated concentrations of PAHs and metals at concentrations exceeding Restricted Residential Soil Cleanup Objectives (RRSCOs, the applicable SCO based on the future intended use of the Site for affordable housing) in soil/fill samples collected from the Site. No polychlorinated biphenyls (PCBs) were detected at concentrations above laboratory detection limits in two composite soil/fill samples collected from the Site.

LiRo completed a supplemental Phase II at the Site and documented the findings in a report, dated November 16, 2022. The work consisted of collection of ten surface soil samples (SS-1 through SS-10), completion of five soil borings (LB-13 through LB-17), three of which were converted into temporary one-inch diameter monitoring wells (GW LB-13, GW LB-14, and GW LB-16), and sub-slab soil vapor sampling from the northern-most building at two sample points (SSV-01 and 02). Photoionization detector (PID) readings up to 13.8 parts per million (ppm) were identified during the work at LB-13 (4-6 fbgs).

Laboratory analytical results revealed the following:

- Surface soil/fill samples – PAHs and/or metals at concentrations above RRSCOs in seven surface soil samples (SS-1, SS-2, SS-4, SS-5, SS-6, SS-8, and SS-9).
- Subsurface soil/fill samples – xylenes above RRSCOs in one soil sample (LB-13, 4-5').
- Groundwater sampling - trichloroethene (TCE), a chlorinated VOC, at a concentration above its Groundwater Quality Standard (GWQS) at one well (GW LB-16), benzene

and methyl tert-butyl ether (MtBE), both petroleum VOCs, exceeding their respective GWQS at one well (GW LB-13).

- Sub-slab vapor sampling in northern-most building - TCE exceedances in both sub-slab vapor samples at concentrations requiring mitigation in comparison to the New York State Department of Health (NYSDOH) Decision Matrices.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 Geophysical Survey

Prior to TurnKey's test pit investigation that is further detailed below, between April 12, 2023 and April 16, 2023, a geophysical survey was completed on-Site, across the Site in accessible exterior areas, by TurnKey's subcontractor, Maddan Geophysics LLC (Maddan). Maddan used non-intrusive EM-61 equipment to identify potential buried metallic anomalies. The EM-61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The geophysical work was completed across the subject parcel. A figure showing the limits of the geophysical survey along with potential subsurface structures (anomalies) was generated by Maddan along with a written report (see Appendix C).

2.2 Test Pit Investigation

On April 17, 2023, TurnKey mobilized a track-mounted excavator to the Site. As shown on Figure 3, 15 test pits designated as BMTP-1 through BMTP-15 were completed on-Site. All test pits were completed until native soils were encountered or to the maximum reach of the excavator at approximately eight feet below ground surface (fbgs). Additional information relative to findings during the test pit investigation is provided in Section 3.0.

The physical characteristics of all test pits were classified using the ASTM D2488 Visual-Manual Procedure Description. Soils from each test pit were screened via headspace screening using a MiniRae 3000 Photoionization Detector (PID). Visual and/or olfactory observations were noted. All field observations, including lithology, depths, PID scan results, etc., at each investigation location are summarized in the Test Pit Log sheets provided in Appendix A. Photographs taken during the work are included in Appendix B.

Twelve (12) soil/fill samples selected for laboratory analysis were transported under chain-of custody command to Eurofins Buffalo (Eurofins) in Amherst, New York for analysis of polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) metals via United States Environmental Protection Agency (USEPA) Methods 8270D and 6010C/7471B, respectively. All samples were collected in laboratory provided sample bottles and were cooled to 4^0 C prior to transport.

3.0 INVESTIGATION FINDINGS

3.1 Geophysical Survey

Maddan's report (see Appendix C) indicates that numerous subsurface buried metallic anomalies were observed during the survey. Specifically, ten anomalies, identified as Anomaly A through Anomaly J, were identified during the work. TurnKey's test pit investigation further assessed the nature of the anomalies, as follows:

- Anomaly A – determined to be a former building foundation.
- Anomaly B – determined to be a former building foundation.
- Anomaly C – determined to be a former building foundation.
- Anomaly D – determined to be a metal pipe.
- Anomaly E – determined to be a metal pipe.
- Anomaly F – determined to be a metal pipe.
- Anomaly G – determined to be a buried presumed large radiator unit.
- Anomaly H – determined to be metal piping.
- Anomaly I – determined to be a metal plate.
- Anomaly J – likely related to remnants of building foundations.

3.2 Site Geology/Hydrogeology

The overburden geology observed during the investigation activities is generally described as fill materials ranging in depths between 0.5 fbgs and 6 fbgs and even to at least the bottom of certain test pits at 7-8 fbgs (i.e., BMTP-2, BMTP-5, and BMTP-12). Fill materials consisted of cinders/black fines, sand, and gravel with fragments of brick and concrete. Ash was noted intermingled with fill materials at BMTP-1, BMTP-2, and BMTP-7 and a yellow material with coal was noted in fill at BMTP-3. Miscellaneous debris/solid waste, as further discussed above and in the table below, was encountered at BMTP-2, BMTP-5, BMTP-7, BMTP-8, BMTP-11, and BMTP-12. Native soils beneath fill materials consisted of sand with silt or sandy lean clay.

Groundwater was not encountered during TurnKey's work. However, during previous drilling work by others, groundwater was noted at depths ranging between four fbgs and eight fbgs.

Groundwater flow is likely to the north towards Scajaquada Creek or west toward Lake Erie. Local groundwater flow, however, may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions.

3.3 Field Observations

Soil samples from the test pit investigation were observed and scanned via headspace screening for total volatile organics using a PID. A brief description of the field observations during the boring investigation is presented below:

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
BMTP-1	Anomaly C on the northwest portion of the Site and general Site conditions.	0.0 ppm throughout boring.	Fill to 3 fbgs. Former building foundation encountered.
BMTP-2	Anomaly G east of existing north-most building and general Site conditions.	0.0 ppm throughout boring.	Fill to at least 7 fbgs. Large, presumed radiator unit encountered.
BMTP-3	Anomaly H on north-central portion of the Site and general Site conditions.	0.0 ppm throughout boring.	Fill to 1.5 fbgs., metal piping encountered.
BMTP-4	Former gasoline UST area per historic Sanborn maps.	0.0 ppm throughout boring.	None
BMTP-5	Anomaly A on the north portion of the Site.	0.0 ppm throughout boring.	Fill to at least 8 fbgs. Former building foundation encountered.
BMTP-6	Anomaly D on the east portion of the Site.	0.0 ppm throughout boring.	Fill to at least 2 fbgs, metal piping encountered.
BMTP-7	Anomaly E on the east portion of the Site.	0.0 ppm throughout boring.	Fill to at least 2 fbgs, metal piping encountered.
BMTP-8	Anomaly F on the east portion of the Site.	0.0 ppm throughout boring.	Metal piping encountered at 6 inches.
BMTP-9	Anomaly I on the central portion of the Site, north of a loading ramp.	0.0 ppm throughout boring.	Metal plate encountered.
BMTP-10	Anomaly J/ former buildings on the south part of the Site.	0.0 ppm throughout boring.	Fill to 0.5 fbgs. Remnants of building foundations encountered.

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
BMTP-11	Site conditions east of south-most building and proximate to former buildings	0.0 ppm throughout boring.	Fill to 0.5 fbgs.
BMTP-12	Anomaly J/ former buildings on south part of Site.	0.0 ppm throughout boring.	Fill to at least 8 fbgs. Remnants of building foundations encountered.
BMTP-13	Anomaly B/ former buildings on northeast portion of the Site.	0.0 ppm throughout boring.	Fill to 5 fbgs. Former building foundation encountered.
BMTP-14	Anomaly B/ former buildings on northeast portion of the Site.	0.0 ppm throughout boring.	Fill to 6 fbgs. Former building foundations encountered.
BMTP-15	Site conditions on the east-central portion of the Site.	0.0 ppm throughout boring.	Fill to 0.75 fbgs. Remnants of building foundations encountered.

3.4 Soil Analytical Results

Table 1 presents a summary of the detected PAHs and metals for each of the twelve soil/fill samples selected for laboratory analysis from TurnKey's investigation. Figure 3 includes a summary of laboratory analytical results from TurnKey's investigation and previous assessments by others.

For comparative purposes, Table 1 includes 6NYCRR Part 375 Unrestricted, Restricted-Residential, Commercial and Industrial Use Soil Cleanup Objectives (USCOs, RRSCOs, CSCOs and ISCOs, respectively). Part 375 SCOs are specific to the intended reuse of the site and are typically employed for comparison at other remediation sites with NYSDEC oversight, such as Brownfield sites. Based upon current zoning and the anticipated future use of the site in a residential capacity (affordable housing), the RRSCOs were considered the most applicable comparative criteria. A copy of the laboratory analytical data package is included in Appendix D.

As summarized on Table 1 and Figure 3, PAHs and/or metals were identified at concentrations exceeding USCOs, RRSCOs, CSCOs and/or ISCOs in all 12 soil/fill samples collected from across the Site. Specifically, in regard to PAHs, individual concentrations exceeded their respective ISCOs at 8 sample locations (BMTP-1, BMTP-3, BMTP-5, BMTP-10, BMTP-11, BMTP-12, BMTP-13, and BMTP-15). The highest total PAH concentrations, which would be considered hot spots if the Site were in a regulatory program, were 7,953

milligrams per kilogram (mg/kg) at BMTP-1 (1-3 ft), 843 mg/kg at BMTP-11, and 6,461 mg/kg at BMTP-12.

Metals (arsenic, barium, cadmium, chromium, lead and/or mercury) were identified at concentrations exceeding USCOs, RRSCOs, CSCOs and/or ISCOs in 10 of the 12 soil/fill sample locations. Of note, arsenic exceeded its ISCO at BMTP-14 (18.1 mg/kg) and barium exceeded its respective CSCO at BMTP-3 (415 mg/kg) and BMTP-14 (472 mg/kg). The highest total lead concentration, which exceeds its ISCO, was identified at BMTP-11 (7,120 mg/kg). Additional lead concentrations exceeding its RRSCO and/or CSCO were identified at BMTP-1 (795 mg/kg), BMTP-3 (566 mg/kg), BMTP-6 (747 mg/kg), BMTP-13 (967 mg/kg), and BMTP-14 (3,060 mg/kg). Mercury exceeded its RRSCO at BMTP-13 (0.82 mg/kg), BMTP-13 (1.1 mg/kg), and BMTP-14 (0.9 mg/kg).

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of Phase II investigation activities at the Site, TurnKey offers the following conclusions and recommendations:

- The Site is slated for redevelopment as an affordable housing project.
- The Site has a history of automotive painting, automotive repair, laundry/drycleaning, an oil warehouse, a machine shop, sign painting and manufacturing, ice housing, bottling with bottle washing, and pasteurizing. One gasoline UST was identified on the north-central part of the Site from at least 1926 through at least 1950 and an additional gasoline UST was identified off-site within the Jefferson Avenue right-of-way (east adjacent to a former sheet metal shop and auto painting operation) from at least 1926 through at least 1950.
- Fill materials were observed across the Site during TurnKey's investigation at depths ranging between 0.5 fbgs and 6 fbgs and even to at least the bottom of certain test pits at 7-8 fbgs. Fill materials generally consisted of cinders/black fines, ash, sand, and/or gravel with fragments of brick and concrete.
- As further detailed below and on Figure 3, laboratory analysis of fill samples collected from across the Site revealed environmental impacts with concentrations exceeding RRSCOs (i.e., the applicable SCO for the planned redevelopment) from each subject parcel.
- A geophysical assessment completed across accessible exterior portions of the Site identified subsurface metallic anomalies. TurnKey's test pit investigation confirmed that anomalies are associated with buried metal debris/solid waste, including disconnected pipes, and a large, presumed radiator unit. No evidence of an UST was encountered during the work.
- Previous Phase II activities by others, summarized on Figure 3, identified widespread soil/fill impacts with elevated concentrations of PAHs and metals, and to a lesser extent petroleum, with concentrations exceeding their respective RRSCOs (the most applicable SCO for the Site). In addition, groundwater sampling at the Site revealed a chlorinated VOC (TCE) and petroleum VOCs (benzene and MtBE) in groundwater at elevated concentrations exceeding their respective GWQS. Sub-slab vapor sampling in the northern-most existing building at the Site revealed TCE at concentrations above its mitigation threshold at two sub-slab sample locations.
- TurnKey's Phase II revealed the presence of additional soil/fill impacts across the Site with concentrations of PAHs and/or metals exceeding their respective

RRSCOs in 11 of 12 soil/fill samples collected from the Site (see Figure 3). Of note, the highest total PAH concentrations, which would be considered hot spots if the Site were in a regulatory program, were 7,953 mg/kg at BMTP-1 (1-3 ft), 843 mg/kg at BMTP-11, and 6,461 mg/kg at BMTP-12. In addition, arsenic exceeded its ISCO at BMTP-14 (18.1 mg/kg), barium exceeded its respective CSCO at BMTP-3 (415 mg/kg) and BMTP-14 (472 mg/kg), and lead exceeded its ISCO at BMTP-11 (7,120 mg/kg) and its CSCO at BMTP-14 (3060 mg/kg).

