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Preliminary Site Investigation

BIKE TRAIL EXTENSION AND IMPROVEMENTS MATTOON TO CHARLESTON, COLES COUNTY, ILLINOIS

February 18, 2019
File No. 81.0220535.03

PREPARED FOR:
City of Mattoon
208 N. 19th Street
Mattoon, IL 61938

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February 18, 2019
File No. 81.0220535.02

Mr. Dean Barber
Public Works Director
City of Mattoon
208 N. 19th Street
Mattoon, IL 61938

Re: Preliminary Site Investigation
Bike Trail Extension and Improvements from Mattoon to Charleston
Mattoon to Charleston, Coles County, IL
81.0220535.02

Dear Mr. Barber,

Huff & Huff, Inc., a subsidiary of GZA GeoEnvironmental, Inc. (H&H) is pleased to submit this *Preliminary Site Investigation* (PSI) for proposed Bike Trail Extension and Improvements from Mattoon to Charleston in Coles County, IL.

The scope and depth of this study are consistent with those proposed and accepted by the City of Mattoon. The field observations and results reported herein are considered sufficient in detail and scope to form an informed and professional opinion as to the obvious potential environmental hazards along the Project Corridor. This assessment has further investigated the forty-one (41) potentially impacted properties (PIPs) identified in the *Preliminary Environmental Site Assessment* (PESA).

Soil samples were collected along the Project Corridor and, specifically, relative to the identified PIPs. The laboratory analytical assessment for contaminants of concern associated with the various PIPs includes VOCs, BTEX, PNAs, total Target Analyte List (TAL) metals, and soil pH.

Based on detections of SVOCs that exceeded the Maximum Allowable Concentration (MACs) values at various locations throughout the Project Corridor in addition to the detections of arsenic that exceeded the MAC values at twenty-four locations, exclusion zones have been established around these locations. The soil generated from these borings is **NOT** certified for CCDD disposal but must be managed as a non-special waste with final disposition at a Subtitle D Sanitary Landfill. The CCDD exclusion zones along Broadway Street, are depicted on Figure 4-1.

Soils within the areas characterized by SB-4 (0-3), SB-6 (0-3), SB-7 (0-3), SB-8 (0-3), SB-9 (0-3), SB-10 (0-3), SB-11 (0-1), SB-12 (0-1), SB-16 (0-1), SB-18 (0-1), SB-19/SB-19A (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-29 (0-5), SB-30 (0-3), SB-32 (0-1), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-42 (0-1), SB-43 (0-1), SB-44 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1) are considered to be a(5) soils per Article 669.05 of IDOT Standard Specifications for Road and Bridge Construction, which must be managed and disposed of off-site as non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-5 (1-3), SB-8 (3-5), SB-9 (3-5), SB-25 (0-1), and SB-31 (1-3) are considered to be 669.05 a(4) soils, which can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized by SB-1 (0-5), SB-2 (0-5), SB-3 (0-5), SB-6 (3-5), SB-7 (3-5), SB-10 (3-5), SB-13 (0-1), SB-14 (0-1), SB-15 (0-1), SB-17 (0-1), SB-20 (0-1), SB-21 (0-1), SB-28 (0-1), SB-34 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-39 (0-1), SB-41 (0-1) are considered to be 669.05 a(3) soils, which may be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized SB-27 (0-1) are considered to be 669.05 a(1) soils. Soil in the vicinity of these soil borings may be utilized within the construction limits as fill, when suitable. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-4 (3-5), SB-5 (3-5), SB-30 (3-5), and SB-31 (3-5) achieves the MACs, are considered unrestricted, and may be managed on site or off site, including disposal at a CCDD/USFO facility using the attached LPC-663 form in Appendix D.

In addition, based on naphthalene results from SB-10 in exceedance of the inhalation exposure pathway, a construction worker (CW) caution has been identified from the midpoint of N. 14th Street extending 75 feet west and from the northern and southern extents of the Project Corridor (approximately 60 feet).

Soils from the remainder of the Project Corridor may be reused onsite or disposed of at a CCDD facility. As PIPs were identified along the Project Corridor, the CCDD regulations require completion of Uncontaminated Soil Certification by Licensed Professional Engineer or Geologist (LPC-663) prior to placement of soils at either a CCDD or soil-only USFO facility. The completed LPC-663 Forms are included in Appendix E.

If you have any questions or comments, please don't hesitate to contact us at 630-684-9100.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Adam Kittler
Project Geologist

Jill Connolly
Project Manager / Consultant Reviewer

Jeremy J. Reynolds, P.G.
Associate Principal

Attachments: Mattoon Bike Trail Extension PSI Report

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GLOSSARY OF ACRONYMS

ACM	Asbestos-Containing Material	**NIPC**	Northeast Illinois Planning Commission
ASTM	ASTM International	**NFR**	No Further Remediation
bgs	below ground surface	**NPMS**	National Pipeline Mapping System
BDE	Bureau of Design and Environment	**PESA**	Preliminary Environmental Site Assessment
BLRS	Bureau of Local Roads and Streets	**PGA**	Peak Ground Acceleration
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes	**PID**	Photoionization Detector
CCDD	Clean Construction or Demolition Debris	**PIP**	Potentially Impacted Property
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	**PNA**	Polynuclear Aromatic Hydrocarbons
COC	Contaminant of Concern	**PSI**	Preliminary Site Investigation
CWA	Clean Water Act	**RCRA**	Resource Conservation and Recovery Act
ERIS	Environmental Risk Information Services	**REC**	Recognized Environmental Condition
FEMA	Federal Emergency Management Agency	**RO**	Remedial Objective
FOIA	Freedom of Information Act	**ROW**	Right-of-Way
IAC	Illinois Administrative Code	**SPILLS**	Spills and Incidences
IDOT	Illinois Department of Transportation	**SQG**	Small Quantity Generator
IEMA	Illinois Emergency Management Agency	**USEPA**	United States Environmental Protection Agency
IEPA	Illinois Environmental Protection Agency	**USFO**	Uncontaminated Soil Fill Operation
ISGS	Illinois State Geological Survey	**USGS**	United States Geological Survey
LUST	Leaking Underground Storage Tank	**UST**	Underground Storage Tank
MAC	Maximum Allowable Concentration	**WWTP**	Wastewater Treatment Plant

EXECUTIVE SUMMARY

This *Preliminary Site Investigation* (PSI) pertains to the proposed improvements that are along the Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston (Project Corridor). The planned improvements include trail resurfacing, street signage, and new trail pavement construction. At this time, the maximum depth of excavation for the proposed improvements is anticipated to be approximately 1 to 5 ft bgs.

A *Preliminary Environmental Site Assessment* (PESA) was conducted by Huff & Huff, Inc. in September 2018. The PESA concluded that forty-one (41) potentially impacted properties (PIPs) existed adjacent to the Project Corridor. Soil borings were advanced at forty-seven (47) locations within the existing right-of-way (ROW) on December 12, 2018, to address the PIPs, which are summarized in the following table.

Table ES-1 Summary of Sites Determined to be PIPs

Site ID	Site Name	Address	Reason(s)
RR-1	New York Central Railroad	Project Corridor (Excluding Roadway Areas Within Charleston)	Historic Rail Use
5	Niebrugge Oil Company / Platolene 500	212 N. 15th Street, Mattoon, IL	LUST, SPILLS, UST Listings
6	CIPS Town Gas / Central Illinois Public Service	SE Corner 14th Street and Richmond Ave, Mattoon, IL	ENG, INST, SRP, LUST Listings
7	Young Radiator / Ballinger, Dennis / Unknown / Former Young Radiator	120 N. 14th Street, Mattoon, IL	CERCLIS, ENG, FINDS/FRS, INST, LUST, RCRA NON GEN, SEMS, SPILLS, SRP, UST, LUST TRUST
8	City of Mattoon Street Department	1201 Richmond Avenue, Mattoon, IL	UST Listing
13	Mattoon Softball Complex / Former Railyard	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	Former rail use based off of historical aerials
17	Verizon Wireless	324 N. 1st Street, Mattoon, IL	AST Listing
18	Storage Yard and Water-tower	379 N. Division Street, Mattoon, IL	Potential storage of hazardous materials based off historical aerials and site reconnaissance
19	Monitor Signs Inc	316 N. Division, Mattoon, IL	RCRA CESQG Listings, Site Reconnaissance
20	General Steel & Metal/Mervis Industry, Inc.	612 N. Logan Street, Mattoon, IL	LUST, RCRA CESQG, UST Listings
25	NCI Group, Inc dba Insulated Panel Systems	1509 Dewitt Avenue East, Mattoon, IL	AST Listing
26	Resthaven Memorial Gardens Cemetery	1701 Dewitt Avenue, Mattoon, IL	Potential for storage or release of hazardous material
28	JG Scholes Trucking, Inc	6125 Stockton Road, Mattoon, IL	AST Listing
30	Charleston Country Club	8355 Country Club Road, Charleston, IL	Historic use of golf course, potential for storage of hazardous materials
37	Lester Building Systems	890 W. State Street, Charleston, IL	INST, SRP Listings
39	Treasure Island Furniture	620 W. State Street, Charleston, IL	UST listings, Proximity to Corridor
42	Maintenance and Storage Facility	110 N. E Street, Charleston, IL	Potential storage of hazardous materials based off historical aerials and site reconnaissance

Site ID	Site Name	Address	Reason(s)
43	CJS Auto & Towing	22 C Street, Charleston, IL	RCRA NON GEN Listing, Site Reconnaissance
49	AT&T Mobility / Total Grain Marketing LLC	100 N. 5th Street, Charleston, IL	AST, FINDS/FRS, ICIS Listings
50	Gano Welding Supplies Inc.	320 Railroad Street, Charleston, IL	FINDS/FRS Listings
53	Huckaba & Sons Construction Co / Wright Trucking Dennis	823 Olive Street, Charleston, IL	UST Listings
54	Midstate Foundry Co	10th and Olive Street, Charleston, IL	FINDS/FRS, ICIS, and UST Listings
59	Kirchner Building Center	1 6th Street, Charleston, IL	UST Listings
64	Dutts, Gayna / Winnett & Deremiah	603 Madison Avenue, Charleston, IL	LUST, UST Listings
65	Quality Auto Construction	611 Madison Street, Charleston, IL	RCRA SQG Listings
66	Darrell Eaton Property	617 Madison Street, Charleston, IL	LUST, UST Listings
74	Carols Cleaners	616 S. 6th Street, Charleston, IL	FINDS/FRS, RCRA NON GEN Listings
76	Coles County Sherriff Dept.	701 7th Street, Charleston, IL	AST, LUST, SPILLS, UST Listings
80	IL Consolidated Telephone Co	805 7th Street, Charleston, IL	Minimal FINDS/FRS, UST listings, good housekeeping noted
84	Inyart Tire & Auto	515 Lincoln Avenue, Charleston, IL	FINDS/FRS Listings, Site Reconnaissance
85	Marathon Oil #1819	Lincoln Avenue & 6th Street, Charleston, IL	UST Listing
86	Eastern Illinois University / Eastern Illinois University - Art Park	600-12 Lincoln Avenue, Charleston, IL	FINDS/FRS, RCRA SQG, ICIS, SPILLS
E	Pierce Francis & Diller W L (SIA)	1709 Broadway P.O. Box 320, Mattoon, IL	CERCLIS and SEMS ARCHIVE listings
I	Sherwin-Williams Co	1522 Broadway, Mattoon, IL	RCRA NON GEN Listings
O	Meadow Gold Dairy / Borden, Inc	1308-1312 Broadway, Mattoon, IL	LUST, SPILLS, SRP, UST Listings
AE	CIPS Town Gas	339 Washington Avenue, Charleston, IL	ENG, INST, SRP Listings
AJ	No Facility Name Provided / Hucks #250	501-503 Madison Street, Charleston, IL	UST, SPILLS Listings
AK	Jim Hutton, Boatman / Illinois Dept. of Transportation / Public Right of Way	5th & Madison, Charleston, IL	LUST, SPILLS, UST Listings
AM	Johnsons Automotive SVC Inc	407 8th Street, Charleston, IL	RCRA SQG Listing
RR-2	Illinois Central Railroad	1718 Broadway Avenue, Mattoon, IL	Historic Rail Use
RR-3	New York Chicago and St. Louis Railroad	5th Street and Olive Avenue, Charleston, IL	Historic Rail Use

Forty-seven (47) soil borings were advanced to depths of approximately five (5) feet bgs, corresponding to the maximum anticipated depth of the planned and/or potential improvements. The current guidance for determining the ability to dispose of materials as clean construction or demolition debris (CCDD) at a CCDD facility of uncontaminated soil fill operation (USFO) is through comparison of soil sample analytical results to the Maximum Allowable Concentrations (MACs) of chemical constituents in uncontaminated soil used as fill material. There is also a soil pH requirement (between 6.25 and 9.0).