We understand that the Site is being considered for redevelopment. Based on the findings detailed above, the Site is a potential candidate for the New York State BCP. Regardless of whether the BCP is pursued, impacted soil/fill materials present on-Site will require exposure control, remediation, and/or proper soil management either prior to or during the redevelopment project.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of the CB Emmanuel. The contents of this report are limited to information available at the time of the Site investigation activities and to data referenced herein, and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of CB Emmanuel. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

TABLES

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS

JEFFERSON AND BEST SITE
BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs[2]	Restricted Residential Use SCOs[2]	Commercial Use SCOs[2]	Industrial Use SCOs[2]	SAMPLE LOCATION (DEPTH)											
					BMTP-1 1-3 ft	BMTP-3 0-1.5 ft	BMTP-5 4-6 ft	BMTP-6 1-2 ft	BMTP-7 1-2 ft	BMTP-10 0-0.5 ft	BMTP-11 0-0.5 ft	BMTP-12 1-3 ft	BMTP-13 1-3 ft	BMTP-13 3-5 ft	BMTP-14 0-0.5 ft	BMTP-15 0-0.5 ft
Sample Date					04/17/2023											
Polyaromatic Hydrocarbons (PAHs) [3]																
Acenaphthene	**20**	**100**	**500**	**1000**	**120**	ND	0.29 J	ND	0.18 J	0.46 J	15 J	**41 J**	ND	ND	0.24 J	ND
Acenaphthylene	**100**	**100**	**500**	**1000**	19	ND	0.13 J	ND	ND	ND	ND	31 J	0.8 J	ND	ND	ND
Anthracene	**100**	**100**	**500**	**1000**	**260**	0.69 J	0.73 J	ND	0.32	1.5	24 J	**160**	0.93 J	ND	0.45 J	0.63 J
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	**550**	**1.5 J**	**2.1**	0.13 J	0.61	**3.3**	**62**	**530**	**3.2**	0.28 J	0.85 J	**1.8 J**
Benzo(a)pyrene	**1**	**1**	**1**	**1.1**	**540**	**1.4 J**	**2.2**	ND	0.59	**3.1**	**61**	**560**	**3.4**	0.32 J	0.86 J	**1.8 J**
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	**680**	**1.7 J**	**2.7**	ND	0.64	**3.6**	**79**	**640**	**3.9**	0.34 J	1	**2.2**
Benzo(ghi)perylene	**100**	**100**	**500**	**1000**	**340**	0.78 J	1.4	ND	0.32	1.8	33 J	**320**	2.1	0.22 J	0.49 J	0.91 J
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	**110**	**320**	**0.89 J**	**1.1**	ND	0.27	**1.5**	**31 J**	**270**	**1.5 J**	0.21 J	0.4 J	**0.85 J**
Chrysene	**1**	**3.9**	**56**	**110**	**550**	**1.5 J**	**2.3**	ND	0.6	**3.5**	**70**	**510**	**2.9**	0.33 J	0.91 J	**1.9**
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	**1.1**	**100**	ND	**0.4 J**	ND	0.1 J	**0.56 J**	**11 J**	**84**	**0.57 J**	ND	ND	ND
Fluoranthene	**100**	**100**	**500**	**1000**	**1500**	3.5	4.6	0.15 J	1.2	7.4	**170**	**1300**	7.4	0.62 J	2.2	3.7
Fluorene	**30**	**100**	**500**	**1000**	**150**	0.3 J	0.42 J	ND	0.12 J	0.77 J	13 J	**53**	0.33 J	ND	0.21 J	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	**330**	**0.76 J**	**1.3**	ND	0.29	**1.7**	**34 J**	**310**	**1.8 J**	0.2 J	0.47 J	**0.89 J**
Naphthalene	**12**	**100**	**500**	**1000**	**94**	ND	0.39 J	ND	0.042 J	0.49 J	ND	12 J	0.33 J	ND	ND	ND
Phenanthrene	**100**	**100**	**500**	**1000**	**1300**	2.6	3.6	ND	1.2	5.8	**130**	**640**	2.9	0.36 J	1.9	2.2
Pyrene	**100**	**100**	**500**	**1000**	**1100**	2.4	3.6	0.16 J	1.2	5.8	**110**	**1000**	6.2	0.48 J	1.7	2.8
Total PAHs	**100**	**100**	**500**	**1000**	**7953**	18.02 J	27.26 J	0.44 J	7.682 J	41.28 J	**843 J**	**6461 J**	38.26 J	3.36 J	11.68 J	19.68 J
Metals - mg/Kg																
Arsenic	**13**	**16**	**16**	**16**	5.9 J	8.3 J	7.4 J	7.5 J	5.9 J	4.3 J	4.9 J	5 J	11.5 J	8.7 J	**18.1 J**	4.3 J
Barium	**350**	**400**	**400**	**10,000**	74.6	**415**	122	124	71.9	66.7	207	83.6	193	146	**472**	43 JF1F2
Cadmium	**2.5**	**4.3**	**9.3**	**60**	**3.1 J**	**3 J**	0.51 J	0.47 J	0.2 J	0.25 J	2.5 J	0.67 J	1.5 J	0.54 J	2.5 J	1.3 J
Chromium	**31**	**180**	**1500**	**6800**	**101**	**171**	21.3 J	29.2 J	18 J	16.8 J	**98.6 J**	20.4 J	24.7 J	25.5 J	**32.4 J**	**87.8 F1**
Lead	**64**	**400**	**1000**	**3900**	**795**	**566**	**256**	**747**	**90.5 J**	44 J	**7120**	62.2 J	**967**	19.3 J	**3060**	**166 F1**
Mercury	**0.18**	**0.81**	**2.8**	**5.7**	0.13 F1F2	0.067	**0.49**	**0.28**	0.079	0.044	0.086	0.048	**0.82**	**1.1**	**0.9**	0.064
Selenium	**3.9**	**180**	**1500**	**6800**	ND	ND	ND	0.62 J	ND	ND	ND	ND	1.1 J	1.8 J	ND	ND
Silver	**2**	**180**	**1500**	**6800**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCLs

Definitions:

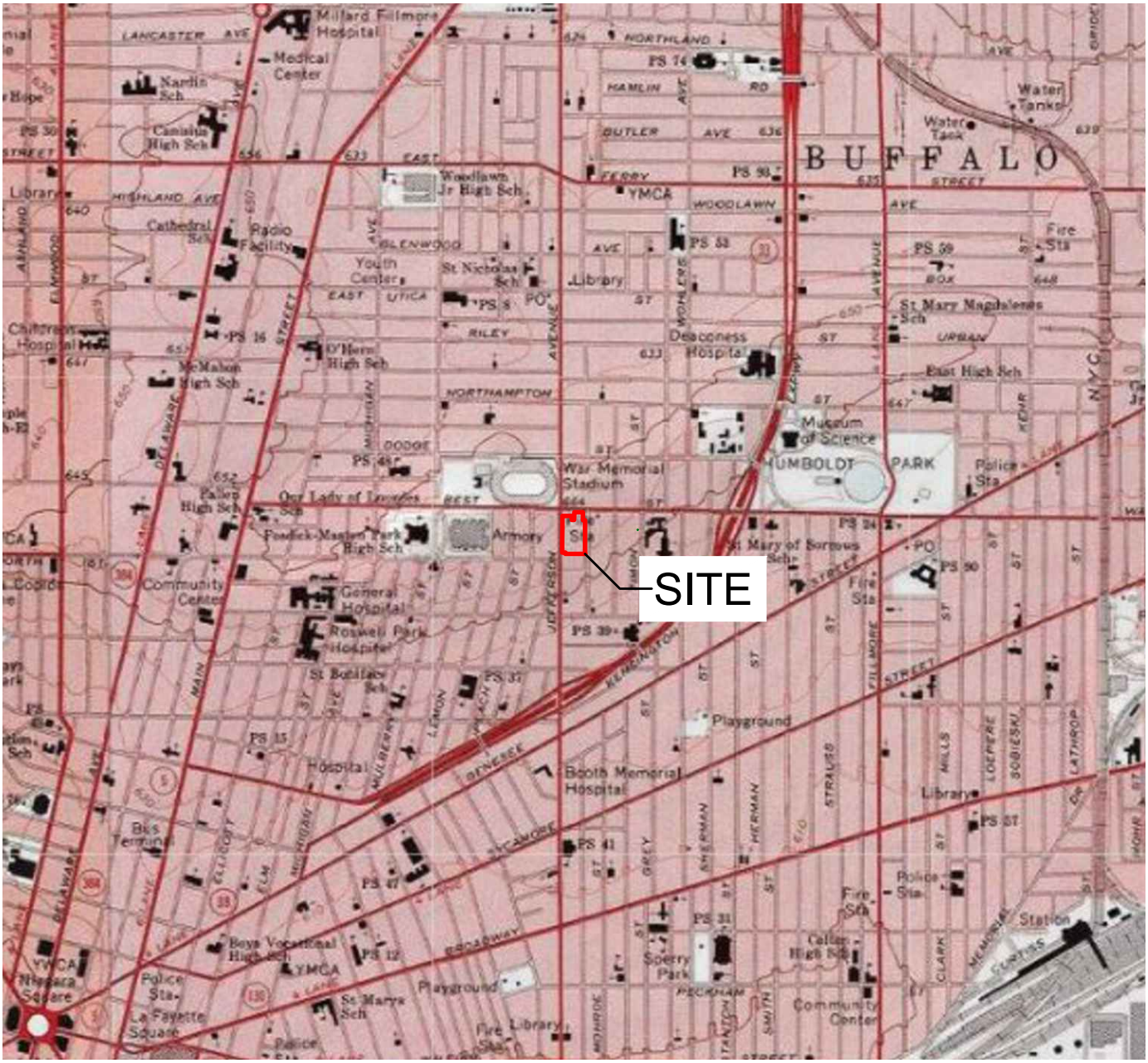
ND = Parameter not detected above laboratory detection limit.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
F1= MS and/or MSD recovery exceeds control limits.
F2 = MS/MSD RPD exceeds control limits.

Bold	: Results exceed Unrestricted Use SCOs
Bold	: Results exceed Restricted Residential Use SCOs
Bold	: Results exceed Commercial Use SCOs
Bold	: Results exceed Industrial Use SCOs

FIGURES

FIGURE 1

F:\CAD\TurnKey\CB Emanuel\Jefferson and Best\Phase II\Figure 1; Site Location and Vicinity Map.dwg



TurnKey Environmental Restoration, LLC

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: T0562-023-001

DATE: MAY 2023

DRAFTED BY: CMS

SITE LOCATION AND VICINITY MAP

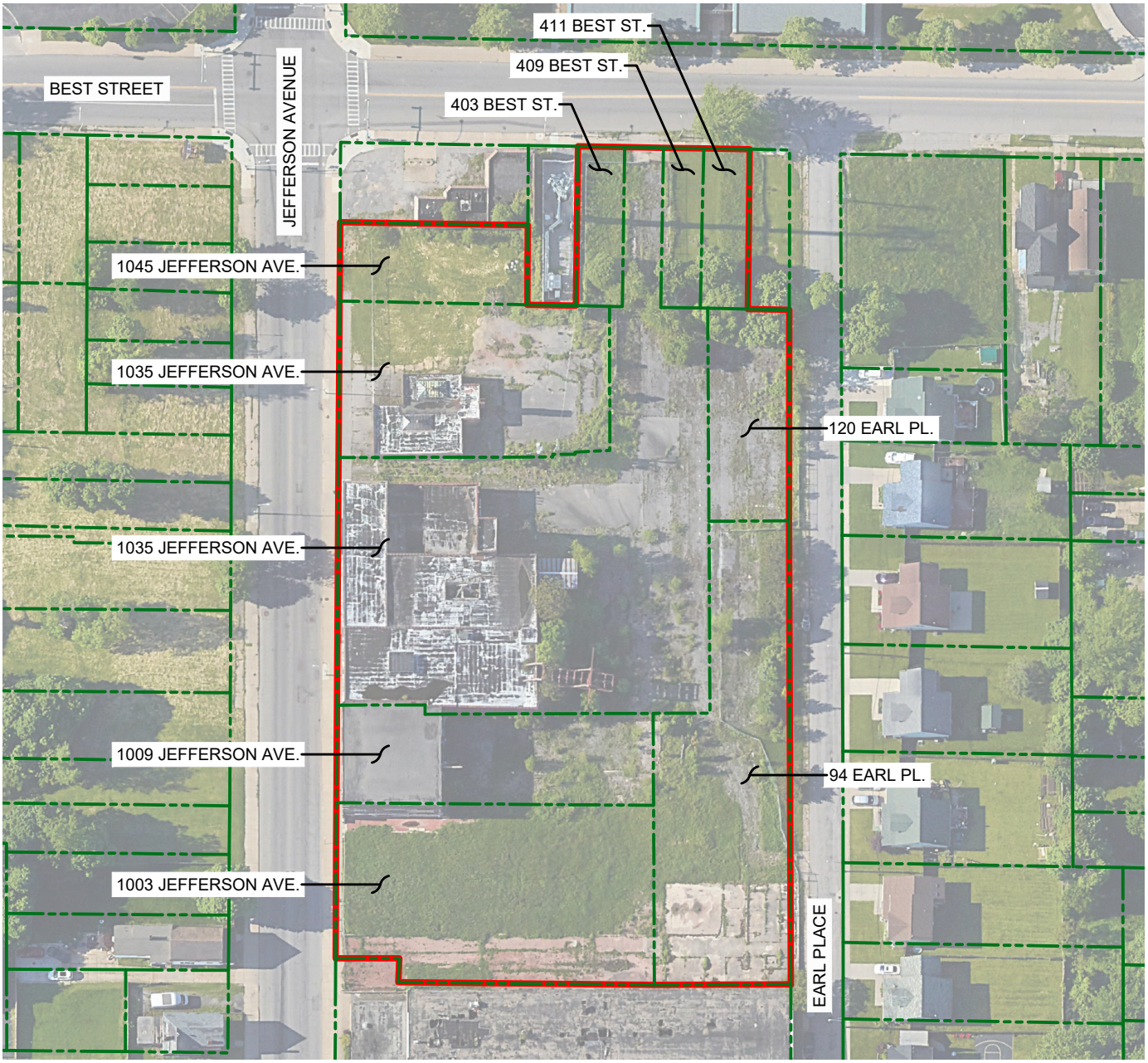
SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTGATION

JEFFERSON AND BEST SITE
BUFFALO, NEW YORK

PREPARED FOR
CB EMMANUEL

FIGURE 2

F:\CAD\TurnKey\CB Emanuel\Jefferson and Best\Phase II\Figure 2; Site Plan (Aerial).dwg



N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

LEGEND:

PROPERTY BOUNDARY

PARCEL BOUNDARY

TurnKey Environmental Restoration, LLC

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: T0562-023-001

DATE: MAY 2023

DRAFTED BY: CMS

SITE PLAN (AERIAL)

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTGATION

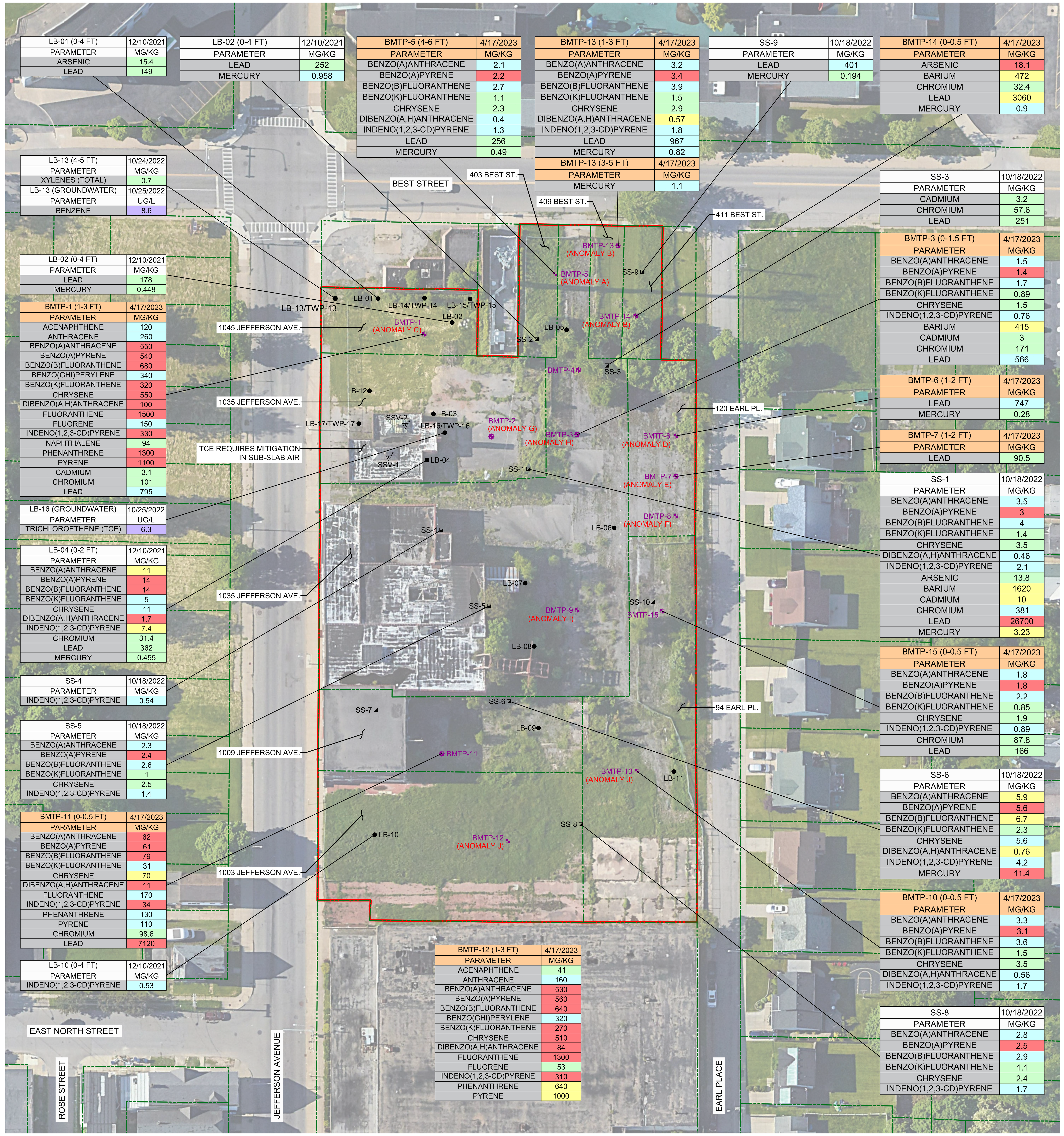
JEFFERSON AND BEST SITE
BUFFALO, NEW YORK

PREPARED FOR
CB EMMANUEL

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- BMTP-1 — SUPPLEMENTAL PHASE II TEST PIT (TURNKEY, APRIL 2023)
- SB-1 — PHASE II SOIL BORING (LIRO, DECEMBER 2021)
- SS-1 — SURFACE SOIL SAMPLE (LIRO, OCTOBER 2022)
- SUB-1 — SUBSLAB VAPOR (LIRO, OCTOBER 2022)
- EXCEEDS UNRESTRICTED USE SCOs[2]
- EXCEEDS RESTRICTED-RESIDENTIAL USE SCOs[2]
- EXCEEDS COMMERCIAL USE SCOs[2]
- EXCEEDS INDUSTRIAL USE SCOs[2]
- EXCEEDS CLASS GA GROUNDWATER QUALITY STANDARDS[3]

NOTES:
1. IMAGE TAKEN FROM GOOGLE EARTH 2022.
2. ANOMALY LOCATIONS IDENITIFIED AS 'ANOMALY A' THROUGH 'ANOMALY J' NOTED IN GEOPHYSICAL SURVEY RESULTS LETTER REPORT BY MADDAN GEOPHYSICS LLC IN APRIL 2023.
3. RESULTS COMPARED TO 6 NYCRR PART 375 SOIL CLEANUP OBJECTIVES (SCOs).
4. RESULTS COMPARED TO DIVISION OF WATER TECHNICAL AND OPERATIONAL GUIDANCE SERIES (1.1.1) AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES AND GROUNDWATER EFFLUENT LIMITATIONS



LB-01 (0-4 FT)	12/10/2021
PARAMETER	MG/KG
ARSENIC	15.4
LEAD	149

LB-02 (0-4 FT)	12/10/2021
PARAMETER	MG/KG
LEAD	252
MERCURY	0.958

BMTP-5 (4-6 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	2.1
BENZO(A)PYRENE	2.2
BENZO(B)FLUORANTHENE	2.7
BENZO(K)FLUORANTHENE	1.1
CHRYSENE	2.3
DIBENZO(A,H)ANTHRACENE	0.4
INDENO(1,2,3-CD)PYRENE	1.3
LEAD	256
MERCURY	0.49

BMTP-13 (1-3 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	3.2
BENZO(A)PYRENE	3.4
BENZO(B)FLUORANTHENE	3.9
BENZO(K)FLUORANTHENE	1.5
CHRYSENE	2.9
DIBENZO(A,H)ANTHRACENE	0.57
INDENO(1,2,3-CD)PYRENE	1.8
LEAD	967
MERCURY	0.82
BMTP-13 (3-5 FT)	4/17/2023
PARAMETER	MG/KG
MERCURY	1.1

SS-9	10/18/2022
PARAMETER	MG/KG
LEAD	401
MERCURY	0.194

BMTP-14 (0-0.5 FT)	4/17/2023
PARAMETER	MG/KG
ARSENIC	18.1
BARIUM	472
CHROMIUM	32.4
LEAD	3060
MERCURY	0.9

LB-13 (4-5 FT)	10/24/2022
PARAMETER	MG/KG
XYLENES (TOTAL)	0.7
LB-13 (GROUNDWATER)	10/25/2022
PARAMETER	UG/L
BENZENE	8.6

LB-02 (0-4 FT)	12/10/2021
PARAMETER	MG/KG
LEAD	178
MERCURY	0.448

BMTP-1 (1-3 FT)	4/17/2023
PARAMETER	MG/KG
ACENAPHTHENE	120
ANTHRACENE	260
BENZO(A)ANTHRACENE	550
BENZO(A)PYRENE	540
BENZO(B)FLUORANTHENE	680
BENZO(GHI)PERYLENE	340
BENZO(K)FLUORANTHENE	320
CHRYSENE	550
DIBENZO(A,H)ANTHRACENE	100
FLUORANTHENE	1500
FLUORENE	150
INDENO(1,2,3-CD)PYRENE	330
NAPHTHALENE	94
PHENANTHRENE	1300
PYRENE	1100
CADMIUM	3.1
CHROMIUM	101
LEAD	795

LB-16 (GROUNDWATER)	10/25/2022
PARAMETER	UG/L
TRICHLOROETHENE (TCE)	6.3

LB-04 (0-2 FT)	12/10/2021
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	11
BENZO(A)PYRENE	14
BENZO(B)FLUORANTHENE	14
BENZO(K)FLUORANTHENE	5
CHRYSENE	11
DIBENZO(A,H)ANTHRACENE	1.7
INDENO(1,2,3-CD)PYRENE	7.4
CHROMIUM	31.4
LEAD	362
MERCURY	0.455

SS-4	10/18/2022
PARAMETER	MG/KG
INDENO(1,2,3-CD)PYRENE	0.54

SS-5	10/18/2022
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	2.3
BENZO(A)PYRENE	2.4
BENZO(B)FLUORANTHENE	2.6
BENZO(K)FLUORANTHENE	1
CHRYSENE	2.5
INDENO(1,2,3-CD)PYRENE	1.4

BMTP-11 (0-0.5 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	62
BENZO(A)PYRENE	61
BENZO(B)FLUORANTHENE	79
BENZO(K)FLUORANTHENE	31
CHRYSENE	70
DIBENZO(A,H)ANTHRACENE	11
FLUORANTHENE	170
INDENO(1,2,3-CD)PYRENE	34
PHENANTHRENE	130
PYRENE	110
CHROMIUM	98.6
LEAD	7120

LB-10 (0-4 FT)	12/10/2021
PARAMETER	MG/KG
INDENO(1,2,3-CD)PYRENE	0.53

BMTP-12 (1-3 FT)	4/17/2023
PARAMETER	MG/KG
ACENAPHTHENE	41
ANTHRACENE	160
BENZO(A)ANTHRACENE	530
BENZO(A)PYRENE	560
BENZO(B)FLUORANTHENE	640
BENZO(GHI)PERYLENE	320
BENZO(K)FLUORANTHENE	270
CHRYSENE	510
DIBENZO(A,H)ANTHRACENE	84
FLUORANTHENE	1300
FLUORENE	53
INDENO(1,2,3-CD)PYRENE	310
PHENANTHRENE	640
PYRENE	1000

SS-3	10/18/2022
PARAMETER	MG/KG
CADMIUM	3.2
CHROMIUM	57.6
LEAD	251

BMTP-3 (0-1.5 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.5
BENZO(A)PYRENE	1.4
BENZO(B)FLUORANTHENE	1.7
BENZO(K)FLUORANTHENE	0.89
CHRYSENE	1.5
INDENO(1,2,3-CD)PYRENE	0.76
BARIUM	415
CADMIUM	3
CHROMIUM	171
LEAD	566

BMTP-6 (1-2 FT)	4/17/2023
PARAMETER	MG/KG
LEAD	747
MERCURY	0.28

BMTP-7 (1-2 FT)	4/17/2023
PARAMETER	MG/KG
LEAD	90.5

SS-1	10/18/2022
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	3.5
BENZO(A)PYRENE	3
BENZO(B)FLUORANTHENE	4
BENZO(K)FLUORANTHENE	1.4
CHRYSENE	3.5
DIBENZO(A,H)ANTHRACENE	0.46
INDENO(1,2,3-CD)PYRENE	2.1
ARSENIC	13.8
BARIUM	1620
CADMIUM	10
CHROMIUM	381
LEAD	26700
MERCURY	3.23

BMTP-15 (0-0.5 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	1.8
BENZO(A)PYRENE	1.8
BENZO(B)FLUORANTHENE	2.2
BENZO(K)FLUORANTHENE	0.85
CHRYSENE	1.9
INDENO(1,2,3-CD)PYRENE	0.89
CHROMIUM	87.8
LEAD	166

SS-6	10/18/2022
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	5.9
BENZO(A)PYRENE	5.6
BENZO(B)FLUORANTHENE	6.7
BENZO(K)FLUORANTHENE	2.3
CHRYSENE	5.6
DIBENZO(A,H)ANTHRACENE	0.76
INDENO(1,2,3-CD)PYRENE	4.2
MERCURY	11.4

BMTP-10 (0-0.5 FT)	4/17/2023
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	3.3
BENZO(A)PYRENE	3.1
BENZO(B)FLUORANTHENE	3.6
BENZO(K)FLUORANTHENE	1.5
CHRYSENE	3.5
DIBENZO(A,H)ANTHRACENE	0.56
INDENO(1,2,3-CD)PYRENE	1.7

SS-8	10/18/2022
PARAMETER	MG/KG
BENZO(A)ANTHRACENE	2.8
BENZO(A)PYRENE	2.5
BENZO(B)FLUORANTHENE	2.9
BENZO(K)FLUORANTHENE	1.1
CHRYSENE	2.4
INDENO(1,2,3-CD)PYRENE	1.7

TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: T0562-023-001

REVISIONS

NO.	BY	DATE	REMARKS

SEAL

DRAWN BY: CMS
DATE: MAY 2023
CHECKED BY: MAL
APPROVED BY:

INVESTIGATION LOCATIONS AND AREAS OF CONCERN

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION
JEFFERSON AND BEST SITE
BUFFALO, NEW YORK

PREPARED FOR
CB EMMANUEL

FIGURE 3

APPENDIX A

TEST PIT LOGS

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-1

Logged By: NAS

Checked By: BWM

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2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Brown/ white/ black/ red, moist, mostly fill (cinders, brick, ash, concrete), some fine sand, medium dense, no odors		0.0	Sampled (1-3 ft)	
	-3.0 / 3.0	***Fine sand with silt*** Brown, moist, mostly fine sand, little silt, medium dense, no odors		0.0		
5.0				0.0		
	-7.0 / 7.0	End of Test Pit		0.0		
10.0						

PID VOCs ppm scale: 0 25 50 75 100

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***2*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***7*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-2

Logged By: NAS

Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Grey/white, moist, mostly fill (ash, brick, concrete, limestone, metal piping), encountered suspect radiator, some fine sand, loose when disturbed, no odors		0.0		
				0.0		
				0.0		
				0.0		
				0.0		
5.0				0.0		
				0.0		
	-7.0			0.0		
	7.0	End of Test Pit				
10.0						

PID VOCs ppm scale: 0 25 50 75 100

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***4*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***7*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-3

Logged By: NAS

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Brown/yellow/black, moist, mostly fine sand, some fill (yellow material, coal), medium dense, no odors		0.0	Sampled (0-1.5 ft)	
	-1.5			0.0		
	1.5	***Fine Sand with Silt*** Brown, moist, mostly fine sand, little silt, medium dense, no odors		0.0		
				0.0		
				0.0		
5.0	-5.0			0.0		
	5.0	End of Test Pit				
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***5*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-4