Samples were selected from each boring for analysis of the contaminants of concern (COCs) associated with the PIPs identified in the PESA, and include one or more the following: volatile organic compounds (VOCs); benzene, toluene, ethyl benzene, total xylenes (BTEX), a sub-set of the volatile organic list; semi-volatile organic compounds (SVOCs); polynuclear aromatic compounds (PNAs), a sub-set of the semi-volatile organic list; total Target Analyte List (TAL) metals. Samples were also analyzed for soil pH using laboratory analysis to assess CCDD suitability of Project Corridor soils.

Fifteen samples were analyzed for soil pH using laboratory analysis. The results range from 6.43 to 8.91, within the required range for CCDD disposal (6.25 to 9.0).

Sample SB-8 (1-3) had a detection of benzene above the most stringent Tier 1 ROs and the MACs. The remaining VOC (and subset BTEX) results are below detection limits for the samples analyzed, achieving the Tier 1 ROs and the MACs.

Fifty-six (56) samples contained detectable levels of SVOCs. Fifty-two (52) samples contained detections of SVOCs that exceeded the most stringent MAC values. Exceeding constituents consisted of one or more of the following: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno (1,2,3-cd)pyrene, and naphthalene.

Sample SB-10 (1-3) contained naphthalene and benzo(a)anthracene at a concentration that exceeded the MAC limits for disposal within a populated area in a MSA county excluding Chicago, within Chicago corporate limits, within a populated area in a non-MSA county, and outside of a populated area. In addition, the naphthalene concentration also exceeded the Tier 1 RO for construction worker inhalation. SB-10 (1-3) also contained benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno (1,2,3-cd)pyrene at concentrations that exceeded the most stringent MAC values.

Twenty-three (23) soil samples SB-4 (1-3), SB-6 (1-3), SB-7 (1-3), SB-8 (1-3), SB-9 (1-3), SB-11 (0-1), SB-12 (0-1), SB-18 (0-1), SB-9 (0-1), SB-20 (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-27 (0-1), SB-29 (1-3), SB-29 (3-5), SB-30 (1-3), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-43 (0-1), and SB-44 (0-1) contained arsenic at a concentration that exceeded the MAC value (13.0 mg/kg) for soils within a MSA county. Exceedances of the RO and MAC values for arsenic at these locations will preclude these areas from being eligible for CCDD disposal with a MSA county. In addition, one sample, SB-32 (0-1), exceeded the MAC value (11.3 mg/kg) for soils in a non-MSA county. Exceedances of the RO and MAC values for arsenic at this location will preclude this area from being eligible for CCDD disposal with a non-MSA county.

Twenty-six (26) soil samples contained total mercury at concentrations that exceeded the MAC value (0.1 mg/kg) and the construction worker inhalation objective (0.1 mg/kg) but achieved the Residential and Industrial/Commercial ROs. The construction worker caution for mercury is based on elemental mercury, and mercury detected in this location is likely attributed to inorganic mercury salt compounds (association with coal, specifically). Due to the nature of the Project Corridor as a former railroad with potential historic use of coal and coal noted in several of the boring locations, elevated total mercury levels are anticipated to be associated with the coal and are not anticipated to be of the elemental speciation of mercury.

Twelve (12) soil samples had detections of total chromium that exceeded the MAC value (21 mg/kg). Five select soil samples [SB-15 (0-1), SB-21 (0-1), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total chromium exceedances were subsequently analyzed for TCLP chromium which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP chromium results, chromium is considered to achieve the MAC in the five samples analyzed for TCLP chromium. Table 3-10 presents the soil TCLP chromium results compared to the MAC. The remaining seven (7) soil samples with total chromium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Sixteen (16) soil samples had detections of total lead that exceeded the MAC value (107 mg/kg). Total lead was detected at SB-19 (0-1) with a concentration of 5770 mg/kg. TCLP laboratory analysis was unable to be completed on the sample due to matrix issues. An additional sample, SB-19A (0-1) was obtained from the same interval and boring location. Total lead was detected at a concentration of 117 mg/kg. Six select soil samples [SB-3 (1-3), SB-18 (0-1), SB-19A (0-1), SB-20 (0-1), SB-27 (0-1), and 31 (1-3)] with total lead exceedances were subsequently analyzed for TCLP lead. Soil samples SB-18 (0-1) and SB-27 (0-1) had detections (0.0161 mg/L and 0.0182 mg/L, respectively) of TCLP lead that exceeded the MAC

Value (0.0075 mg/L). The remaining samples had results below the lab detection limit, achieving the MACs. The remaining ten (10) soil samples with total lead exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Forty (40) soil samples had detections of total iron that exceeded the MAC value (15,000 mg/kg). Fourteen select soil samples [SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (3-5), SB-6 (3-5), SB-10 (3-5), SB-21 (0-1), SB-28 (0-1), SB-30 (3-5), SB-31 (1-3), SB-31 (3-5), SB-36 (0-1), SB-37 (0-1), and SB-41 (0-1)] with total iron exceedances were subsequently analyzed for TCLP iron. One sample, SB-10 (3-5), had a detection of TCLP iron, 4.74 mg/L, below the MAC value of 5mg/L. The remaining TCLP lead results were below the lab detection limit, achieving the MAC. Based on the subsequent TCLP iron results, iron is considered to achieve the MAC in the fourteen samples analyzed for TCLP iron. Table 3-10 presents the soil TCLP iron results compared to the MAC. The remaining twenty-six (26) soil samples with total iron exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Twenty-three (23) soil samples had detections of total silver that exceeded the MAC value (4.4 mg/kg). Six select soil samples [SB-15 (0-1), SB-21 (0-1), SB-31 (1-3), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP silver results compared to the MAC. The remaining seventeen (17) soil samples with total silver exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Nineteen (19) soil samples had detections of total thallium that exceeded the MAC value (2.6 mg/kg). Eight select soil samples [SB-1 (1-3), SB-3 (1-3), SB-21 (0-1), SB-31 (1-3), SB-35 (0-1), SB-36 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP thallium results compared to the MAC. The remaining three (3) soil samples with total thallium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Seven (7) soil samples had detections of total manganese that exceeded the MAC value (630 mg/kg). Four select soil samples [SB-15 (0-1), SB-35 (0-1), SB-36 (0-1), and SB-39 (0-1)] with total manganese exceedances were subsequently analyzed for TCLP or SPLP manganese. Two samples, SB-35 (0-1) and SB-36 (0-1), had a detection of SPLP manganese, 0.0378 mg/L and 0.0291 mg/L, below the MAC value of 0.15 mg/L. The remaining SPLP and TCLP manganese results were below the lab detection limit, achieving the MAC. Based on the subsequent SPLP and TCLP manganese results, manganese is considered to achieve the MAC in the four samples analyzed for SPLP and TCLP manganese. Table 3-10 presents the soil SPLP and TCLP manganese results compared to the MAC.

Based on detections of SVOCs that exceeded the Maximum Allowable Concentration (MACs) values at various locations throughout the Project Corridor in addition to the detections of arsenic that exceeded the MAC values at twenty-four locations, exclusion zones have been established around these locations. The soil generated from these borings is **NOT** certified for CCDD disposal but must be managed as a non-special waste with final disposition at a Subtitle D Sanitary Landfill. The CCDD exclusion zones along Broadway Street, are depicted on Figure 4-1.

Soils within the areas characterized by SB-4 (0-3), SB-6 (0-3), SB-7 (0-3), SB-8 (0-3), SB-9 (0-3), SB-10 (0-3), SB-11 (0-1), SB-12 (0-1), SB-16 (0-1), SB-18 (0-1), SB-19/SB-19A (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-29 (0-5), SB-30 (0-3), SB-32 (0-1), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-42 (0-1), SB-43 (0-1), SB-44 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1) are considered to be a(5) soils per Article 669.05 of IDOT Standard Specifications for Road and Bridge

Construction, which must be managed and disposed of off-site as non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-5 (1-3), SB-8 (3-5), SB-9 (3-5), SB-25 (0-1), and SB-31 (1-3) are considered to be 669.05 a(4) soils, which can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized by SB-1 (0-5), SB-2 (0-5), SB-3 (0-5), SB-6 (3-5), SB-7 (3-5), SB-10 (3-5), SB-13 (0-1), SB-14 (0-1), SB-15 (0-1), SB-17 (0-1), SB-20 (0-1), SB-21 (0-1), SB-28 (0-1), SB-34 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-39 (0-1), SB-41 (0-1) are considered to be 669.05 a(3) soils, which may be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized SB-27 (0-1) are considered to be 669.05 a(1) soils. Soil in the vicinity of these soil borings may be utilized within the construction limits as fill, when suitable. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-4 (3-5), SB-5 (3-5), SB-30 (3-5), and SB-31 (3-5) achieves the MACs, are considered unrestricted, and may be managed on site or off site, including disposal at a CCDD/USFO facility using the attached LPC-663 form in Appendix D.

Should soils be encountered within the areas identified as CCDD acceptable that are not representative of the soils encountered during the PSI boring activities (odors, staining, or debris), those soils would need to be reassessed prior to disposal at a "clean fill" facility.

CCDD Soil Classification Summary:

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-1	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP iron and thallium below detection limits, achieving respective MAC Values
SB-2	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value, TCLP iron below detection limits, achieving respective MAC Values
SB-3	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron, mercury, thallium, and lead exceed most stringent Tier 1 ROs and MAC Value; TCLP iron, thallium, and lead below detection limits, achieving respective MAC Values
SB-4	1-3	0-3	a(5): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-5	1-3*	0-3	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county *total iron exceeds most stringent Tier 1 ROs and MAC Value. TCLP analysis was not analyzed. The TCLP results of 14 other samples were analyzed and achieved the MAC values. It is the professional opinion of Huff & Huff that total iron is not a contaminate of concern in this sample.
	3-5	3-5	Unrestricted: Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-6	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-7	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total mercury exceed most stringent Tier 1 ROs and MAC Value
SB-8	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
SB-9	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
SB-10	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances. Naphthalene exceedances above construction worker inhalation.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-11	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA and arsenic exceedances.
SB-12	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA and arsenic exceedances.
SB-13	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value
SB-14	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-15	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, manganese, and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese, TCLP chromium and silver below detection limits, achieving respective MAC Values
SB-16	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total mercury exceeds most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-17	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value
SB-18	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, manganese, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-19 / SB-19A	0-1	0-1	a(5): detections of PNA above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance. **Total lead result was 5,770 mg/kg, TCLP lead was unable to be run for lead due to matrix issues within the lab. An additional sample was later collected from the same interval within the boring location, total lead result was 117mg/kg with TCLP lead below detection limits.**
SB-20	0-1	0-1	a(2)/a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; a(2) due to arsenic value between 11.3 and 13.0, a(3) due to PNA exceedance above most stringent RO.
SB-21	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, iron, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, silver, and thallium below detection limits, achieving respective MAC Values
SB-22	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-23	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-24	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-25	0-1	0-1	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
SB-26	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-27	0-1	0-1	a(1): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and thallium above most stringent Tier 1 ROs and MAC Value; TCLP lead exceeds MAC Value.
SB-28	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-29	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, lead, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
	3-5	3-5	a(5): total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-30	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-31	1-3	0-3	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-32	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-33	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and lead exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-34	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total manganese and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP silver results are below detection limits, achieving respective MAC Values
SB-35	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total manganese and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP silver results are below detection limits, achieving respective MAC Values
SB-36	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total iron, manganese and thallium exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP iron and thallium results are below detection limits, achieving respective MAC Values
SB-37	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, and silver results are below detection limits, achieving respective MAC Values

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-38	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, and manganese exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-39	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, manganese, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, manganese, silver, and thallium results are below detection limits, achieving respective MAC Values
SB-40	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic exceeds most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-41	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, iron, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, silver, and thallium results are below detection limits, achieving respective MAC Values
SB-42	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-43	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-44	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedances.
SB-45	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-46	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, lead, mercury, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-47	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.