Logged By: NAS

Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fine sand and gravel*** Grey, moist, mostly fine sand, some medium sand, little subangular gravel, medium dense, no odors		0.0 0.0		
	-1.5 1.5	***Sandy Lean Clay*** Brown, moist, mostly lean clay, some fine sand, stiff, no odors		0.0 0.0 0.0		
5.0	-5.0 5.0	End of Test Pit				
10.0						

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***2*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***5*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001
Project: Jefferson and Best Site
Client: CB Emmanuel
Site Location: Buffalo, NY

Test Pit I.D.: BMTP-5
Logged By: NAS
Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Reworked Fine sand with Fill*** Brown, moist, mostly fine sand, some fill (subangular gravel, concrete, brick, asphalt, metal, wood, plastic), loose when disturbed, no odors		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Sampled (4-6 ft)	
	-8.0 8.0	End of Test Pit				
5.0						
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***8*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-6

Logged By: NAS

Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Asphalt***				
	-0.3 / 0.3	***Subangular Gravel*** Grey, moist, mostly subangular gravel, little fine sand, loose when disturbed, no odors		0.0		
	-0.5 / 0.5	***Fill*** Grey, moist, mostly fine sand, little fill (cinders, black fines), loose when disturbed, no odors		0.0	Sampled (1-2 ft)	
	-2.0 / 2.0	***Fine sand with Silt*** Brown, moist, mostly fine sand, some silt, medium dense, no odors		0.0		
				0.0		
				0.0		
5.0	-5.0 / 5.0	End of Test Pit		0.0		
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***5*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001	***Test Pit I.D.:*** BMTP-7
Project: Jefferson and Best Site	***Logged By:*** NAS
Client: CB Emmanuel	***Checked By:*** BWM
Site Location: Buffalo, NY	

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0 / -0.3	***Asphalt***				
	0.3 / -0.5	***Subangular Gravel*** Grey, moist, mostly subangular gravel, little fine sand, loose when disturbed, no odors		0.0		
	0.5 / -2.0	***Fill*** Black, moist, mostly fine sand, some fill (ash, cinders, metal piping), medium dense, no odors		0.0; 0.0	Sampled (1-2 ft)	
	2.0 / -4.0	***Fine sand with Silt*** Brown, moist, mostly fine sand, some silt, medium dense, no odors		0.0; 0.0		
	4.0	End of Test Pit				
5.0						
10.0						

Excavated By: TurnKey Environmental Restoration
Excavator Type: Kubota Mini Excavator KX040
Excavation Date(s): 4/17/2023
Comments:

Length: 10
Width: 3
Depth: 4

Depth to Water: N/A
Visual Impacts: None
Olfactory Observations: None

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-8

Logged By: NAS

Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0 -0.3	***Asphalt***				
	0.3 -0.5	***Subangular Gravel***				
	0.5	Grey, moist, mostly subangular gravel, little fine sand, steel pipe at 6 inches, loose when disturbed, no odors		0.0		
		Fine sand with Silt		0.0		
		Brown, moist, mostly fine sand, some silt, medium dense, no odors		0.0		
				0.0		
				0.0		
5.0	-5.0 5.0	End of Test Pit				
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***5*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001
Project: Jefferson and Best Site
Client: CB Emmanuel
Site Location: Buffalo, NY

Test Pit I.D.: BMTP-9
Logged By: NAS
Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface			
	0.0 / -0.3	***Asphalt***			
	0.3 / -0.8	***Subangular Gravel*** Grey, moist, mostly subangular gravel, little fine sand, loose when disturbed, no odors	0.0		
	0.8 / -6.0	***Fine sand with Silt*** Brown, moist, mostly fine sand, some silt, medium dense, no odors	0.0, 0.0, 0.0, 0.0, 0.0, 0.0		
5.0					
	6.0	End of Test Pit			
10.0					

PID scale: 0, 25, 50, 75, 100 ppm

Excavated By: TurnKey Environmental Restoration	*Length: 10*	*Depth to Water: N/A*
Excavator Type: Kubota Mini Excavator KX040	*Width: 3*	*Visual Impacts: None*
Excavation Date(s): 4/17/2023	*Depth: 6*	*Olfactory Observations: None*
Comments:		

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-10

Logged By: NAS

Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Subangular Gravel with fill*** Grey, moist, mostly subangular gravel, little fine sand, trace fill (cinders, black fines) loose when disturbed, no odors		0.0	Sampled (0-0.5 ft)	
	-0.5 0.5	***Sandy Lean Clay*** Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors		0.0		
				0.0		
				0.0		
	-4.0 4.0	End of Test Pit		0.0		
5.0						
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: TurnKey Environmental Restoration ***Length: 10*** ***Depth to Water: N/A***
Excavator Type: Kubota Mini Excavator KX040 ***Width: 3*** ***Visual Impacts: None***
Excavation Date(s): 4/17/2023 ***Depth: 4*** ***Olfactory Observations: None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-11

Logged By: NAS

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand, some fill (black fines, cinders, metal pieces), loose when disturbed, no odors		0.0	Sampled (0-0.5 ft)	
	-0.5 / 0.5					
	-0.8 / 0.8	***Asphalt***		0.0		
	-1.0 / 1.0	***Subangular Gravel*** Grey, moist, mostly subangular gravel, some fine sand, loose when disturbed, no odors		0.0		
		Fine Sand and Silt Tan, moist, mostly fine sand, some silt, medium dense, no odors		0.0		
				0.0		
				0.0		
5.0	-5.0 / 5.0	End of Test Pit				
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***5*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001
Project: Jefferson and Best Site
Client: CB Emmanuel
Site Location: Buffalo, NY

Test Pit I.D.: BMTP-12
Logged By: NAS
Checked By: BWM

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SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Brown/black, moist, mostly fill (cinders, black fines, brick, fire brick, metal rebar, metal piping, conduit, concrete), loose when disturbed, no odors		0.0	Sampled (1-3 ft)	
				0.0		
				0.0		
				0.0		
5.0				0.0		
				0.0		
				0.0		
	-8.0			0.0		
	8.0	End of Test Pit				
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***8*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-13

Logged By: NAS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil*** Brown, moist, mostly silty sand, medium dense, no odors		0.0		
	-0.4 / 0.4	***Fill*** Grey/brown/black, moist, mostly fill (cinders, black fines, concrete, brick, gravel), some fine sand, loose when disturbed, no odors		0.0		
				0.0	Sampled (1-3 ft)	
				0.0		
				0.0	Sampled (3-5 ft)	
5.0	-5.0 / 5.0	***Sandy Lean Clay*** Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors		0.0		
	-6.0 / 6.0	End of Test Pit		0.0		
10.0						

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***6*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-14

Logged By: NAS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil*** Brown, moist, mostly silty sand, medium dense, no odors		0.0	Sampled (0-0.5 ft)	
		Fill Black/brown/grey, moist, mostly fill (concrete, brick, limestone, cinders), loose when disturbed, no odors		0.0		
				0.0		
				0.0		
5.0				0.0		
				0.0		
	-6.0 6.0	***Sandy Lean Clay*** Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors		0.0		
	-7.0 7.0	End of Test Pit		0.0		
10.0						

PID VOCs: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***7*** ***Olfactory Observations:*** ***None***
Comments:

TEST PIT EXCAVATION LOG

Project No: T0562-023-001

Project: Jefferson and Best Site

Client: CB Emmanuel

Site Location: Buffalo, NY

Test Pit I.D.: BMTP-15

Logged By: NAS

Checked By: BWM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fill (black fines, cinders, subangular gravel), some fine sand, loose when disturbed, no odors		0.0	Sampled (0-0.5 ft)	
	-0.8 0.8	***Sandy Lean Clay*** Reddish brown, moist, mostly lean clay, some fine sand, stiff, no odors		0.0		
				0.0		
				0.0		
				0.0		
5.0				0.0		
				0.0		
				0.0		
	-8.0 8.0	End of Test Pit		0.0		
10.0						

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: ***TurnKey Environmental Restoration*** ***Length:*** ***10*** ***Depth to Water:*** ***N/A***
Excavator Type: ***Kubota Mini Excavator KX040*** ***Width:*** ***3*** ***Visual Impacts:*** ***None***
Excavation Date(s): ***4/17/2023*** ***Depth:*** ***8*** ***Olfactory Observations:*** ***None***
Comments:

APPENDIX B

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: View of BMTP-1.

Photo 2: View of BMTP-2.

Photo 3: View of BMTP-3.

Photo 4: View of BMTP-5.

Jefferson and Best Site Photo Date: April 17, 2023	TurnKey Environmental Restoration, LLC

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: View of BMTP-6.

Photo 6: View of BMTP-7.

Photo 7: View of BMTP-8.

Photo 8: View of BMTP-9.

Jefferson and Best Site Photo Date: April 17, 2023	TurnKey Environmental Restoration, LLC

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9: View of BMTP-10.

Photo 10: View of BMTP-11.

Photo 11: View of BMTP-12.

Photo 12: View of BMTP-13.

Jefferson and Best Site Photo Date: April 17, 2023	TurnKey Environmental Restoration, LLC

APPENDIX C

GEOPHYSICAL REPORT

Maddan Geophysics LLC

April 24, 2023

Bryan Mayback
Project Manager
TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

Transmitted via email to: Bryan Mayback < bmayback@bm-tk.com>

Dear Mr. Mayback:

Re: Geophysical Survey Results, Jefferson and Best, Buffalo, NY

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for Turnkey Environmental Restoration, LLC (Turnkey) in support of their environmental investigation of a property located at the south east corner of Jefferson Ave and Best St in Buffalo, NY (the Site). The purpose of the investigation was to explore for anomalies indicative of underground storage tanks (UST's).

The geophysical investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation, if warranted. The information provided herein is intended to assist Turnkey with their assessment of potential environmental concerns at the Site. Maddan Geophysics LLC (MADDAN) performed data acquisition between April 12 -16, 2023.

2.0 METHODOLOGY

A reference grid was installed at the Site to facilitate data acquisition along parallel survey lines spaced 3 feet apart. The grid was marked with orange and white spray paint and pin flags with select coordinates labeled to aid in the reoccupation of stations if necessary. Grid coordinate 200N,200E was established at the southeast corner of the main site building with grid North taken as the direction perpendicular to the north wall of that building

Time Domain Electromagnetic Survey Methodology (EM61)

The Geonics EM61 was used to map the distribution of buried metals at the Site. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator which

is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.

EM61 in use (Photo not from this site)

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at each station location. The instrument responses are recorded in units of milliVolts (mV). Data were recorded digitally by a data logger at a rate of approximately 2 measurements per foot along the survey lines which were spaced 3 feet apart.

3.0 RESULTS

The EM61 data for the Site are shown in Figure 1. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to ~30 mVolts) likely contain buried metals.

Ten anomalies or anomalous areas, labelled A through J on Figure 1, are called out due to their relative size (response amplitude and aerial extent). These anomalies may represent a UST or remnants of a UST and associated appurtenances, items of potential environmental significance, or miscellaneous buried metals. The center locations of Anomalies A through I were staked in the field on April 17 to assist with subsequent intrusive investigation. Anomaly J is a large anomalous area encompassing the southern portion of the Site. A review of historic aerial photos indicates this area previously was covered with buildings. Anomaly J likely relates to remnants of building foundations.

Any of the additional above background responses may be significant from an environmental perspective and these geophysical data should be viewed with recognition of the limitations of the technology employed.

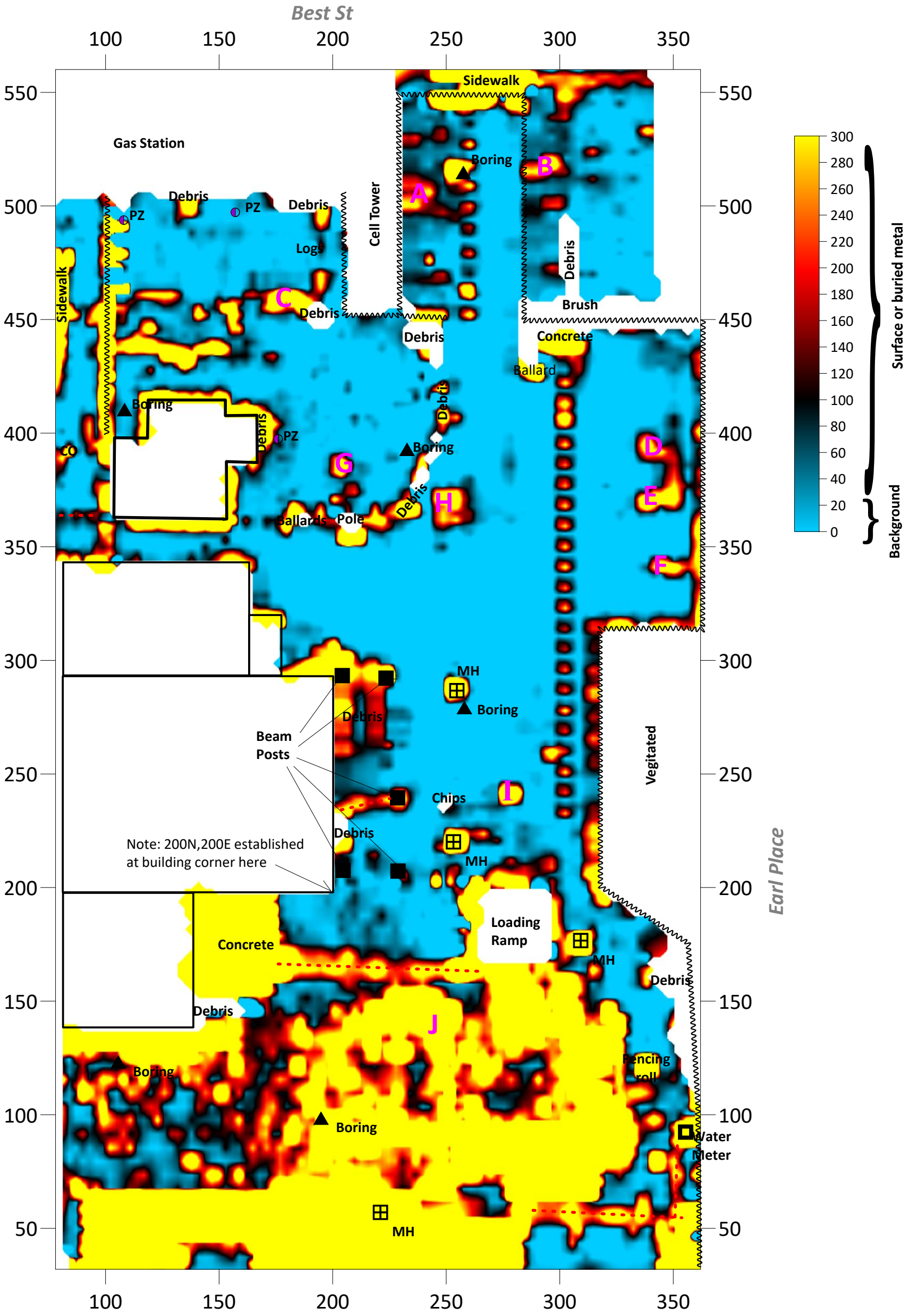
4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
Maddan Geophysics, LLC

John Luttinger
President



A **Geophysical Anomaly for discussion**

Interpreted linear anomaly

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

Figure 1

Geophysical Survey Results
Color Contours of EM61 Data
(mVolts)
Jefferson and Best Street
Buffalo, NY
Turnkey Environmental Restoration, LLC
Maddan Geophysics

APPENDIX D

LABORATORY ANALYTICAL DATA SUMMARY PACKAGE

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryan Mayback
Benchmark Env. Eng. & Science, PLLC
2558 Hamburg Turnpike
Lackawanna, New York 14218

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JOB DESCRIPTION

Jefferson & Best site

JOB NUMBER

480-207977-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Authorized for release by
Rebecca Jones, Project Management Assistant I
Rebecca.Jones@et.eurofinsus.com
Designee for
Brian Fischer, Manager of Project Management
Brian.Fischer@et.eurofinsus.com
(716)504-9835

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-207977-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-207977-1

Comments
No additional comments.

Receipt
The samples were received on 4/19/2023 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.0º C.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color, appearance, and viscosity: BMTP-1 1-3FT (480-207977-1), BMTP-3 0-1.5FT (480-207977-2), BMTP-5 4-6FT (480-207977-3), BMTP-6 1-2FT (480-207977-4), BMTP-10 0-6IN (480-207977-6), BMTP-11 0-6IN (480-207977-7), BMTP-12 1-3FT (480-207977-8), BMTP-13 1-3FT (480-207977-9), BMTP-14 0-6IN (480-207977-10), BMTP-15 0-6IN (480-207977-11) and BMTP-13 3-5FT (480-207977-16). Elevated reporting limits (RL) are provided.

Method 8270D: The following samples required a dilution due to the nature of the sample matrix: BMTP-1 1-3FT (480-207977-1), BMTP-11 0-6IN (480-207977-7) and BMTP-12 1-3FT (480-207977-8). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: BMTP-3 0-1.5FT (480-207977-2), BMTP-6 1-2FT (480-207977-4), BMTP-13 1-3FT (480-207977-9), BMTP-15 0-6IN (480-207977-11) and BMTP-13 3-5FT (480-207977-16). These results have been reported and qualified.

Method 8270D: The following samples were diluted to bring the concentration of target analytes within the calibration range: BMTP-1 1-3FT (480-207977-1) and BMTP-12 1-3FT (480-207977-8). Elevated reporting limits (RLs) are provided.

Method 8270D: The following samples were diluted due to the abundance of target analytes: BMTP-1 1-3FT (480-207977-1) and BMTP-12 1-3FT (480-207977-8). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The continuing calibration verification (CCV) associated with batch 480-666432 recovered above the upper control limit for Silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: BMTP-1 1-3FT (480-207977-1), BMTP-11 0-6IN (480-207977-7) and BMTP-12 1-3FT (480-207977-8). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Client Sample ID: BMTP-1 1-3FT
Lab Sample ID: 480-207977-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	120000		18000	2600	ug/Kg	10	☼	8270D	Total/NA
Acenaphthylene	19000		18000	2300	ug/Kg	10	☼	8270D	Total/NA
Anthracene	260000		18000	4400	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	540000		18000	2600	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	340000		18000	1900	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	320000		18000	2300	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	100000		18000	3200	ug/Kg	10	☼	8270D	Total/NA
Fluorene	150000		18000	2100	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	330000		18000	2200	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	94000		18000	2300	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene - DL	550000		90000	9000	ug/Kg	50	☼	8270D	Total/NA
Benzo[b]fluoranthene - DL	680000		90000	14000	ug/Kg	50	☼	8270D	Total/NA
Chrysene - DL	550000		90000	20000	ug/Kg	50	☼	8270D	Total/NA
Fluoranthene - DL	1500000		90000	9500	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene - DL	1300000		90000	13000	ug/Kg	50	☼	8270D	Total/NA
Pyrene - DL	1100000		90000	11000	ug/Kg	50	☼	8270D	Total/NA
Arsenic	5.9	J	212	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	74.6		52.9	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	3.1	J	21.2	0.032	mg/Kg	1	☼	6010C	Total/NA
Chromium	101		52.9	0.21	mg/Kg	1	☼	6010C	Total/NA
Lead	795		106	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13	F1 F2	0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-3 0-1.5FT
Lab Sample ID: 480-207977-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	690	J	2000	500	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	1500	J	2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	1400	J	2000	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	1700	J	2000	320	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	780	J	2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	890	J	2000	260	ug/Kg	10	☼	8270D	Total/NA
Chrysene	1500	J	2000	450	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	3500		2000	210	ug/Kg	10	☼	8270D	Total/NA
Fluorene	300	J	2000	240	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	760	J	2000	250	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2600		2000	300	ug/Kg	10	☼	8270D	Total/NA
Pyrene	2400		2000	240	ug/Kg	10	☼	8270D	Total/NA
Arsenic	8.3	J	237	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	415		59.2	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	3.0	J	23.7	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	171		59.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	566		118	0.28	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.067		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-5 4-6FT
Lab Sample ID: 480-207977-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	290	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	130	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Anthracene	730	J	1000	250	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2100		1000	100	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: BMTP-5 4-6FT (Continued)
Lab Sample ID: 480-207977-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2200		1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	2700		1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1400		1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1100		1000	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2300		1000	220	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	400	J	1000	180	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4600		1000	110	ug/Kg	5	☼	8270D	Total/NA
Fluorene	420	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300		1000	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	390	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	3600		1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	3600		1000	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	7.4	J	230	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	122		57.6	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.51	J	23.0	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	21.3	J	57.6	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	256		115	0.28	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.49		0.022	0.0052	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-6 1-2FT
Lab Sample ID: 480-207977-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	130	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	150	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Pyrene	160	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Arsenic	7.5	J	268	0.54	mg/Kg	1	☼	6010C	Total/NA
Barium	124		66.9	0.15	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.47	J	26.8	0.040	mg/Kg	1	☼	6010C	Total/NA
Chromium	29.2	J	66.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	747		134	0.32	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.62	J	536	0.54	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.28		0.025	0.0058	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-7 1-2FT
Lab Sample ID: 480-207977-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	180	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Anthracene	320		200	48	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	610		200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	590		200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	640		200	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	320		200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	270		200	25	ug/Kg	1	☼	8270D	Total/NA
Chrysene	600		200	44	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	100	J	200	35	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1200		200	21	ug/Kg	1	☼	8270D	Total/NA
Fluorene	120	J	200	23	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	290		200	24	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	42	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1200		200	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1200		200	23	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.9	J	244	0.49	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BMTP-7 1-2FT (Continued)
Lab Sample ID: 480-207977-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	71.9		60.9	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	24.4	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.0	J	60.9	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	90.5	J	122	0.29	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.079		0.023	0.0053	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-10 0-6IN
Lab Sample ID: 480-207977-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	460	J	960	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	1500		960	240	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	3300		960	96	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	3100		960	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	3600		960	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1800		960	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1500		960	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	3500		960	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	560	J	960	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	7400		960	100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	770	J	960	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1700		960	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	490	J	960	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	5800		960	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	5800		960	110	ug/Kg	5	☼	8270D	Total/NA
Arsenic	4.3	J	228	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	66.7		57.0	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.25	J	22.8	0.034	mg/Kg	1	☼	6010C	Total/NA
Chromium	16.8	J	57.0	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	44.0	J	114	0.27	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.044		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-11 0-6IN
Lab Sample ID: 480-207977-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	15000	J	35000	5100	ug/Kg	10	☼	8270D	Total/NA
Anthracene	24000	J	35000	8600	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	62000		35000	3500	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	61000		35000	5100	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	79000		35000	5500	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	33000	J	35000	3700	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	31000	J	35000	4500	ug/Kg	10	☼	8270D	Total/NA
Chrysene	70000		35000	7800	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	11000	J	35000	6100	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	170000		35000	3700	ug/Kg	10	☼	8270D	Total/NA
Fluorene	13000	J	35000	4100	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	34000	J	35000	4300	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	130000		35000	5100	ug/Kg	10	☼	8270D	Total/NA
Pyrene	110000		35000	4100	ug/Kg	10	☼	8270D	Total/NA
Arsenic	4.9	J	434	0.87	mg/Kg	1	☼	6010C	Total/NA
Barium	207		108	0.24	mg/Kg	1	☼	6010C	Total/NA
Cadmium	2.5	J	43.4	0.065	mg/Kg	1	☼	6010C	Total/NA
Chromium	98.6	J	108	0.43	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BMTP-11 0-6IN (Continued)
Lab Sample ID: 480-207977-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7120		217	0.52	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.086		0.042	0.0096	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-12 1-3FT
Lab Sample ID: 480-207977-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	41000	J	42000	6100	ug/Kg	20	☼	8270D	Total/NA
Acenaphthylene	31000	J	42000	5400	ug/Kg	20	☼	8270D	Total/NA
Anthracene	160000		42000	10000	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene	530000		42000	4200	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	560000		42000	6100	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	640000		42000	6600	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	320000		42000	4400	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	270000		42000	5400	ug/Kg	20	☼	8270D	Total/NA
Chrysene	510000		42000	9300	ug/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene	84000		42000	7300	ug/Kg	20	☼	8270D	Total/NA
Fluorene	53000		42000	4900	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	310000		42000	5100	ug/Kg	20	☼	8270D	Total/NA
Naphthalene	12000	J	42000	5400	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	640000		42000	6100	ug/Kg	20	☼	8270D	Total/NA
Pyrene	1000000		42000	4900	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene - DL	1300000		100000	11000	ug/Kg	50	☼	8270D	Total/NA
Arsenic	5.0	J	250	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	83.6		62.6	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.67	J	25.0	0.038	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.4	J	62.6	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	62.2	J	125	0.30	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.048		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-13 1-3FT
Lab Sample ID: 480-207977-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	800	J	2000	260	ug/Kg	10	☼	8270D	Total/NA
Anthracene	930	J	2000	500	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	3200		2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	3400		2000	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	3900		2000	320	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2100		2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	1500	J	2000	260	ug/Kg	10	☼	8270D	Total/NA
Chrysene	2900		2000	450	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	570	J	2000	360	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	7400		2000	210	ug/Kg	10	☼	8270D	Total/NA
Fluorene	330	J	2000	240	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1800	J	2000	250	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	330	J	2000	260	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2900		2000	300	ug/Kg	10	☼	8270D	Total/NA
Pyrene	6200		2000	240	ug/Kg	10	☼	8270D	Total/NA
Arsenic	11.5	J	245	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	193		61.2	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.5	J	24.5	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	24.7	J	61.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	967		122	0.29	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BMTP-13 1-3FT (Continued)
Lab Sample ID: 480-207977-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	1.1	J	489	0.49	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.82		0.023	0.0052	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-14 0-6IN
Lab Sample ID: 480-207977-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	240	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Anthracene	450	J	1000	250	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	850	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	860	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1000		1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	490	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	400	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	910	J	1000	230	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	2200		1000	110	ug/Kg	5	☼	8270D	Total/NA
Fluorene	210	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	470	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1900		1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1700		1000	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	18.1	J	257	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	472		64.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	2.5	J	25.7	0.039	mg/Kg	1	☼	6010C	Total/NA
Chromium	32.4	J	64.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Lead	3060		128	0.31	mg/Kg	1	☼	6010C	Total/NA
Silver	0.43	J	77.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.90		0.022	0.0052	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-15 0-6IN
Lab Sample ID: 480-207977-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	630	J	1900	470	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	1800	J	1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	1800	J	1900	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	2200		1900	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	910	J	1900	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	850	J	1900	250	ug/Kg	10	☼	8270D	Total/NA
Chrysene	1900		1900	430	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	3700		1900	200	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	890	J	1900	240	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2200		1900	280	ug/Kg	10	☼	8270D	Total/NA
Pyrene	2800		1900	230	ug/Kg	10	☼	8270D	Total/NA
Arsenic	4.3	J	221	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	43.0	J F1 F2	55.3	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.3	J	22.1	0.033	mg/Kg	1	☼	6010C	Total/NA
Chromium	87.8	F1	55.3	0.22	mg/Kg	1	☼	6010C	Total/NA
Lead	166	F1	111	0.27	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.064		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: BMTP-13 3-5FT
Lab Sample ID: 480-207977-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	280	J	1000	100	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BMTP-13 3-5FT (Continued)
Lab Sample ID: 480-207977-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	320	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	340	J	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	220	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	210	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	330	J	1000	230	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	620	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	200	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	360	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	480	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	8.7	J	248	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	146		62.0	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.54	J	24.8	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	25.5	J	62.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	19.3	J	124	0.30	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.8	J	496	0.50	mg/Kg	1	☼	6010C	Total/NA
Mercury	1.1		0.023	0.0054	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BMTP-1 1-3FT
Lab Sample ID: 480-207977-1