The CCDD regulations require completion of Uncontaminated Soil Certification by Licensed Professional Engineer or Geologist (LPC-663) prior to placement of soils at either a CCDD or soil-only USFO facility, in cases where PIPs have been identified. PIPs have been identified along the entire Project Corridor, making an LPC-663 necessary for this project. The completed LPC-663 Forms are included in Appendix E.

1.0 INTRODUCTION

1.1 SCOPE OF ASSESSMENT

Huff & Huff, Inc., a subsidiary of GZA GeoEnvironmental, Inc. (H&H) completed this *Preliminary Site Investigation* (PSI) for the City of Mattoon to identify man-made hazards that may be encountered within the proposed Project Corridor along the Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston (Project Corridor).

Based on the findings of the September 2018 *Preliminary Environmental Site Assessment* (PESA), forty-seven (47) soil borings were advanced for this *Preliminary Site Investigation Report* (PSI) to assess Project Corridor soils for construction worker safety and disposal considerations. The results were also used as to compare the constituent concentrations to the Tier 1 ingestion and inhalation exposure pathways for the residential and industrial/commercial population as well as the soil component of groundwater ingestion.

The specific methods used to prepare the assessment are contained in the following:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects (Erdmann et al., 2012)
- ASTM International Standard E 1527-13
- The IDOT BDE Manual, Chapter 27, Section 27-3 - *Special Waste Procedures*, and any subsequent revisions.
- IDOT's Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations and Uncontaminated Soil Fill
- Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.
- IDOT Standard Specifications for Road and Bridge Construction, Article 669.05.

ASTM Standard E 1527-13 uses the term Recognized Environmental Condition (REC) to assess risk. ASTM specifically defines REC as "the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a property: (1) due to any *release* to the *environment*; (2) under conditions indicative of a *release* to the *environment*; or (3) under conditions that pose a *material threat* of a future *release* to the *environment*. *De minimis conditions* are not *recognized environmental conditions*."

Part 1100, 35 Illinois Administrative Code (IAC) has adopted the term Potentially Impacted Property (PIP) when assigning risk to sites. The PIP sites are essentially the same as REC sites as defined by ASTM Standard E 1527-13. Based on the establishment of PIP as the industry standard for describing sites at which special waste management issues may be associated, this report uses the term "PIP" to describe sites presenting environmental concern to the Project Corridor.

Since the proposed scope of this project includes soil excavation activities, soil disposal is anticipated to be a concern as the project progresses. The assessment included collection of soil samples along the Project Corridor to assess soil quality with respect to construction worker safety and soil disposal requirements. Soil sample analytical results are compared to

Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) standards for soil and groundwater exposure, as well as Maximum Allowable Concentrations (MACs) of chemical constituents and pH in uncontaminated soil for Clean Construction or Demolition Debris (CCDD) disposal.

1.2 SCOPE OF IMPROVEMENTS

The proposed improvements are along the Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston in addition to improvements along 6th and 7th street from Olive Avenue to Lincoln Avenue. The Project Corridor study area is approximately 11.2 miles in length from 16th Street in the City of Mattoon to 14th Street in the City of Charleston and approximately 1 mile in length along 6th street and 7th street from Olive Avenue to Lincoln Avenue. The planned improvements include trail resurfacing, street signage, and new trail pavement construction. At this time, the maximum depth of excavation for the proposed improvements is anticipated to be approximately 5 ft bgs.

Refer to Figure 1-1 for the Project Location Map and to Figure 1-2 for a depiction of the Project Corridor.

1.3 SUMMARY OF PREVIOUS ASSESSMENTS

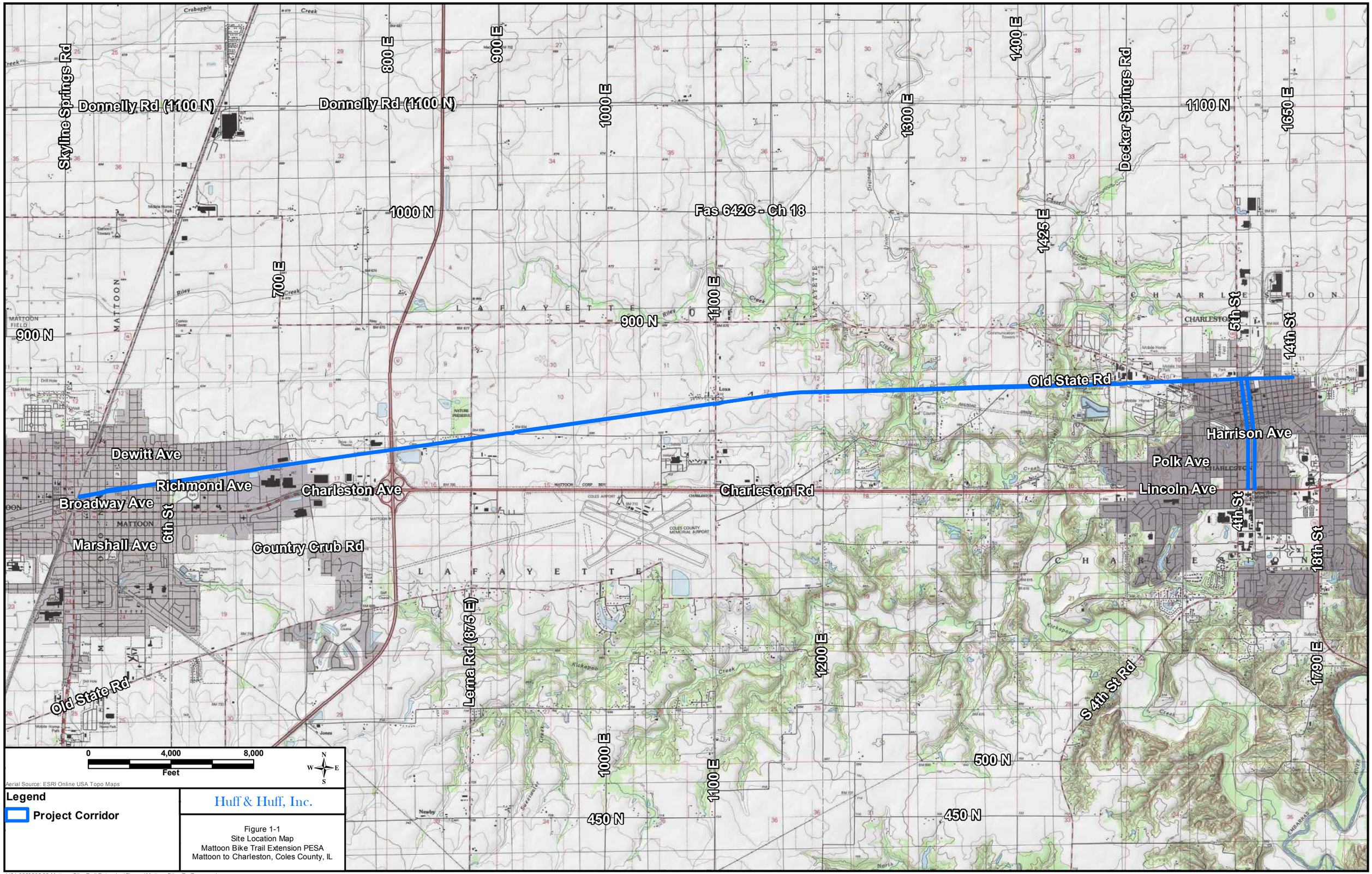
A PESA for the Project Corridor was conducted by Huff & Huff, Inc., (September 2018) which identified forty-one (41) PIPs.

Table 1-1 September 2018 PESA Sites Determined to be PIPs

Site ID	Site Name	Address	Reason(s)
RR-1	New York Central Railroad	Project Corridor (Excluding Roadway Areas Within Charleston)	Historic Rail Use
5	Niebrugge Oil Company / Platolene 500	212 N. 15th Street, Mattoon, IL	LUST, SPILLS, UST Listings
6	CIPS Town Gas / Central Illinois Public Service	SE Corner 14th Street and Richmond Ave, Mattoon, IL	ENG, INST, SRP, LUST Listings
7	Young Radiator / Ballinger, Dennis / Unknown / Former Young Radiator	120 N. 14th Street, Mattoon, IL	CERCLIS, ENG, FINDS/FRS, INST, LUST, RCRA NON GEN, SEMS, SPILLS, SRP, UST, LUST TRUST
8	City of Mattoon Street Department	1201 Richmond Avenue, Mattoon, IL	UST Listing
13	Mattoon Softball Complex / Former Railyard	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	Former rail use based off of historical aerials
17	Verizon Wireless	324 N. 1st Street, Mattoon, IL	AST Listing
18	Storage Yard and Water-tower	379 N. Division Street, Mattoon, IL	Potential storage of hazardous materials based off historical aerials and site reconnaissance
19	Monitor Signs Inc	316 N. Division, Mattoon, IL	RCRA CESQG Listings, Site Reconnaissance
20	General Steel & Metal/Mervis Industry, Inc.	612 N. Logan Street, Mattoon, IL	LUST, RCRA CESQG, UST Listings
25	NCI Group, Inc dba Insulated Panel Systems	1509 Dewitt Avenue East, Mattoon, IL	AST Listing
26	Resthaven Memorial Gardens Cemetery	1701 Dewitt Avenue, Mattoon, IL	Potential for storage or release of hazardous material
28	JG Scholes Trucking, Inc	6125 Stockton Road, Mattoon, IL	AST Listing

Site ID	Site Name	Address	Reason(s)
30	Charleston Country Club	8355 Country Club Road, Charleston, IL	Historic use of golf course, potential for storage of hazardous materials
37	Lester Building Systems	890 W. State Street, Charleston, IL	INST, SRP Listings
39	Treasure Island Furniture	620 W. State Street, Charleston, IL	UST listings, Proximity to Corridor
42	Maintenance and Storage Facility	110 N. E Street, Charleston, IL	Potential storage of hazardous materials based off historical aerials and site reconnaissance
43	CJS Auto & Towing	22 C Street, Charleston, IL	RCRA NON GEN Listing, Site Reconnaissance
49	AT&T Mobility / Total Grain Marketing LLC	100 N. 5th Street, Charleston, IL	AST, FINDS/FRS, ICIS Listings
50	Gano Welding Supplies Inc.	320 Railroad Street, Charleston, IL	FINDS/FRS Listings
53	Huckaba & Sons Construction Co / Wright Trucking Dennis	823 Olive Street, Charleston, IL	UST Listings
54	Midstate Foundry Co	10th and Olive Street, Charleston, IL	FINDS/FRS, ICIS, and UST Listings
59	Kirchner Building Center	1 6th Street, Charleston, IL	UST Listings
64	Dutts, Gayna / Winnett & Deremiah	603 Madison Avenue, Charleston, IL	LUST, UST Listings
65	Quality Auto Construction	611 Madison Street, Charleston, IL	RCRA SQG Listings
66	Darrell Eaton Property	617 Madison Street, Charleston, IL	LUST, UST Listings
74	Carols Cleaners	616 S. 6th Street, Charleston, IL	FINDS/FRS, RCRA NON GEN Listings
76	Coles County Sherriff Dept.	701 7th Street, Charleston, IL	AST, LUST, SPILLS, UST Listings
80	IL Consolidated Telephone Co	805 7th Street, Charleston, IL	Minimal FINDS/FRS, UST listings, good housekeeping noted
84	Inyart Tire & Auto	515 Lincoln Avenue, Charleston, IL	FINDS/FRS Listings, Site Reconnaissance
85	Marathon Oil #1819	Lincoln Avenue & 6th Street, Charleston, IL	UST Listing
86	Eastern Illinois University / Eastern Illinois University - Art Park	600-12 Lincoln Avenue, Charleston, IL	FINDS/FRS, RCRA SQG, ICIS, SPILLS
E	Pierce Francis & Diller W L (SIA)	1709 Broadway P.O. Box 320, Mattoon, IL	CERCLIS and SEMS ARCHIVE listings
I	Sherwin-Williams Co	1522 Broadway, Mattoon, IL	RCRA NON GEN Listings
O	Meadow Gold Dairy / Borden, Inc	1308-1312 Broadway, Mattoon, IL	LUST, SPILLS, SRP, UST Listings
AE	CIPS Town Gas	339 Washington Avenue, Charleston, IL	ENG, INST, SRP Listings
AJ	No Facility Name Provided / Hucks #250	501-503 Madison Street, Charleston, IL	UST, SPILLS Listings
AK	Jim Hutton, Boatman / Illinois Dept. of Transportation / Public Right of Way	5th & Madison, Charleston, IL	LUST, SPILLS, UST Listings
AM	Johnsons Automotive SVC Inc	407 8th Street, Charleston, IL	RCRA SQG Listing
RR-2	Illinois Central Railroad	1718 Broadway Avenue, Mattoon, IL	Historic Rail Use
RR-3	New York Chicago and St. Louis Railroad	5th Street and Olive Avenue, Charleston, IL	Historic Rail Use

Refer to Figure 1-3 for the Potentially Impacted Properties Map.