Date Collected: 04/17/23 09:30
Matrix: Solid

Date Received: 04/19/23 09:50
Percent Solids: 94.0

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120000		18000	2600	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Acenaphthylene	19000		18000	2300	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Anthracene	260000		18000	4400	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Benzo[a]pyrene	540000		18000	2600	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Benzo[g,h,i]perylene	340000		18000	1900	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Benzo[k]fluoranthene	320000		18000	2300	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Dibenz(a,h)anthracene	100000		18000	3200	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Fluorene	150000		18000	2100	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Indeno[1,2,3-cd]pyrene	330000		18000	2200	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10
Naphthalene	94000		18000	2300	ug/Kg	☼	04/20/23 16:01	04/21/23 12:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*60 - 120*	*04/20/23 16:01*	*04/21/23 12:52*	*10*
Nitrobenzene-d5 (Surr)	*81*		*53 - 120*	*04/20/23 16:01*	*04/21/23 12:52*	*10*
p-Terphenyl-d14 (Surr)	*144*	*S1+*	*79 - 130*	*04/20/23 16:01*	*04/21/23 12:52*	*10*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	550000		90000	9000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50
Benzo[b]fluoranthene	680000		90000	14000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50
Chrysene	550000		90000	20000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50
Fluoranthene	1500000		90000	9500	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50
Phenanthrene	1300000		90000	13000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50
Pyrene	1100000		90000	11000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:07	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*60 - 120*	*04/20/23 16:01*	*04/24/23 13:07*	*50*
Nitrobenzene-d5 (Surr)	*0*	*S1-*	*53 - 120*	*04/20/23 16:01*	*04/24/23 13:07*	*50*
p-Terphenyl-d14 (Surr)	*0*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/24/23 13:07*	*50*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9	J	212	0.42	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Barium	74.6		52.9	0.12	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Cadmium	3.1	J	21.2	0.032	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Chromium	101		52.9	0.21	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Lead	795		106	0.25	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Selenium	ND		424	0.42	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1
Silver	ND		63.5	0.21	mg/Kg	☼	04/20/23 14:31	04/21/23 14:19	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	F1 F2	0.021	0.0048	mg/Kg	☼	04/24/23 11:35	04/24/23 13:30	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-3 0-1.5FT

Date Collected: 04/17/23 10:45
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-2

Matrix: Solid
Percent Solids: 83.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Acenaphthylene	ND		2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Anthracene	**690**	**J**	2000	500	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Benzo[a]anthracene	**1500**	**J**	2000	200	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Benzo[a]pyrene	**1400**	**J**	2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Benzo[b]fluoranthene	**1700**	**J**	2000	320	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Benzo[g,h,i]perylene	**780**	**J**	2000	210	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Benzo[k]fluoranthene	**890**	**J**	2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Chrysene	**1500**	**J**	2000	450	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Dibenz(a,h)anthracene	ND		2000	360	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Fluoranthene	**3500**		2000	210	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Fluorene	**300**	**J**	2000	240	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Indeno[1,2,3-cd]pyrene	**760**	**J**	2000	250	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Naphthalene	ND		2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Phenanthrene	**2600**		2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10
Pyrene	**2400**		2000	240	ug/Kg	☼	04/20/23 16:01	04/21/23 13:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*60 - 120*	*04/20/23 16:01*	*04/21/23 13:16*	*10*
Nitrobenzene-d5 (Surr)	*75*		*53 - 120*	*04/20/23 16:01*	*04/21/23 13:16*	*10*
p-Terphenyl-d14 (Surr)	*76*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/21/23 13:16*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.3**	**J**	237	0.47	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Barium	**415**		59.2	0.13	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Cadmium	**3.0**	**J**	23.7	0.036	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Chromium	**171**		59.2	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Lead	**566**		118	0.28	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Selenium	ND		474	0.47	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1
Silver	ND		71.0	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 14:23	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.067**		0.022	0.0051	mg/Kg	☼	04/24/23 11:35	04/24/23 13:35	1

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Client Sample ID: BMTP-5 4-6FT
Lab Sample ID: 480-207977-3
Date Collected: 04/17/23 11:15
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 83.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	290	J	1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Acenaphthylene	130	J	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Anthracene	730	J	1000	250	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Benzo[a]anthracene	2100		1000	100	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Benzo[a]pyrene	2200		1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Benzo[b]fluoranthene	2700		1000	160	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Benzo[g,h,i]perylene	1400		1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Benzo[k]fluoranthene	1100		1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Chrysene	2300		1000	220	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Dibenz(a,h)anthracene	400	J	1000	180	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Fluoranthene	4600		1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Fluorene	420	J	1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Indeno[1,2,3-cd]pyrene	1300		1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Naphthalene	390	J	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Phenanthrene	3600		1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5
Pyrene	3600		1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 13:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*60 - 120*	*04/20/23 16:01*	*04/21/23 13:40*	*5*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*04/20/23 16:01*	*04/21/23 13:40*	*5*
p-Terphenyl-d14 (Surr)	*88*		*79 - 130*	*04/20/23 16:01*	*04/21/23 13:40*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.4	J	230	0.46	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Barium	122		57.6	0.13	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Cadmium	0.51	J	23.0	0.035	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Chromium	21.3	J	57.6	0.23	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Lead	256		115	0.28	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Selenium	ND		460	0.46	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1
Silver	ND		69.1	0.23	mg/Kg	☼	04/20/23 14:31	04/21/23 14:27	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.49		0.022	0.0052	mg/Kg	☼	04/24/23 11:35	04/24/23 13:37	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-6 1-2FT

Date Collected: 04/17/23 11:45
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-4

Matrix: Solid
Percent Solids: 74.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Anthracene	ND		1100	270	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Benzo[a]anthracene	**130**	**J**	1100	110	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Benzo[a]pyrene	ND		1100	160	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Benzo[b]fluoranthene	ND		1100	180	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Benzo[g,h,i]perylene	ND		1100	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Chrysene	ND		1100	250	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Dibenz(a,h)anthracene	ND		1100	200	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Fluoranthene	**150**	**J**	1100	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Fluorene	ND		1100	130	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Indeno[1,2,3-cd]pyrene	ND		1100	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Naphthalene	ND		1100	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Phenanthrene	ND		1100	160	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5
Pyrene	**160**	**J**	1100	130	ug/Kg	☼	04/20/23 16:01	04/21/23 14:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*60 - 120*	*04/20/23 16:01*	*04/21/23 14:04*	*5*
Nitrobenzene-d5 (Surr)	*66*		*53 - 120*	*04/20/23 16:01*	*04/21/23 14:04*	*5*
p-Terphenyl-d14 (Surr)	*70*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/21/23 14:04*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.5**	**J**	268	0.54	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Barium	**124**		66.9	0.15	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Cadmium	**0.47**	**J**	26.8	0.040	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Chromium	**29.2**	**J**	66.9	0.27	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Lead	**747**		134	0.32	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Selenium	**0.62**	**J**	536	0.54	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1
Silver	ND		80.3	0.27	mg/Kg	☼	04/20/23 14:31	04/21/23 14:31	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.025	0.0058	mg/Kg	☼	04/24/23 11:35	04/24/23 13:38	1

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Client Sample ID: BMTP-7 1-2FT
Lab Sample ID: 480-207977-5
Date Collected: 04/17/23 12:15
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 84.3

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	180	J	200	29	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Acenaphthylene	ND		200	25	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Anthracene	320		200	48	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Benzo[a]anthracene	610		200	20	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Benzo[a]pyrene	590		200	29	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Benzo[b]fluoranthene	640		200	31	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Benzo[g,h,i]perylene	320		200	21	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Benzo[k]fluoranthene	270		200	25	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Chrysene	600		200	44	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Dibenz(a,h)anthracene	100	J	200	35	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Fluoranthene	1200		200	21	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Fluorene	120	J	200	23	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Indeno[1,2,3-cd]pyrene	290		200	24	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Naphthalene	42	J	200	25	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Phenanthrene	1200		200	29	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1
Pyrene	1200		200	23	ug/Kg	☼	04/20/23 16:01	04/21/23 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*60 - 120*	*04/20/23 16:01*	*04/21/23 14:29*	*1*
Nitrobenzene-d5 (Surr)	*67*		*53 - 120*	*04/20/23 16:01*	*04/21/23 14:29*	*1*
p-Terphenyl-d14 (Surr)	*90*		*79 - 130*	*04/20/23 16:01*	*04/21/23 14:29*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.9	J	244	0.49	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Barium	71.9		60.9	0.13	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Cadmium	0.20	J	24.4	0.037	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Chromium	18.0	J	60.9	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Lead	90.5	J	122	0.29	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Selenium	ND		487	0.49	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1
Silver	ND		73.1	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 14:35	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.079		0.023	0.0053	mg/Kg	☼	04/24/23 11:35	04/24/23 13:39	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-10 0-6IN

Date Collected: 04/17/23 12:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-6

Matrix: Solid
Percent Solids: 87.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	460	J	960	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Acenaphthylene	ND		960	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Anthracene	1500		960	240	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Benzo[a]anthracene	3300		960	96	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Benzo[a]pyrene	3100		960	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Benzo[b]fluoranthene	3600		960	150	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Benzo[g,h,i]perylene	1800		960	100	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Benzo[k]fluoranthene	1500		960	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Chrysene	3500		960	210	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Dibenz(a,h)anthracene	560	J	960	170	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Fluoranthene	7400		960	100	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Fluorene	770	J	960	110	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Indeno[1,2,3-cd]pyrene	1700		960	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Naphthalene	490	J	960	120	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Phenanthrene	5800		960	140	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5
Pyrene	5800		960	110	ug/Kg	☼	04/20/23 16:01	04/21/23 14:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*60 - 120*	*04/20/23 16:01*	*04/21/23 14:53*	*5*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*04/20/23 16:01*	*04/21/23 14:53*	*5*
p-Terphenyl-d14 (Surr)	*83*		*79 - 130*	*04/20/23 16:01*	*04/21/23 14:53*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.3	J	228	0.46	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Barium	66.7		57.0	0.13	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Cadmium	0.25	J	22.8	0.034	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Chromium	16.8	J	57.0	0.23	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Lead	44.0	J	114	0.27	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Selenium	ND		456	0.46	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1
Silver	ND		68.5	0.23	mg/Kg	☼	04/20/23 14:31	04/21/23 14:39	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.024	0.0056	mg/Kg	☼	04/24/23 11:35	04/24/23 13:43	1

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Client Sample ID: BMTP-11 0-6IN
Lab Sample ID: 480-207977-7
Date Collected: 04/17/23 13:00
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 48.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	15000	J	35000	5100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Acenaphthylene	ND		35000	4500	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Anthracene	24000	J	35000	8600	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Benzo[a]anthracene	62000		35000	3500	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Benzo[a]pyrene	61000		35000	5100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Benzo[b]fluoranthene	79000		35000	5500	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Benzo[g,h,i]perylene	33000	J	35000	3700	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Benzo[k]fluoranthene	31000	J	35000	4500	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Chrysene	70000		35000	7800	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Dibenz(a,h)anthracene	11000	J	35000	6100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Fluoranthene	170000		35000	3700	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Fluorene	13000	J	35000	4100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Indeno[1,2,3-cd]pyrene	34000	J	35000	4300	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Naphthalene	ND		35000	4500	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Phenanthrene	130000		35000	5100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10
Pyrene	110000		35000	4100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*	*04/20/23 16:01*	*04/21/23 15:17*	*10*
Nitrobenzene-d5 (Surr)	*82*		*53 - 120*	*04/20/23 16:01*	*04/21/23 15:17*	*10*
p-Terphenyl-d14 (Surr)	*87*		*79 - 130*	*04/20/23 16:01*	*04/21/23 15:17*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.9	J	434	0.87	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Barium	207		108	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Cadmium	2.5	J	43.4	0.065	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Chromium	98.6	J	108	0.43	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Lead	7120		217	0.52	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Selenium	ND		868	0.87	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1
Silver	ND		130	0.43	mg/Kg	☼	04/20/23 14:31	04/21/23 14:43	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086		0.042	0.0096	mg/Kg	☼	04/24/23 11:35	04/24/23 13:45	1

Client Sample ID: BMTP-12 1-3FT
Lab Sample ID: 480-207977-8

Date Collected: 04/17/23 13:30
Matrix: Solid

Date Received: 04/19/23 09:50
Percent Solids: 79.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	41000	J	42000	6100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Acenaphthylene	31000	J	42000	5400	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Anthracene	160000		42000	10000	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Benzo[a]anthracene	530000		42000	4200	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Benzo[a]pyrene	560000		42000	6100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Benzo[b]fluoranthene	640000		42000	6600	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Benzo[g,h,i]perylene	320000		42000	4400	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Benzo[k]fluoranthene	270000		42000	5400	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Chrysene	510000		42000	9300	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Dibenz(a,h)anthracene	84000		42000	7300	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Fluorene	53000		42000	4900	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Indeno[1,2,3-cd]pyrene	310000		42000	5100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Naphthalene	12000	J	42000	5400	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Phenanthrene	640000		42000	6100	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20
Pyrene	1000000		42000	4900	ug/Kg	☼	04/20/23 16:01	04/21/23 15:41	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*60 - 120*	*04/20/23 16:01*	*04/21/23 15:41*	*20*
Nitrobenzene-d5 (Surr)	*84*		*53 - 120*	*04/20/23 16:01*	*04/21/23 15:41*	*20*
p-Terphenyl-d14 (Surr)	*125*		*79 - 130*	*04/20/23 16:01*	*04/21/23 15:41*	*20*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1300000		100000	11000	ug/Kg	☼	04/20/23 16:01	04/24/23 13:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*S1-*	*60 - 120*	*04/20/23 16:01*	*04/24/23 13:32*	*50*
Nitrobenzene-d5 (Surr)	*0*	*S1-*	*53 - 120*	*04/20/23 16:01*	*04/24/23 13:32*	*50*
p-Terphenyl-d14 (Surr)	*104*		*79 - 130*	*04/20/23 16:01*	*04/24/23 13:32*	*50*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0	J	250	0.50	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Barium	83.6		62.6	0.14	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Cadmium	0.67	J	25.0	0.038	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Chromium	20.4	J	62.6	0.25	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Lead	62.2	J	125	0.30	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Selenium	ND		501	0.50	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1
Silver	ND	^+	75.1	0.25	mg/Kg	☼	04/20/23 14:31	04/21/23 14:58	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048		0.024	0.0056	mg/Kg	☼	04/24/23 11:35	04/24/23 13:46	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-13 1-3FT

Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-9

Matrix: Solid
Percent Solids: 81.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Acenaphthylene	**800**	**J**	2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Anthracene	**930**	**J**	2000	500	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Benzo[a]anthracene	**3200**		2000	200	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Benzo[a]pyrene	**3400**		2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Benzo[b]fluoranthene	**3900**		2000	320	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Benzo[g,h,i]perylene	**2100**		2000	210	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Benzo[k]fluoranthene	**1500**	**J**	2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Chrysene	**2900**		2000	450	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Dibenz(a,h)anthracene	**570**	**J**	2000	360	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Fluoranthene	**7400**		2000	210	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Fluorene	**330**	**J**	2000	240	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Indeno[1,2,3-cd]pyrene	**1800**	**J**	2000	250	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Naphthalene	**330**	**J**	2000	260	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Phenanthrene	**2900**		2000	300	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10
Pyrene	**6200**		2000	240	ug/Kg	☼	04/20/23 16:01	04/21/23 16:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*60 - 120*	*04/20/23 16:01*	*04/21/23 16:05*	*10*
Nitrobenzene-d5 (Surr)	*63*		*53 - 120*	*04/20/23 16:01*	*04/21/23 16:05*	*10*
p-Terphenyl-d14 (Surr)	*68*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/21/23 16:05*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**11.5**	**J**	245	0.49	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Barium	**193**		61.2	0.13	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Cadmium	**1.5**	**J**	24.5	0.037	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Chromium	**24.7**	**J**	61.2	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Lead	**967**		122	0.29	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Selenium	**1.1**	**J**	489	0.49	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1
Silver	ND	^+	73.4	0.24	mg/Kg	☼	04/20/23 14:31	04/21/23 15:02	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.82**		0.023	0.0052	mg/Kg	☼	04/24/23 11:35	04/24/23 13:47	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-14 0-6IN

Date Collected: 04/17/23 14:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-10

Matrix: Solid
Percent Solids: 82.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	240	J	1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Anthracene	450	J	1000	250	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Benzo[a]anthracene	850	J	1000	100	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Benzo[a]pyrene	860	J	1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Benzo[b]fluoranthene	1000		1000	160	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Benzo[g,h,i]perylene	490	J	1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Benzo[k]fluoranthene	400	J	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Chrysene	910	J	1000	230	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Fluoranthene	2200		1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Fluorene	210	J	1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Indeno[1,2,3-cd]pyrene	470	J	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Naphthalene	ND		1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Phenanthrene	1900		1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5
Pyrene	1700		1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 16:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*	*04/20/23 16:01*	*04/21/23 16:29*	*5*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*	*04/20/23 16:01*	*04/21/23 16:29*	*5*
p-Terphenyl-d14 (Surr)	*85*		*79 - 130*	*04/20/23 16:01*	*04/21/23 16:29*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	18.1	J	257	0.51	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Barium	472		64.2	0.14	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Cadmium	2.5	J	25.7	0.039	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Chromium	32.4	J	64.2	0.26	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Lead	3060		128	0.31	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Selenium	ND		514	0.51	mg/Kg	☼	04/20/23 14:31	04/21/23 15:06	1
Silver	0.43	J	77.1	0.26	mg/Kg	☼	04/20/23 14:31	04/25/23 12:51	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.90		0.022	0.0052	mg/Kg	☼	04/24/23 11:35	04/24/23 13:49	1

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Client Sample ID: BMTP-15 0-6IN
Lab Sample ID: 480-207977-11
Date Collected: 04/17/23 15:00
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 88.1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1900	280	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Acenaphthylene	ND		1900	250	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Anthracene	**630**	**J**	1900	470	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Benzo[a]anthracene	**1800**	**J**	1900	190	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Benzo[a]pyrene	**1800**	**J**	1900	280	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Benzo[b]fluoranthene	**2200**		1900	300	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Benzo[g,h,i]perylene	**910**	**J**	1900	200	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Benzo[k]fluoranthene	**850**	**J**	1900	250	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Chrysene	**1900**		1900	430	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Dibenz(a,h)anthracene	ND		1900	340	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Fluoranthene	**3700**		1900	200	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Fluorene	ND		1900	230	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Indeno[1,2,3-cd]pyrene	**890**	**J**	1900	240	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Naphthalene	ND		1900	250	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Phenanthrene	**2200**		1900	280	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10
Pyrene	**2800**		1900	230	ug/Kg	☼	04/20/23 16:01	04/21/23 16:53	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*60 - 120*	*04/20/23 16:01*	*04/21/23 16:53*	*10*
Nitrobenzene-d5 (Surr)	*62*		*53 - 120*	*04/20/23 16:01*	*04/21/23 16:53*	*10*
p-Terphenyl-d14 (Surr)	*75*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/21/23 16:53*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.3**	**J**	221	0.44	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Barium	**43.0**	**J F1 F2**	55.3	0.12	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Cadmium	**1.3**	**J**	22.1	0.033	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Chromium	**87.8**	**F1**	55.3	0.22	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Lead	**166**	**F1**	111	0.27	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Selenium	ND		442	0.44	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1
Silver	ND	^+	66.4	0.22	mg/Kg	☼	04/20/23 14:31	04/21/23 15:10	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.064**		0.021	0.0049	mg/Kg	☼	04/24/23 11:35	04/24/23 13:50	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-13 3-5FT

Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-16

Matrix: Solid
Percent Solids: 80.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Anthracene	ND		1000	250	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Benzo[a]anthracene	**280**	**J**	1000	100	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Benzo[a]pyrene	**320**	**J**	1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Benzo[b]fluoranthene	**340**	**J**	1000	160	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Benzo[g,h,i]perylene	**220**	**J**	1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Benzo[k]fluoranthene	**210**	**J**	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Chrysene	**330**	**J**	1000	230	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Fluoranthene	**620**	**J**	1000	110	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Fluorene	ND		1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Indeno[1,2,3-cd]pyrene	**200**	**J**	1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Naphthalene	ND		1000	130	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Phenanthrene	**360**	**J**	1000	150	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5
Pyrene	**480**	**J**	1000	120	ug/Kg	☼	04/20/23 16:01	04/21/23 17:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*60 - 120*	*04/20/23 16:01*	*04/21/23 17:17*	*5*
Nitrobenzene-d5 (Surr)	*61*		*53 - 120*	*04/20/23 16:01*	*04/21/23 17:17*	*5*
p-Terphenyl-d14 (Surr)	*71*	*S1-*	*79 - 130*	*04/20/23 16:01*	*04/21/23 17:17*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.7**	**J**	248	0.50	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Barium	**146**		62.0	0.14	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Cadmium	**0.54**	**J**	24.8	0.037	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Chromium	**25.5**	**J**	62.0	0.25	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Lead	**19.3**	**J**	124	0.30	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Selenium	**1.8**	**J**	496	0.50	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1
Silver	ND		74.4	0.25	mg/Kg	☼	04/20/23 14:31	04/21/23 14:11	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.1**		0.023	0.0054	mg/Kg	☼	04/24/23 11:35	04/24/23 13:51	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FBP	NBZ	TPHd14						
Lab Sample ID	Client Sample ID	(60-120)	(53-120)	(79-130)						
480-207977-1	BMTP-1 1-3FT	94	81	144 S1+						
480-207977-1 - DL	BMTP-1 1-3FT	94	0 S1-	0 S1-						
480-207977-2	BMTP-3 0-1.5FT	79	75	76 S1-						
480-207977-3	BMTP-5 4-6FT	82	73	88						
480-207977-4	BMTP-6 1-2FT	74	66	70 S1-						
480-207977-5	BMTP-7 1-2FT	75	67	90						
480-207977-6	BMTP-10 0-6IN	80	73	83						
480-207977-7	BMTP-11 0-6IN	81	82	87						
480-207977-8	BMTP-12 1-3FT	80	84	125						
480-207977-8 - DL	BMTP-12 1-3FT	0 S1-	0 S1-	104						
480-207977-9	BMTP-13 1-3FT	65	63	68 S1-						
480-207977-10	BMTP-14 0-6IN	81	71	85						
480-207977-11	BMTP-15 0-6IN	70	62	75 S1-						
480-207977-16	BMTP-13 3-5FT	70	61	71 S1-						
LCS 480-666236/2-A	Lab Control Sample	72	64	84						
MB 480-666236/1-A	Method Blank	82	73	96						

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-666236/1-A
Matrix: Solid
Analysis Batch: 666313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666236

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	24	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Acenaphthylene	ND		170	21	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Anthracene	ND		170	41	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Benzo[a]anthracene	ND		170	17	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Benzo[a]pyrene	ND		170	24	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Benzo[g,h,i]perylene	ND		170	17	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Chrysene	ND		170	37	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Fluoranthene	ND		170	17	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Fluorene	ND		170	19	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Naphthalene	ND		170	21	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Phenanthrene	ND		170	24	ug/Kg		04/20/23 16:01	04/21/23 10:51	1
Pyrene	ND		170	19	ug/Kg		04/20/23 16:01	04/21/23 10:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*60 - 120*	*04/20/23 16:01*	*04/21/23 10:51*	*1*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*04/20/23 16:01*	*04/21/23 10:51*	*1*
p-Terphenyl-d14 (Surr)	*96*		*79 - 130*	*04/20/23 16:01*	*04/21/23 10:51*	*1*

Lab Sample ID: LCS 480-666236/2-A
Matrix: Solid
Analysis Batch: 666313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1640	1310		ug/Kg		80	62 - 120
Acenaphthylene	1640	1320		ug/Kg		81	58 - 121
Anthracene	1640	1380		ug/Kg		84	62 - 120
Benzo[a]anthracene	1640	1380		ug/Kg		84	65 - 120
Benzo[a]pyrene	1640	1450		ug/Kg		89	64 - 120
Benzo[b]fluoranthene	1640	1390		ug/Kg		85	64 - 120
Benzo[g,h,i]perylene	1640	1420		ug/Kg		87	45 - 145
Benzo[k]fluoranthene	1640	1500		ug/Kg		92	65 - 120
Chrysene	1640	1350		ug/Kg		82	64 - 120
Dibenz(a,h)anthracene	1640	1450		ug/Kg		88	54 - 132
Fluoranthene	1640	1350		ug/Kg		82	62 - 120
Fluorene	1640	1320		ug/Kg		81	63 - 120
Indeno[1,2,3-cd]pyrene	1640	1510		ug/Kg		92	56 - 134
Naphthalene	1640	1180		ug/Kg		72	55 - 120
Phenanthrene	1640	1390		ug/Kg		85	60 - 120
Pyrene	1640	1510		ug/Kg		92	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*60 - 120*
Nitrobenzene-d5 (Surr)	*64*		*53 - 120*
p-Terphenyl-d14 (Surr)	*84*		*79 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-666172/1-A
Matrix: Solid
Analysis Batch: 666418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		189	0.38	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Barium	ND		47.3	0.10	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Cadmium	ND		18.9	0.028	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Chromium	ND		47.3	0.19	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Lead	ND		94.6	0.23	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Selenium	ND		378	0.38	mg/Kg		04/20/23 14:31	04/21/23 13:52	1
Silver	ND		56.8	0.19	mg/Kg		04/20/23 14:31	04/21/23 13:52	1

Lab Sample ID: LCSSRM 480-666172/2-A
Matrix: Solid
Analysis Batch: 666418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666172

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	129	101.9	J	mg/Kg		79.0	60.9 - 113.2
Barium	169	139.0		mg/Kg		82.2	68.6 - 114.2
Cadmium	227	170.7		mg/Kg		75.2	64.8 - 110.1
Chromium	115	95.95		mg/Kg		83.4	62.4 - 115.7
Lead	74.8	83.45	J	mg/Kg		111.6	67.0 - 128.9
Selenium	246	186.0	J	mg/Kg		75.6	60.2 - 114.6
Silver	87.5	74.17		mg/Kg		84.8	63.7 - 115.4

Lab Sample ID: 480-207977-11 MS
Matrix: Solid
Analysis Batch: 666432

Client Sample ID: BMTP-15 0-6IN
Prep Type: Total/NA
Prep Batch: 666172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	4.3	J	47.7	49.56	J	mg/Kg	☼	95	75 - 125
Barium	43.0	J F1 F2	47.7	107.4	F1	mg/Kg	☼	135	75 - 125
Cadmium	1.3	J	47.7	45.04		mg/Kg	☼	92	75 - 125
Chromium	87.8	F1	47.7	120.6	F1	mg/Kg	☼	69	75 - 125
Lead	166	F1	47.7	182.7	F1	mg/Kg	☼	34	75 - 125
Selenium	ND		47.7	41.80	J	mg/Kg	☼	88	75 - 125
Silver	ND	^+	11.9	11.67	J ^+	mg/Kg	☼	98	75 - 125

Lab Sample ID: 480-207977-11 MSD
Matrix: Solid
Analysis Batch: 666432

Client Sample ID: BMTP-15 0-6IN
Prep Type: Total/NA
Prep Batch: 666172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	4.3	J	43.3	45.74	J	mg/Kg	☼	96	75 - 125	8	20
Barium	43.0	J F1 F2	43.3	87.34	F2	mg/Kg	☼	102	75 - 125	21	20
Cadmium	1.3	J	43.3	40.99		mg/Kg	☼	92	75 - 125	9	20
Chromium	87.8	F1	43.3	133.9		mg/Kg	☼	106	75 - 125	10	20
Lead	166	F1	43.3	208.3		mg/Kg	☼	97	75 - 125	13	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-207977-11 MSD
Client Sample ID: BMTP-15 0-6IN
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 666432
Prep Batch: 666172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		43.3	37.45	J	mg/Kg	☼	86	75 - 125	11	20
Silver	ND	^+	10.8	10.57	J ^+	mg/Kg	☼	98	75 - 125	10	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-666540/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 666645
Prep Batch: 666540

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0045	mg/Kg		04/24/23 11:35	04/24/23 13:28	1

Lab Sample ID: LCSSRM 480-666540/2-A ^10
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 666645
Prep Batch: 666540

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	20.7	14.02		mg/Kg		67.7	38.3 - 110.1

Lab Sample ID: 480-207977-1 MS
Client Sample ID: BMTP-1 1-3FT
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 666645
Prep Batch: 666540

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.13	F1 F2	0.320	0.594	F1	mg/Kg	☼	144	80 - 120