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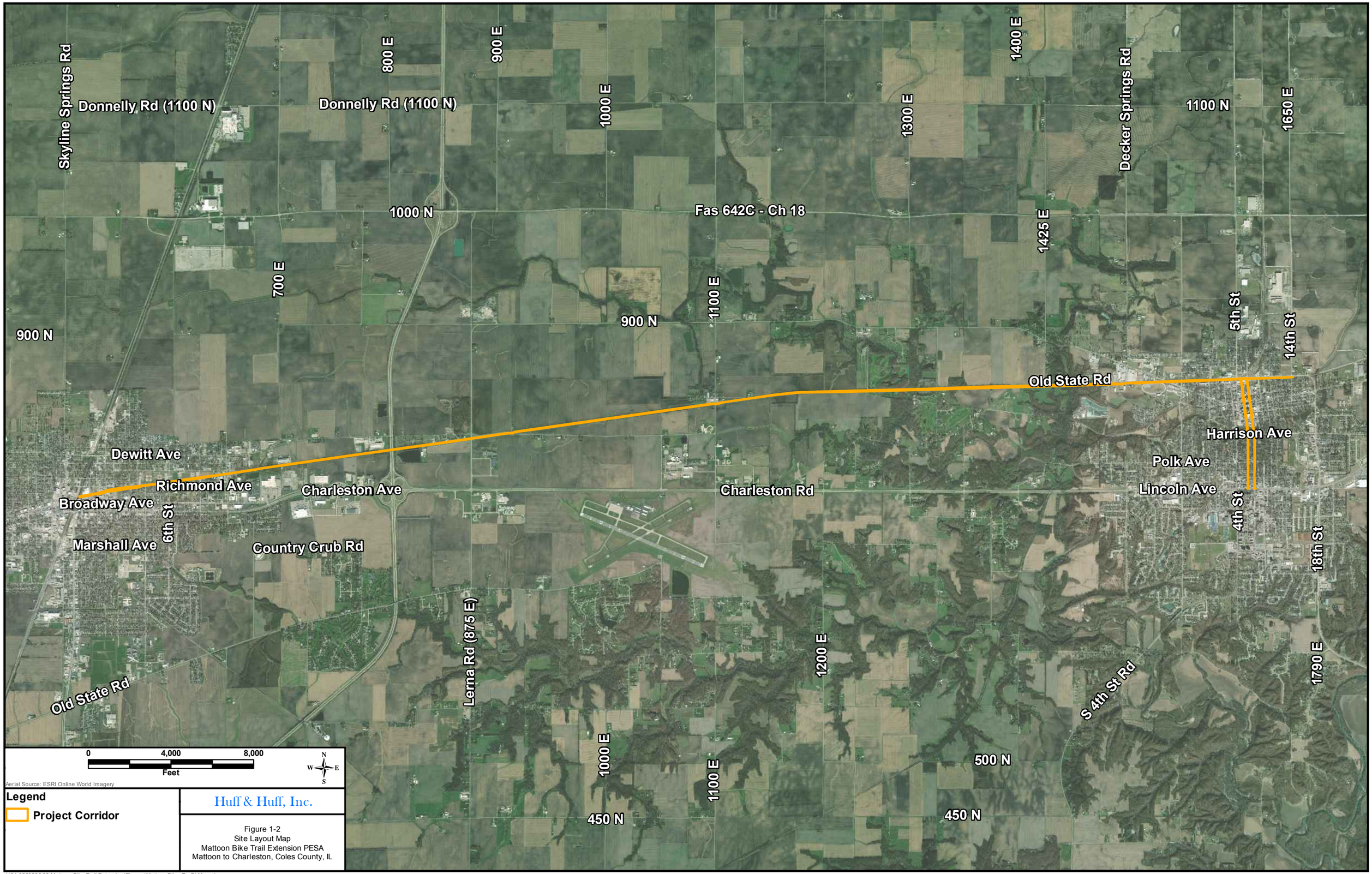

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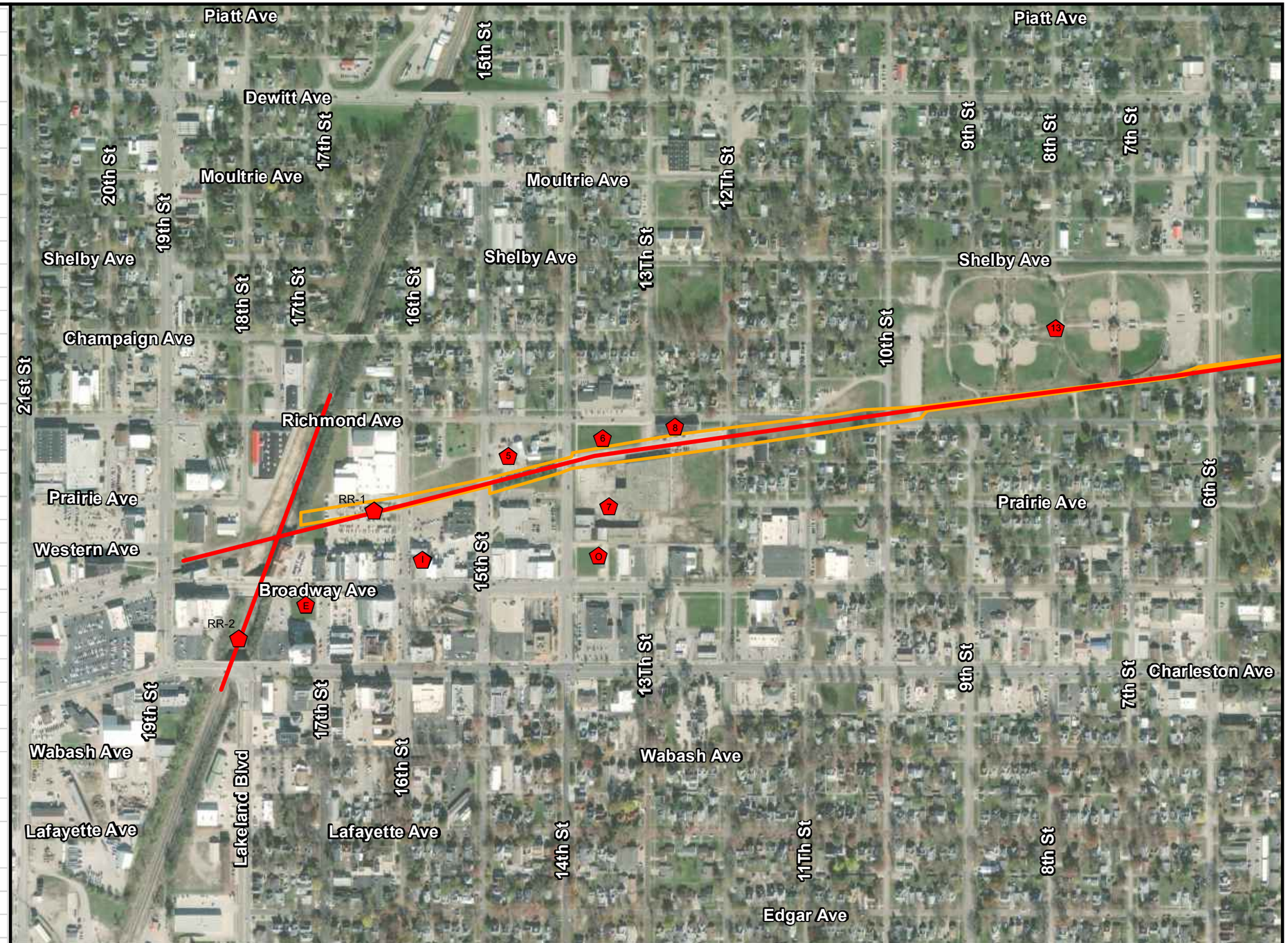
Site ID	Address	Status
5	212 N. 15th Street, Mattoon, IL	PIP
6	SE Corner 14th Street and Richmond Ave, Mattoon, IL	PIP
7	120 N. 14th Street, Mattoon, IL	PIP
8	1201 Richmond Avenue, Mattoon, IL	PIP
13	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	PIP
17	324 N. 1st Street, Mattoon, IL	PIP
18	379 N. Division Street, Mattoon, IL	PIP
19	316 N. Division, Mattoon, IL	PIP
20	612 N. Logan Street, Mattoon, IL	PIP
25	1509 Dewitt Avenue East, Mattoon, IL	PIP
26	1701 Dewitt Avenue, Mattoon, IL	PIP
28	6125 Stockton Road, Mattoon, IL	PIP
30	8355 Country Club Road, Charleston, IL	PIP
37	890 W. State Street, Charleston, IL	PIP
39	620 W. State Street, Charleston, IL	PIP
42	110 N. E Street, Charleston, IL	PIP
43	22 C Street, Charleston, IL	PIP
49	100 N. 5th Street, Charleston, IL	PIP
50	320 Railroad Street, Charleston, IL	PIP
53	823 Olive Street, Charleston, IL	PIP
54	10th and Olive Street, Charleston, IL	PIP
59	1 6th Street, Charleston, IL	PIP
64	603 Madison Avenue, Charleston, IL	PIP
65	611 Madison Street, Charleston, IL	PIP
66	617 Madison Street, Charleston, IL	PIP
74	616 S. 6th Street, Charleston, IL	PIP
76	701 7th Street, Charleston, IL	PIP
80	805 7th Street, Charleston, IL	PIP
84	515 Lincoln Avenue, Charleston, IL	PIP
85	Lincoln Avenue & 6th Street, Charleston, IL	PIP
86	600-12 Lincoln Avenue, Charleston, IL	PIP
E	1709 Broadway P.O. Box 320, Mattoon, IL	PIP
I	1522 Broadway, Mattoon, IL	PIP
O	1308-1312 Broadway, Mattoon, IL	PIP
AE	339 Washingon Avenue, Charleston, IL	PIP
AJ	501-503 Madison Street, Charleston, IL	PIP
AK	5th & Madison, Charleston, IL	PIP
AM	407 8th Street, Charleston, IL	PIP
RR-1	Length of Project Corridor	PIP
RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP



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Feet

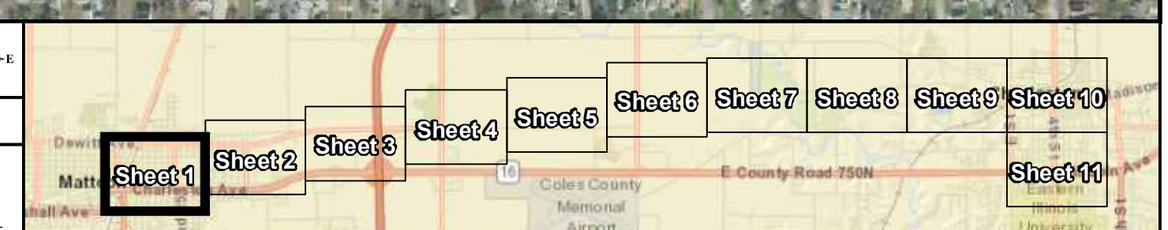
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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Site ID	Address	Status
5	212 N. 15th Street, Mattoon, IL	PIP
6	SE Corner 14th Street and Richmond Ave, Mattoon, IL	PIP
7	120 N. 14th Street, Mattoon, IL	PIP
8	1201 Richmond Avenue, Mattoon, IL	PIP
13	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	PIP
17	324 N. 1st Street, Mattoon, IL	PIP
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39	620 W. State Street, Charleston, IL	PIP
42	110 N. E Street, Charleston, IL	PIP
43	22 C Street, Charleston, IL	PIP
49	100 N. 5th Street, Charleston, IL	PIP
50	320 Railroad Street, Charleston, IL	PIP
53	823 Olive Street, Charleston, IL	PIP
54	10th and Olive Street, Charleston, IL	PIP
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84	515 Lincoln Avenue, Charleston, IL	PIP
85	Lincoln Avenue & 6th Street, Charleston, IL	PIP
86	600-12 Lincoln Avenue, Charleston, IL	PIP
E	1709 Broadway P.O. Box 320, Mattoon, IL	PIP
I	1522 Broadway, Mattoon, IL	PIP
O	1308-1312 Broadway, Mattoon, IL	PIP
AE	339 Washingon Avenue, Charleston, IL	PIP
AJ	501-503 Madison Street, Charleston, IL	PIP
AK	5th & Madison, Charleston, IL	PIP
AM	407 8th Street, Charleston, IL	PIP
RR-1	Length of Project Corridor	PIP
RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP

0 500 1,000
Feet

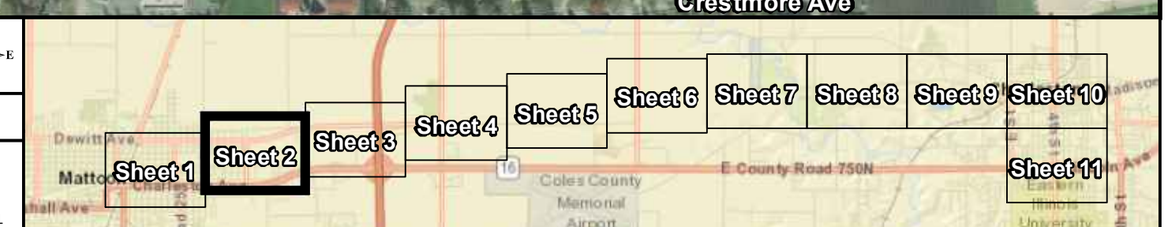
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP

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Feet

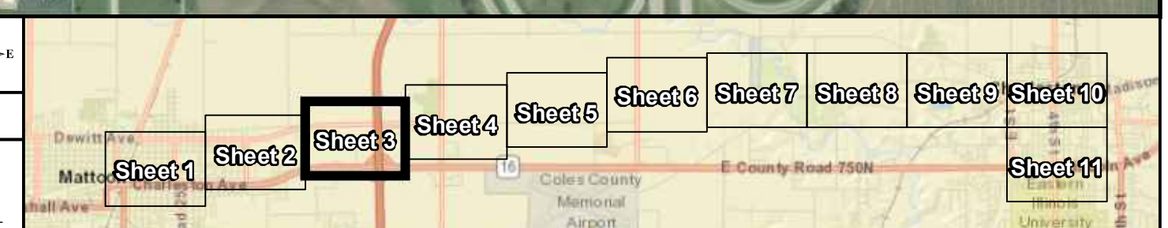
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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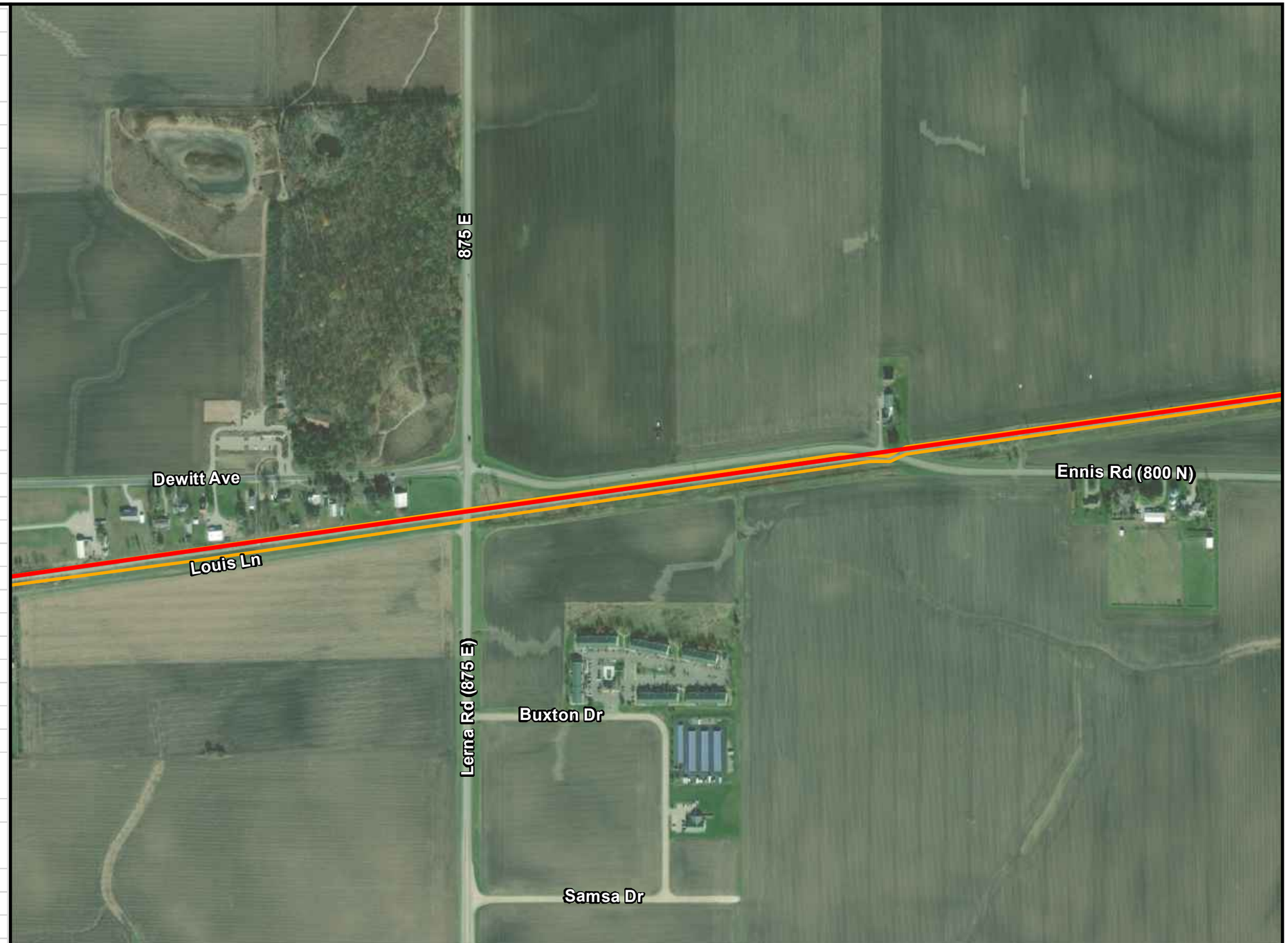

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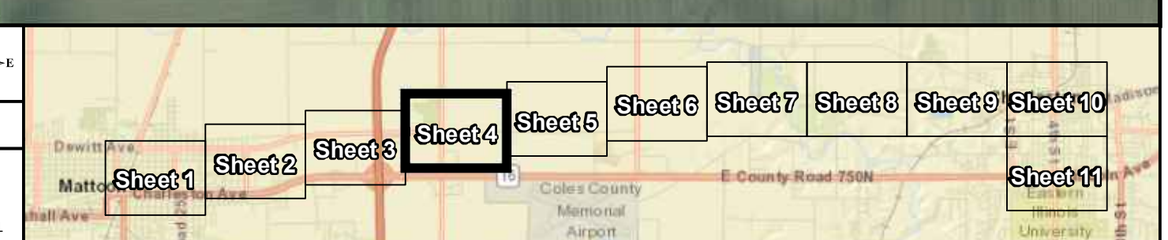
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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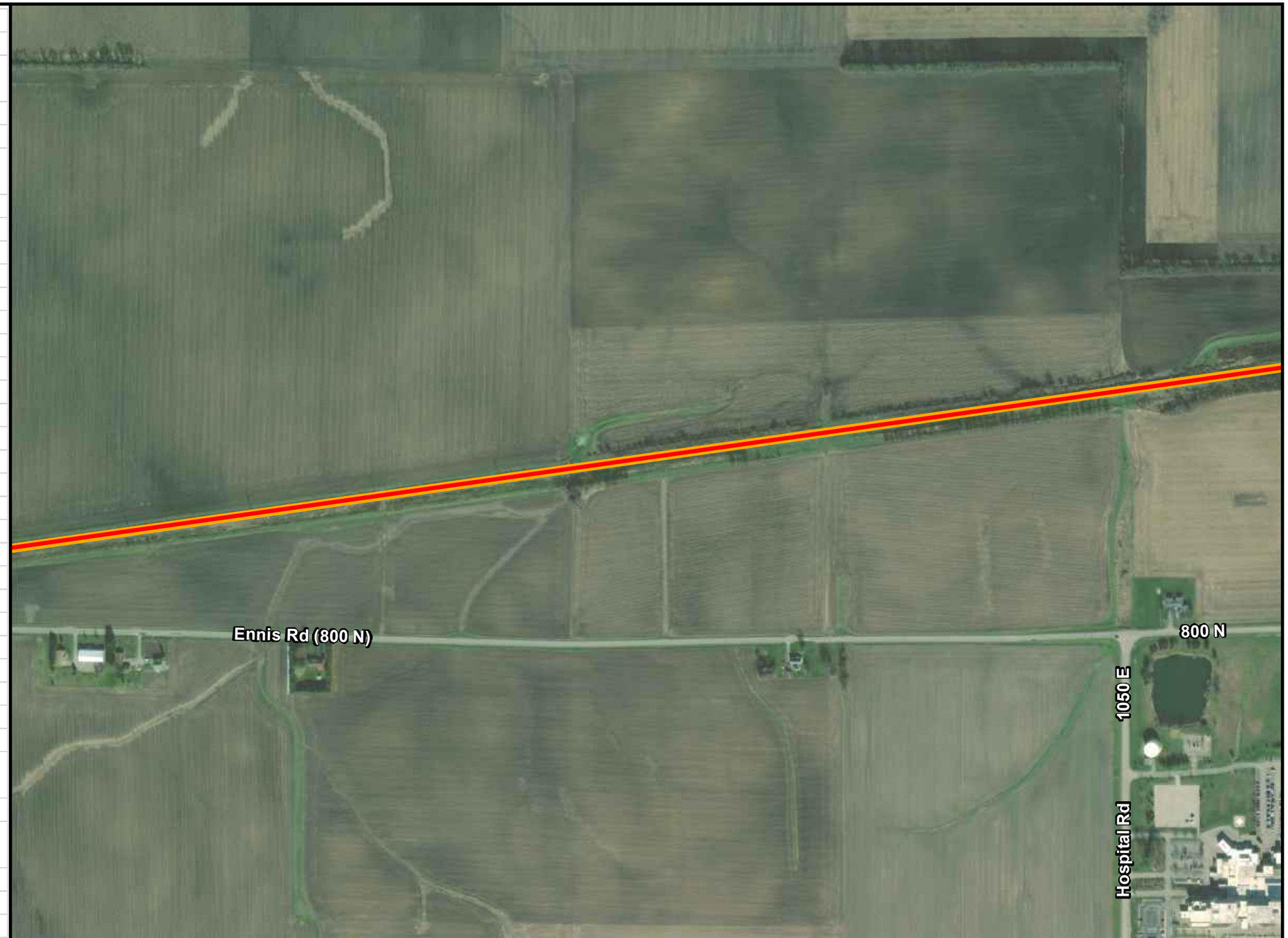

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Aerial Source: ESRI Online World Imagery