Lab Sample ID: 480-207977-1 MSD
Client Sample ID: BMTP-1 1-3FT
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 666645
Prep Batch: 666540

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.13	F1 F2	0.355	1.52	F1 F2	mg/Kg	☼	392	80 - 120	88	20

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

GC/MS Semi VOA

Prep Batch: 666236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	3550C	
480-207977-1 - DL	BMTP-1 1-3FT	Total/NA	Solid	3550C	
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	3550C	
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	3550C	
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	3550C	
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	3550C	
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	3550C	
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	3550C	
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	3550C	
480-207977-8 - DL	BMTP-12 1-3FT	Total/NA	Solid	3550C	
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	3550C	
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	3550C	
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	3550C	
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	3550C	
MB 480-666236/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-666236/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 666313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	8270D	666236
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	8270D	666236
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	8270D	666236
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	8270D	666236
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	8270D	666236
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	8270D	666236
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	8270D	666236
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	8270D	666236
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	8270D	666236
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	8270D	666236
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	8270D	666236
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	8270D	666236
MB 480-666236/1-A	Method Blank	Total/NA	Solid	8270D	666236
LCS 480-666236/2-A	Lab Control Sample	Total/NA	Solid	8270D	666236

Analysis Batch: 666571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1 - DL	BMTP-1 1-3FT	Total/NA	Solid	8270D	666236
480-207977-8 - DL	BMTP-12 1-3FT	Total/NA	Solid	8270D	666236

Metals

Prep Batch: 666172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	3050B	
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	3050B	
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	3050B	
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	3050B	
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	3050B	
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	3050B	
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	3050B	
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 666172 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	3050B	
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	3050B	
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	3050B	
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	3050B	
MB 480-666172/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-666172/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-207977-11 MS	BMTP-15 0-6IN	Total/NA	Solid	3050B	
480-207977-11 MSD	BMTP-15 0-6IN	Total/NA	Solid	3050B	

Analysis Batch: 666418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	6010C	666172
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	6010C	666172
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	6010C	666172
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	6010C	666172
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	6010C	666172
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	6010C	666172
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	6010C	666172
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	6010C	666172
MB 480-666172/1-A	Method Blank	Total/NA	Solid	6010C	666172
LCSSRM 480-666172/2-A	Lab Control Sample	Total/NA	Solid	6010C	666172

Analysis Batch: 666432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	6010C	666172
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	6010C	666172
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	6010C	666172
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	6010C	666172
480-207977-11 MS	BMTP-15 0-6IN	Total/NA	Solid	6010C	666172
480-207977-11 MSD	BMTP-15 0-6IN	Total/NA	Solid	6010C	666172

Prep Batch: 666540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	7471B	
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	7471B	
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	7471B	
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	7471B	
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	7471B	
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	7471B	
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	7471B	
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	7471B	
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	7471B	
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	7471B	
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	7471B	
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	7471B	
MB 480-666540/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-666540/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-207977-1 MS	BMTP-1 1-3FT	Total/NA	Solid	7471B	
480-207977-1 MSD	BMTP-1 1-3FT	Total/NA	Solid	7471B	

Metals

Analysis Batch: 666645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	7471B	666540
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	7471B	666540
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	7471B	666540
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	7471B	666540
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	7471B	666540
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	7471B	666540
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	7471B	666540
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	7471B	666540
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	7471B	666540
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	7471B	666540
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	7471B	666540
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	7471B	666540
MB 480-666540/1-A	Method Blank	Total/NA	Solid	7471B	666540
LCSSRM 480-666540/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	666540
480-207977-1 MS	BMTP-1 1-3FT	Total/NA	Solid	7471B	666540
480-207977-1 MSD	BMTP-1 1-3FT	Total/NA	Solid	7471B	666540

Analysis Batch: 666824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	6010C	666172

General Chemistry

Analysis Batch: 666262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-207977-1	BMTP-1 1-3FT	Total/NA	Solid	Moisture	
480-207977-2	BMTP-3 0-1.5FT	Total/NA	Solid	Moisture	
480-207977-3	BMTP-5 4-6FT	Total/NA	Solid	Moisture	
480-207977-4	BMTP-6 1-2FT	Total/NA	Solid	Moisture	
480-207977-5	BMTP-7 1-2FT	Total/NA	Solid	Moisture	
480-207977-6	BMTP-10 0-6IN	Total/NA	Solid	Moisture	
480-207977-7	BMTP-11 0-6IN	Total/NA	Solid	Moisture	
480-207977-8	BMTP-12 1-3FT	Total/NA	Solid	Moisture	
480-207977-9	BMTP-13 1-3FT	Total/NA	Solid	Moisture	
480-207977-10	BMTP-14 0-6IN	Total/NA	Solid	Moisture	
480-207977-11	BMTP-15 0-6IN	Total/NA	Solid	Moisture	
480-207977-16	BMTP-13 3-5FT	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-1 1-3FT
Lab Sample ID: 480-207977-1
Date Collected: 04/17/23 09:30
Matrix: Solid
Date Received: 04/19/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-1 1-3FT
Lab Sample ID: 480-207977-1
Date Collected: 04/17/23 09:30
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		10	666313	JMM	EET BUF	04/21/23 12:52
Total/NA	Prep	3550C	DL		666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D	DL	50	666571	JMM	EET BUF	04/24/23 13:07
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:19
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:30

Client Sample ID: BMTP-3 0-1.5FT
Lab Sample ID: 480-207977-2
Date Collected: 04/17/23 10:45
Matrix: Solid
Date Received: 04/19/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-3 0-1.5FT
Lab Sample ID: 480-207977-2
Date Collected: 04/17/23 10:45
Matrix: Solid
Date Received: 04/19/23 09:50
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		10	666313	JMM	EET BUF	04/21/23 13:16
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:23
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:35

Client Sample ID: BMTP-5 4-6FT
Lab Sample ID: 480-207977-3
Date Collected: 04/17/23 11:15
Matrix: Solid
Date Received: 04/19/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-5 4-6FT
Date Collected: 04/17/23 11:15
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-3
Matrix: Solid
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		5	666313	JMM	EET BUF	04/21/23 13:40
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:27
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:37

Client Sample ID: BMTP-6 1-2FT
Date Collected: 04/17/23 11:45
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-6 1-2FT
Date Collected: 04/17/23 11:45
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-4
Matrix: Solid
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		5	666313	JMM	EET BUF	04/21/23 14:04
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:31
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:38

Client Sample ID: BMTP-7 1-2FT
Date Collected: 04/17/23 12:15
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-7 1-2FT
Date Collected: 04/17/23 12:15
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-5
Matrix: Solid
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		1	666313	JMM	EET BUF	04/21/23 14:29
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:35
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:39

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-10 0-6IN
Date Collected: 04/17/23 12:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-10 0-6IN
Date Collected: 04/17/23 12:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-6
Matrix: Solid
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		5	666313	JMM	EET BUF	04/21/23 14:53
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:39
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:43

Client Sample ID: BMTP-11 0-6IN
Date Collected: 04/17/23 13:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-11 0-6IN
Date Collected: 04/17/23 13:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-7
Matrix: Solid
Percent Solids: 48.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		10	666313	JMM	EET BUF	04/21/23 15:17
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:43
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:45

Client Sample ID: BMTP-12 1-3FT
Date Collected: 04/17/23 13:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-12 1-3FT
Date Collected: 04/17/23 13:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-8
Matrix: Solid
Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		20	666313	JMM	EET BUF	04/21/23 15:41
Total/NA	Prep	3550C	DL		666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D	DL	50	666571	JMM	EET BUF	04/24/23 13:32
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666432	BMB	EET BUF	04/21/23 14:58
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:46

Client Sample ID: BMTP-13 1-3FT
Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-13 1-3FT
Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-9
Matrix: Solid
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		10	666313	JMM	EET BUF	04/21/23 16:05
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666432	BMB	EET BUF	04/21/23 15:02
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:47

Client Sample ID: BMTP-14 0-6IN
Date Collected: 04/17/23 14:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-14 0-6IN
Date Collected: 04/17/23 14:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-10
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		5	666313	JMM	EET BUF	04/21/23 16:29
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666432	BMB	EET BUF	04/21/23 15:06
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666824	BMB	EET BUF	04/25/23 12:51

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Client Sample ID: BMTP-14 0-6IN
Date Collected: 04/17/23 14:30
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-10
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:49

Client Sample ID: BMTP-15 0-6IN
Date Collected: 04/17/23 15:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-15 0-6IN
Date Collected: 04/17/23 15:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-11
Matrix: Solid
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		10	666313	JMM	EET BUF	04/21/23 16:53
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666432	BMB	EET BUF	04/21/23 15:10
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:50

Client Sample ID: BMTP-13 3-5FT
Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	666262	DSC	EET BUF	04/20/23 18:38

Client Sample ID: BMTP-13 3-5FT
Date Collected: 04/17/23 14:00
Date Received: 04/19/23 09:50

Lab Sample ID: 480-207977-16
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			666236	SJM	EET BUF	04/20/23 16:01
Total/NA	Analysis	8270D		5	666313	JMM	EET BUF	04/21/23 17:17
Total/NA	Prep	3050B			666172	VAK	EET BUF	04/20/23 14:31
Total/NA	Analysis	6010C		1	666418	BMB	EET BUF	04/21/23 14:11
Total/NA	Prep	7471B			666540	NVK	EET BUF	04/24/23 11:35
Total/NA	Analysis	7471B		1	666645	NVK	EET BUF	04/24/23 13:51

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-207977-1
Project/Site: Jefferson & Best site

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Jefferson & Best site

Job ID: 480-207977-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-207977-1	BMTP-1 1-3FT	Solid	04/17/23 09:30	04/19/23 09:50
480-207977-2	BMTP-3 0-1.5FT	Solid	04/17/23 10:45	04/19/23 09:50
480-207977-3	BMTP-5 4-6FT	Solid	04/17/23 11:15	04/19/23 09:50
480-207977-4	BMTP-6 1-2FT	Solid	04/17/23 11:45	04/19/23 09:50
480-207977-5	BMTP-7 1-2FT	Solid	04/17/23 12:15	04/19/23 09:50
480-207977-6	BMTP-10 0-6IN	Solid	04/17/23 12:30	04/19/23 09:50
480-207977-7	BMTP-11 0-6IN	Solid	04/17/23 13:00	04/19/23 09:50
480-207977-8	BMTP-12 1-3FT	Solid	04/17/23 13:30	04/19/23 09:50
480-207977-9	BMTP-13 1-3FT	Solid	04/17/23 14:00	04/19/23 09:50
480-207977-10	BMTP-14 0-6IN	Solid	04/17/23 14:30	04/19/23 09:50
480-207977-11	BMTP-15 0-6IN	Solid	04/17/23 15:00	04/19/23 09:50
480-207977-16	BMTP-13 3-5FT	Solid	04/17/23 14:00	04/19/23 09:50

Chain of Custody Record

599244 eurofins Environment Testing TestAmerica

Address: ______

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	
Company Name:	Turnkey Env. Restoration
Address:	2558 Hamburg Tpke
City/State/Zip:	Buffalo NY 14218
Phone:	716-713-3437
Fax:	
Project Name:	Jefferson : Best Site
Site:	
P O #	TDS62-023-001

Project Manager: Bryan Mayback
Tel/Email: 716-713-3437
Site Contact: Nick Sco...
Lab Contact: Brian Fisher
Date: 4/18/23
Carrier:

COC No: ______ of ______ COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Analysis Turnaround Time
☐ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below ______
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	PAH's	RCRA Metals	Sample Specific Notes:
BMTP-1 1-3Ft	4/17/23	9:30	G	Soil	2			X	X	
BMTP-3 0-1.5Ft	↓	10:45	↓	↓	↓			X	X	
BMTP-5 4-6Ft		11:15						X	X	
BMTP-6 1-2Ft		11:45						X	X	
BMTP-7 1-2Ft		12:15						X	X	
BMTP-10 0-6in		12:30						X	X	
BMTP-11 0-6in		13:00						X	X	
BMTP-12 1-3Ft		13:30						X	X	
BMTP-13 1-3Ft		14:00						X	X	
BMTP-14 0-6in		14:30						X	X	
BMTP-15 0-6in		15:00						X	X	

480-207977 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments:
4.0 #1 ICE

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ______ Corr'd: ______ Therm ID No.: ______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	BMTK	4/18/23 11:00			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA	Date/Time: 4/19/23 950

Chain of Custody Record

599245 eurofins Environment Testi TestAmerica

Address: ______________________

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact			
Company Name: Turnkey Env Restoration	Project Manager: Bryan Mayo	Site Contact: Nick Szel	Date: 4/13/23
Address: 2558 Hamburg Tpk	Tel/Email: 716-713-3437	Lab Contact: Brian Fi…	Carrier:
City/State/Zip: Buffalo NY 14218	Analysis Turnaround Time		COC No:
Phone: 716-713-3437	☐ CALENDAR DAYS ☐ WORKING DAYS		____ of ____ COCs
Fax:	TAT if different from Below ______		Sampler:
Project Name: Jefferson & Best	☐ 2 weeks		For Lab Use Only:
Site:	☐ 1 week		Walk-in Client:
P O # T0562-023-001	☐ 2 days		Lab Sampling:
	☐ 1 day		Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	PAH's	TCLP Metals	Sample Specific Notes:
BMTP-2 4-6Ft	4/11/23	10:15	G	Soil	2					On hold
~~BMTP-4~~	↓		↓	↓	↓					~~On hold~~
BMTP-8 0-1Ft	↓	12:25	↓	↓	↓					On hold
BMTP-9 0-1Ft	↓	12:45	↓	↓	↓					On hold
BMTP-12 4-6Ft	↓	13:35	↓	↓	↓					On hold
BMTP-13 3-5Ft	↓	14:00	↓	↓	↓					On hold

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ______ Months

Special Instructions/QC Requirements & Comments:

4.0 #1 ICE

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____		Therm ID No.: ____
Relinquished by: [signature]	Company: BMK	Date/Time: 4/13/23 11:4?	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA	Date/Time: 4/19/23 950

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-207977-1

Login Number: 207977
List Number: 1
Creator: Kolb, Chris M

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	bmtk
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	