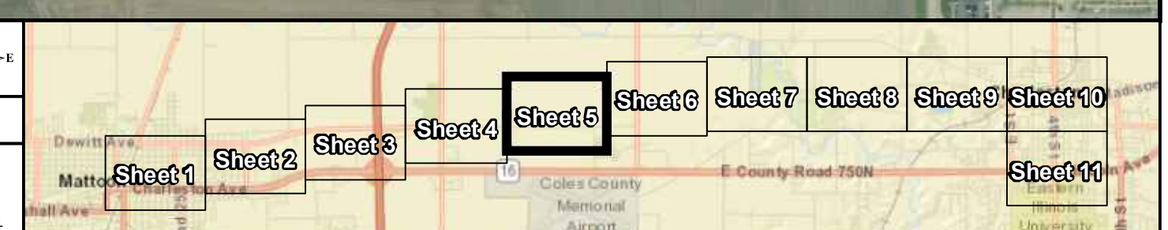
N W E S

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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0 500 1,000
Feet

Aerial Source: ESRI Online World Imagery

N W E S

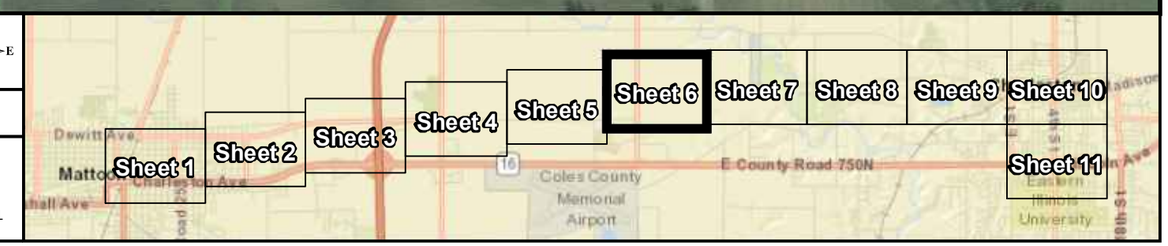
Legend

Project Corridor

PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

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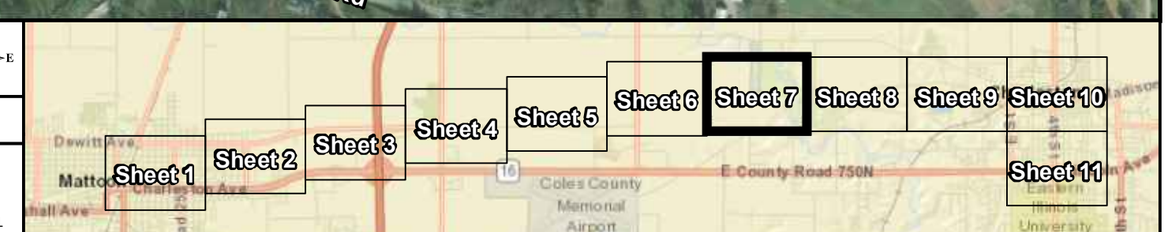
Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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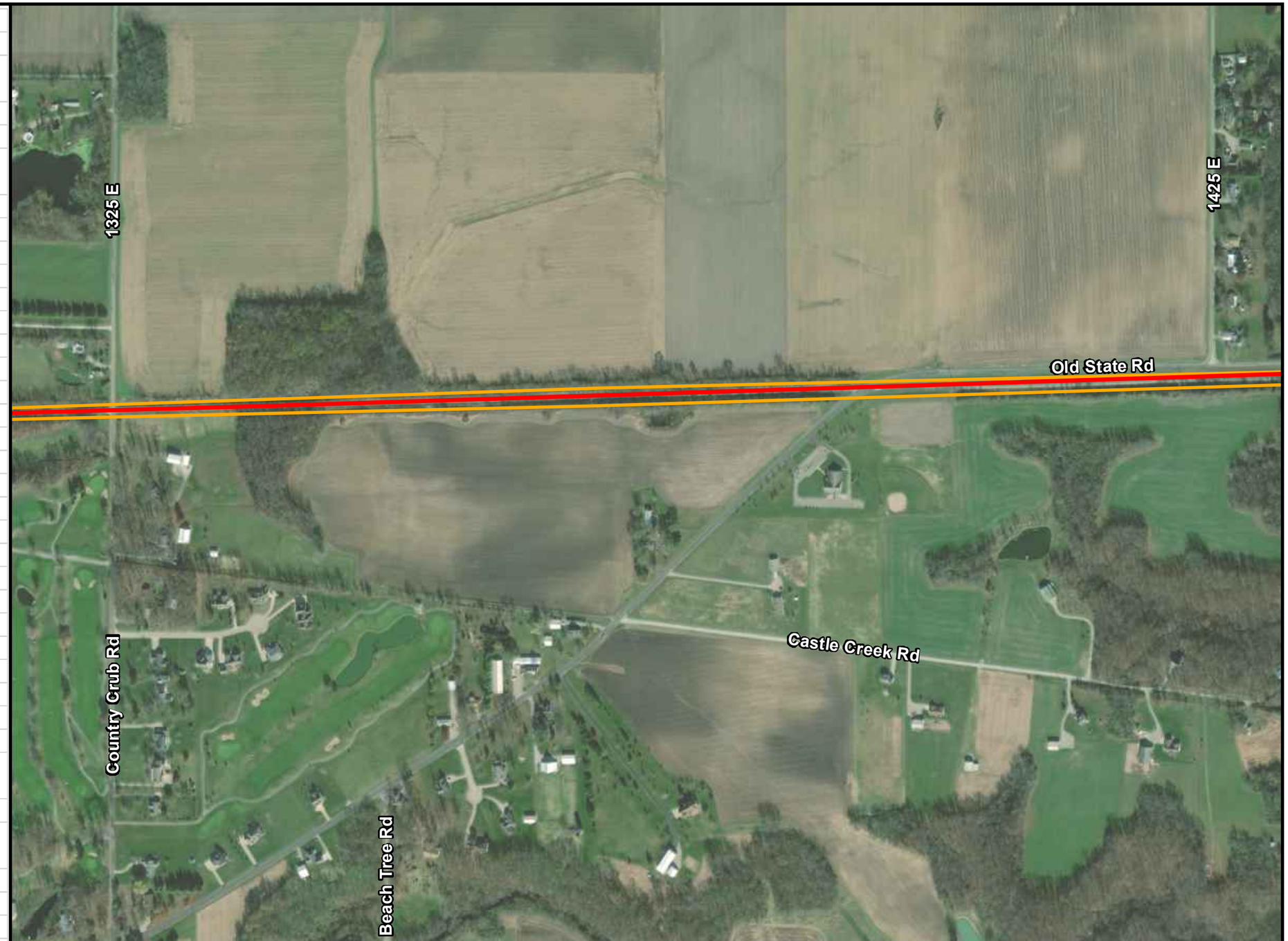

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N W E S

Legend

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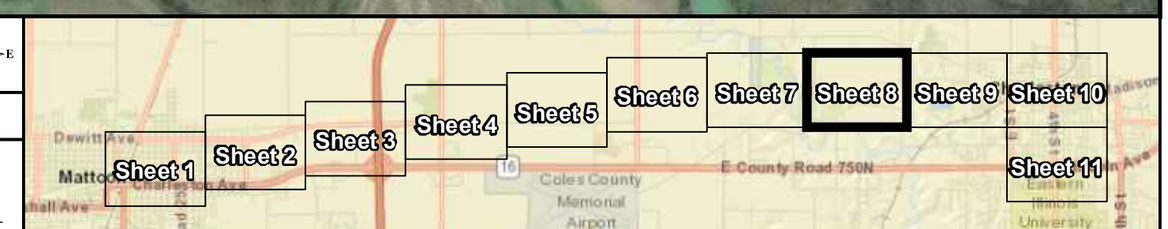
Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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85	Lincoln Avenue & 6th Street, Charleston, IL	PIP
86	600-12 Lincoln Avenue, Charleston, IL	PIP
E	1709 Broadway P.O. Box 320, Mattoon, IL	PIP
I	1522 Broadway, Mattoon, IL	PIP
O	1308-1312 Broadway, Mattoon, IL	PIP
AE	339 Washingon Avenue, Charleston, IL	PIP
AJ	501-503 Madison Street, Charleston, IL	PIP
AK	5th & Madison, Charleston, IL	PIP
AM	407 8th Street, Charleston, IL	PIP
RR-1	Length of Project Corridor	PIP
RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP

0 500 1,000
Feet

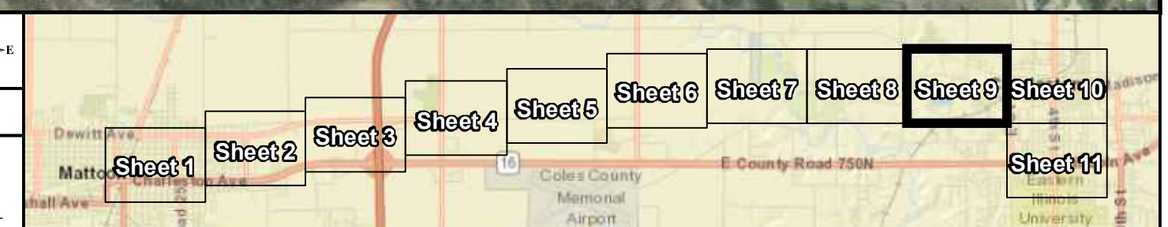
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



J:\81.0220535.02 Mattoon Bike Trail Extension\Figures\Matton_Bike_Tr_PIP.mxd

Site ID	Address	Status
5	212 N. 15th Street, Mattoon, IL	PIP
6	SE Corner 14th Street and Richmond Ave, Mattoon, IL	PIP
7	120 N. 14th Street, Mattoon, IL	PIP
8	1201 Richmond Avenue, Mattoon, IL	PIP
13	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	PIP
17	324 N. 1st Street, Mattoon, IL	PIP
18	379 N. Division Street, Mattoon, IL	PIP
19	316 N. Division, Mattoon, IL	PIP
20	612 N. Logan Street, Mattoon, IL	PIP
25	1509 Dewitt Avenue East, Mattoon, IL	PIP
26	1701 Dewitt Avenue, Mattoon, IL	PIP
28	6125 Stockton Road, Mattoon, IL	PIP
30	8355 Country Club Road, Charleston, IL	PIP
37	890 W. State Street, Charleston, IL	PIP
39	620 W. State Street, Charleston, IL	PIP
42	110 N. E Street, Charleston, IL	PIP
43	22 C Street, Charleston, IL	PIP
49	100 N. 5th Street, Charleston, IL	PIP
50	320 Railroad Street, Charleston, IL	PIP
53	823 Olive Street, Charleston, IL	PIP
54	10th and Olive Street, Charleston, IL	PIP
59	1 6th Street, Charleston, IL	PIP
64	603 Madison Avenue, Charleston, IL	PIP
65	611 Madison Street, Charleston, IL	PIP
66	617 Madison Street, Charleston, IL	PIP
74	616 S. 6th Street, Charleston, IL	PIP
76	701 7th Street, Charleston, IL	PIP
80	805 7th Street, Charleston, IL	PIP
84	515 Lincoln Avenue, Charleston, IL	PIP
85	Lincoln Avenue & 6th Street, Charleston, IL	PIP
86	600-12 Lincoln Avenue, Charleston, IL	PIP
E	1709 Broadway P.O. Box 320, Mattoon, IL	PIP
I	1522 Broadway, Mattoon, IL	PIP
O	1308-1312 Broadway, Mattoon, IL	PIP
AE	339 Washingon Avenue, Charleston, IL	PIP
AJ	501-503 Madison Street, Charleston, IL	PIP
AK	5th & Madison, Charleston, IL	PIP
AM	407 8th Street, Charleston, IL	PIP
RR-1	Length of Project Corridor	PIP
RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP

0 500 1,000
Feet

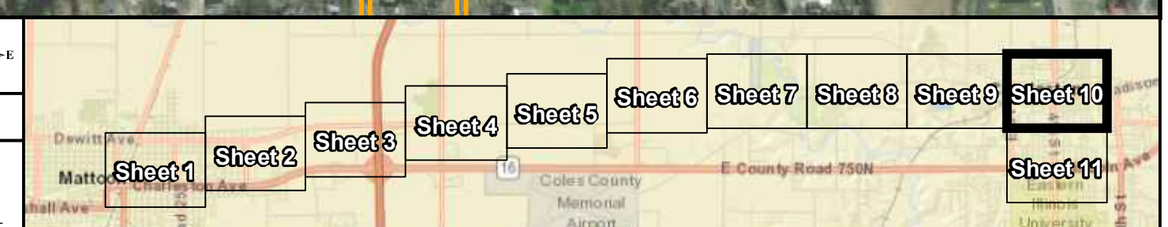
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



J:\81.0220535.02 Mattoon Bike Trail Extension\Figures\Matton_Bike_Tr_PIP.mxd

Site ID	Address	Status
5	212 N. 15th Street, Mattoon, IL	PIP
6	SE Corner 14th Street and Richmond Ave, Mattoon, IL	PIP
7	120 N. 14th Street, Mattoon, IL	PIP
8	1201 Richmond Avenue, Mattoon, IL	PIP
13	Shelby Avenue from 10th Street to N. Logan Street, Mattoon, IL	PIP
17	324 N. 1st Street, Mattoon, IL	PIP
18	379 N. Division Street, Mattoon, IL	PIP
19	316 N. Division, Mattoon, IL	PIP
20	612 N. Logan Street, Mattoon, IL	PIP
25	1509 Dewitt Avenue East, Mattoon, IL	PIP
26	1701 Dewitt Avenue, Mattoon, IL	PIP
28	6125 Stockton Road, Mattoon, IL	PIP
30	8355 Country Club Road, Charleston, IL	PIP
37	890 W. State Street, Charleston, IL	PIP
39	620 W. State Street, Charleston, IL	PIP
42	110 N. E Street, Charleston, IL	PIP
43	22 C Street, Charleston, IL	PIP
49	100 N. 5th Street, Charleston, IL	PIP
50	320 Railroad Street, Charleston, IL	PIP
53	823 Olive Street, Charleston, IL	PIP
54	10th and Olive Street, Charleston, IL	PIP
59	1 6th Street, Charleston, IL	PIP
64	603 Madison Avenue, Charleston, IL	PIP
65	611 Madison Street, Charleston, IL	PIP
66	617 Madison Street, Charleston, IL	PIP
74	616 S. 6th Street, Charleston, IL	PIP
76	701 7th Street, Charleston, IL	PIP
80	805 7th Street, Charleston, IL	PIP
84	515 Lincoln Avenue, Charleston, IL	PIP
85	Lincoln Avenue & 6th Street, Charleston, IL	PIP
86	600-12 Lincoln Avenue, Charleston, IL	PIP
E	1709 Broadway P.O. Box 320, Mattoon, IL	PIP
I	1522 Broadway, Mattoon, IL	PIP
O	1308-1312 Broadway, Mattoon, IL	PIP
AE	339 Washingon Avenue, Charleston, IL	PIP
AJ	501-503 Madison Street, Charleston, IL	PIP
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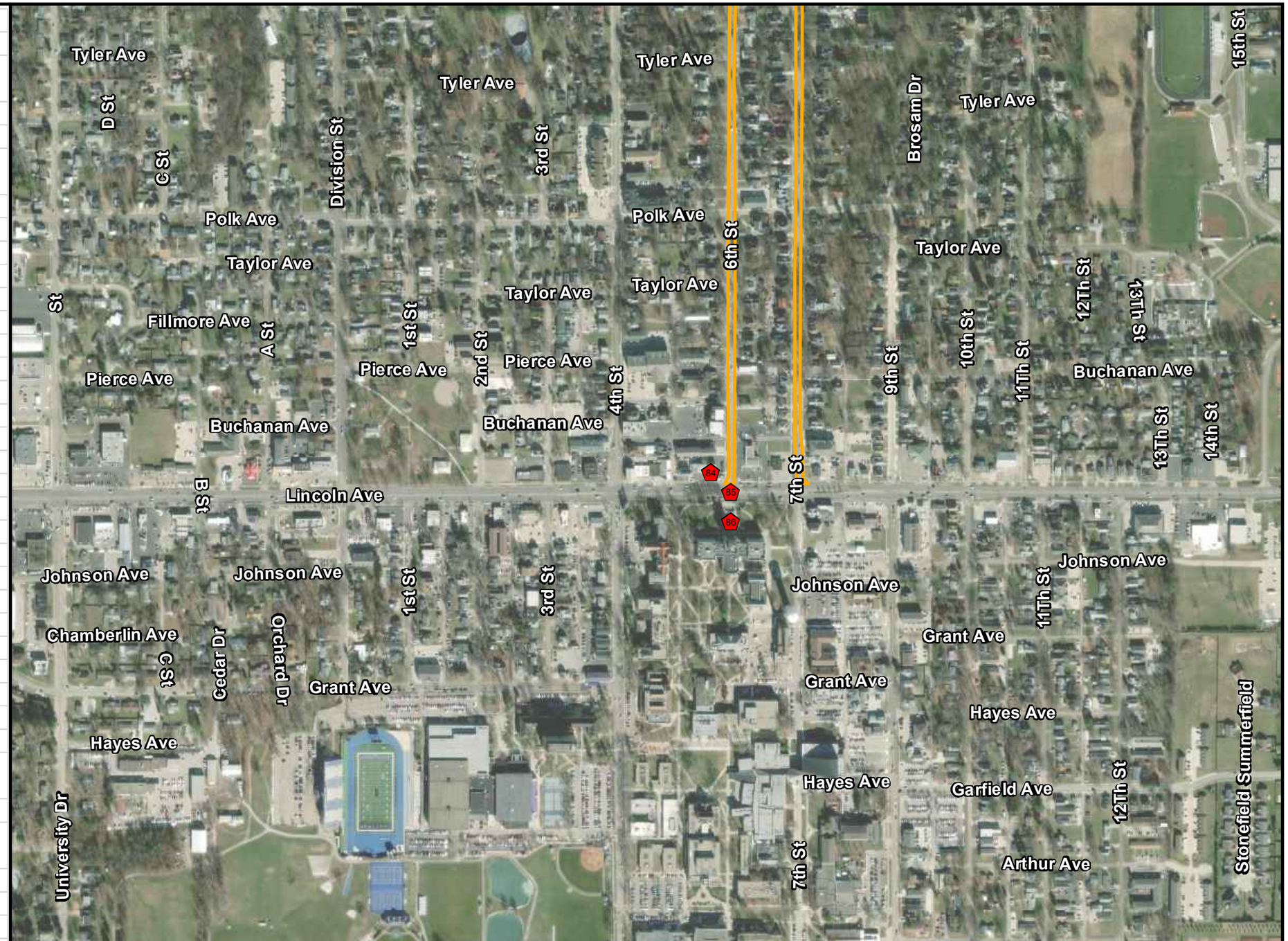
AM	407 8th Street, Charleston, IL	PIP
RR-1	Length of Project Corridor	PIP
RR-2	1718 Broadway Avenue, Mattoon, IL	PIP
RR-3	5th Street and Olive Avenue, Charleston, IL	PIP



0 500 1,000
Feet

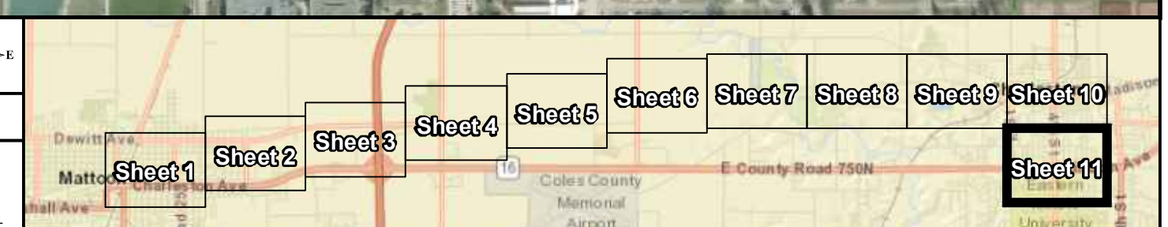
Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- PIP

Huff & Huff, Inc.

Figure 1-3
Potentially Impacted Properties Map
Mattoon Bike Trail Extension PESA
Mattoon to Charleston, Coles County, IL



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2.0 SUBSURFACE INVESTIGATION

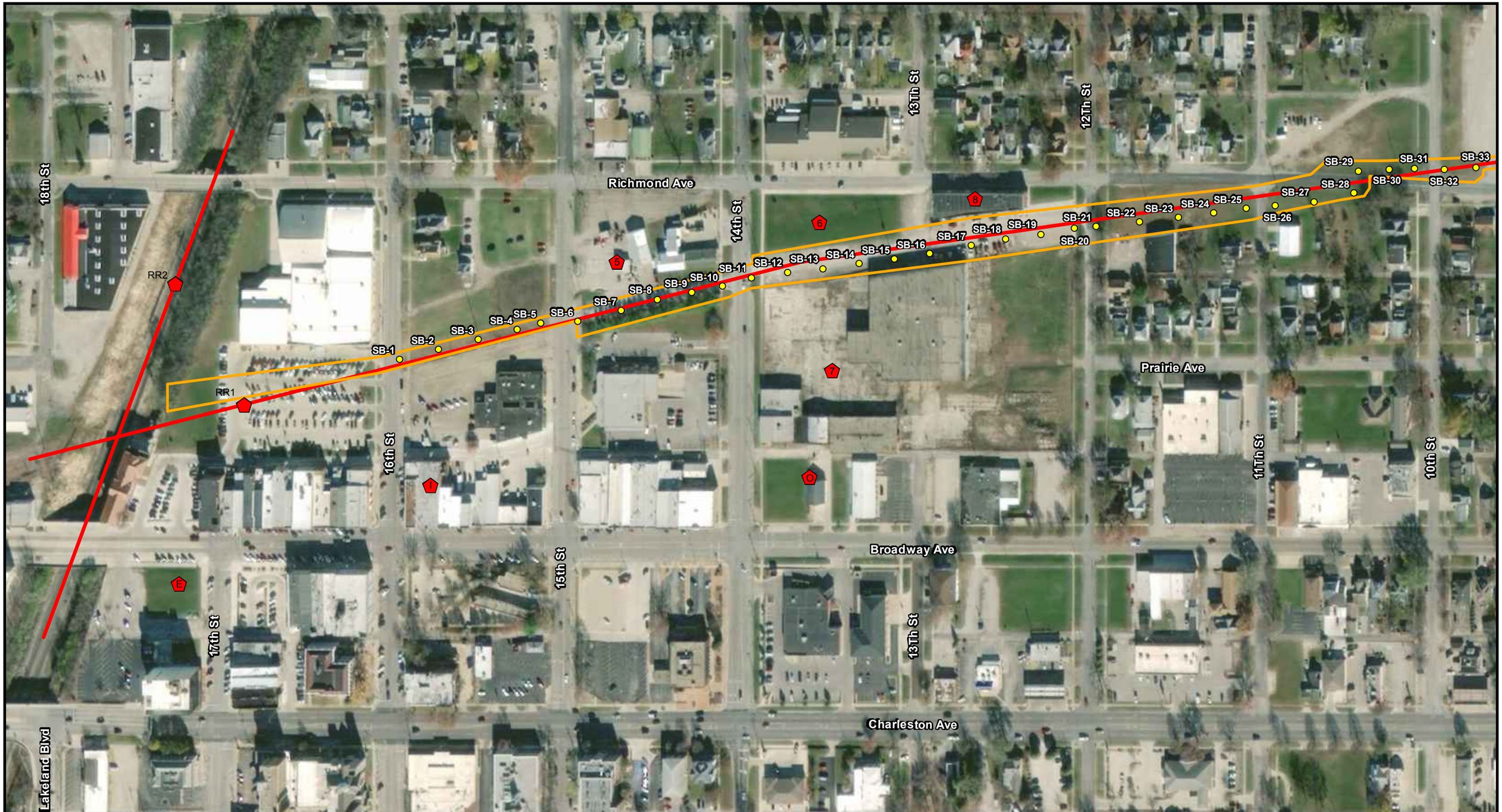
Soil sampling was performed at forty-seven (47) locations on December 12th, 2018 as depicted on Figure 2-1. The subsurface investigation was designed to characterize potential impacts associated with the PIPs, as well as to characterize the soils for future management. Soil boring locations were determined based on the PIP locations and to best represent the Project Corridor from a soil management perspective. The following sections present the procedures and findings for the soil sampling activities performed along the Project Corridor.

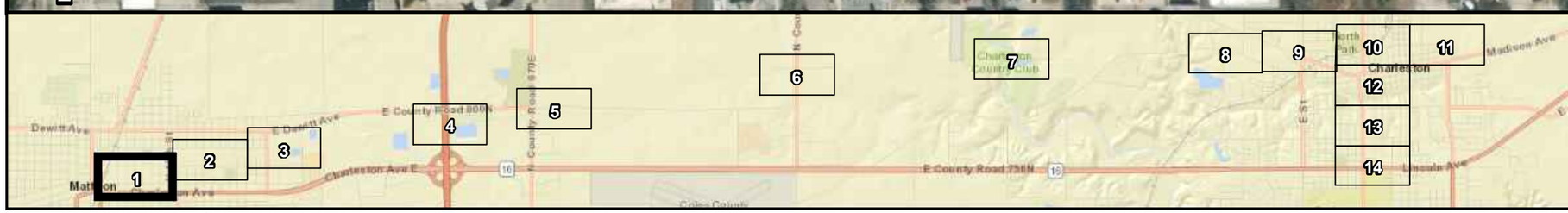
2.1 SAMPLING METHODOLOGY

On December 12th, 2018, Environmental Soil Probing (ESP) and H&H, completed soil borings and collected soil samples along the Project Corridor at forty-seven (47) locations. The soil borings were completed with a truck-mounted GeoProbe or hand-auger. Borings were advanced to a depth of approximately one (1) to five (5) feet below ground surface (bgs) to reflect the anticipated depth of excavation for the proposed bike-trail project. Samples were collected continuously to terminal depth. Samples were screened both visually and with a photo-ionization detector (PID) for possible signs of soil contamination.

2.2 PARAMETERS OF CONCERN

The PIPs were identified as being associated with numerous USTs (gasoline, heating oil, used oil), ASTs, and RCRA sites with a variety of listings. A former railroad was identified throughout the length of the Project Corridor. In addition, two railroads were also identified intersecting the Project Corridor. Parameters of concern were selected based on this information and include one or more of the following: volatile organic compounds (VOCs); benzene, toluene, ethyl benzene, total xylenes (BTEX), a sub-set of the volatile organic list; semi-volatile organics (SVOCs); polynuclear aromatic compounds (PNAs), a sub-set of the semi-volatile organic list; and total analytical list (TAL) metals. Samples were also analyzed for soil pH using laboratory analysis to assess CCDD suitability of Project Corridor soils.





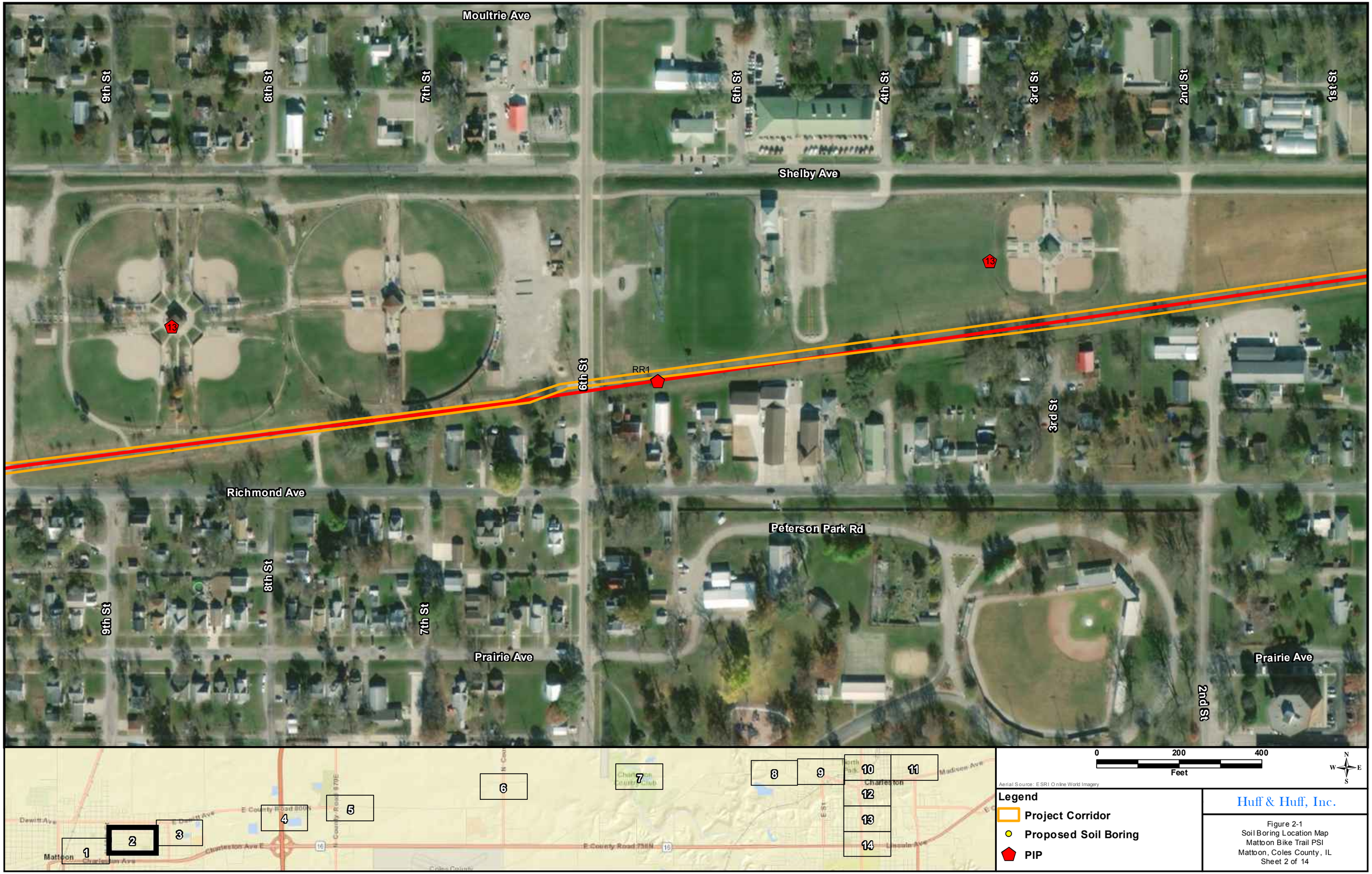
Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 1 of 14

J:\810220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd



Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 2 of 14

J:\61.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

Dewitt Ave
Logan St
First Division St
Moultrie Ave
Second Division St
Shelby Ave
SB-34
20
RR1
17
18
19
Division Ave
Logan Ave
Richmond Ave
Holiday Rd

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

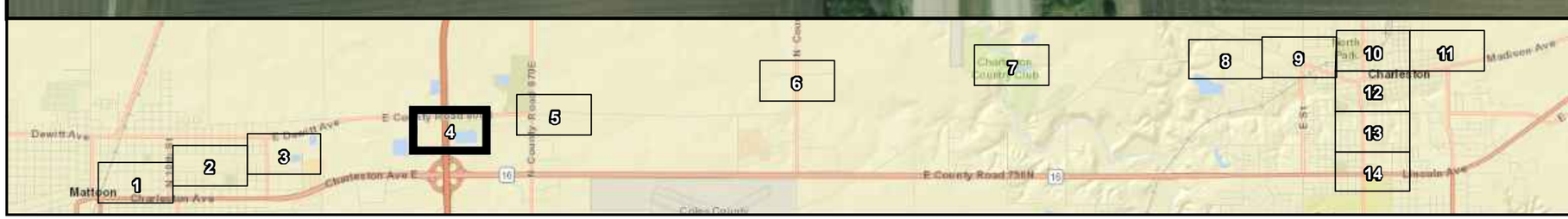
Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 3 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd



0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 4 of 14

J:\81\0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

875 E

Dewitt Ave

Ennis Rd (800 N)

RR1

SB-37

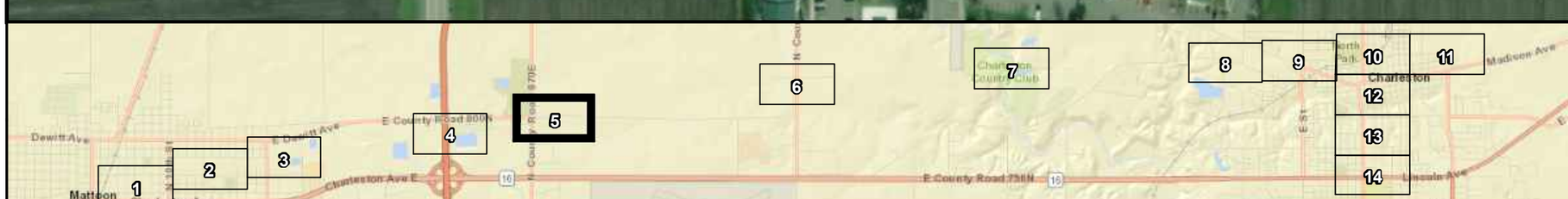
SB-38

SB-36

SB-35

Louis Ln

Lerna Rd (875 E)



0 200 400

Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 5 of 14

J:\81022053503 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 6 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 7 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

Old State Rd

RR1

37

SB-43

SB-44

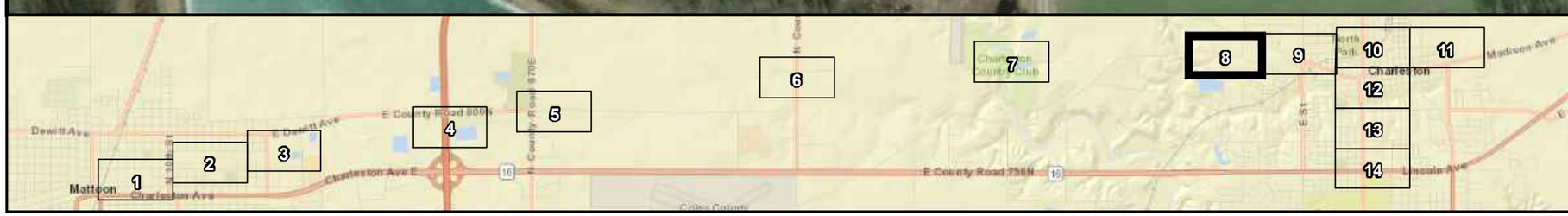
Madison

Decker Springs Rd

State St

Granite Dr

Madison Ave



0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 8 of 14

J:\810220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

Castle Dr
Windsor Rd
Vine Ave
Vine Ave
B St
Locust Ave
39
39
42
State St
St
SB-45
SB-46
SB-47
RR1
Railroad Ave
43
D St
C St
Lytle Ave
Division St
Washington Ave
A St
Madison Ave
Reynolds Dr
G St
B St

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

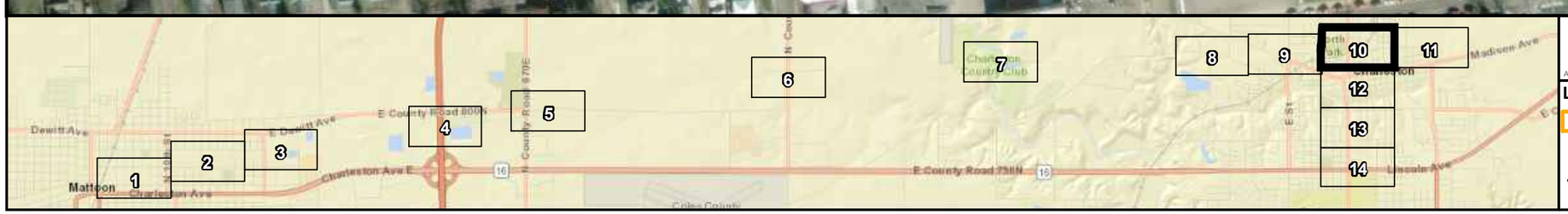
Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 9 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd



0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 10 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 11 of 14

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 12 of 14

J:\81\0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

Kiwanis Park Rd
5th St
8th St
Harrison Ave
80
1st St
6th St
Tyler Ave
Tyler Ave
Tyler Ave
Brosam Dr
Brosam Dr W & E
7th St
2nd St
3rd St
4th St
10th St
11Th St
Polk Ave
Polk Ave
9th St
Taylor Ave

0 200 400
Feet

Aerial Source: ESRI Online World Imagery

N W E S

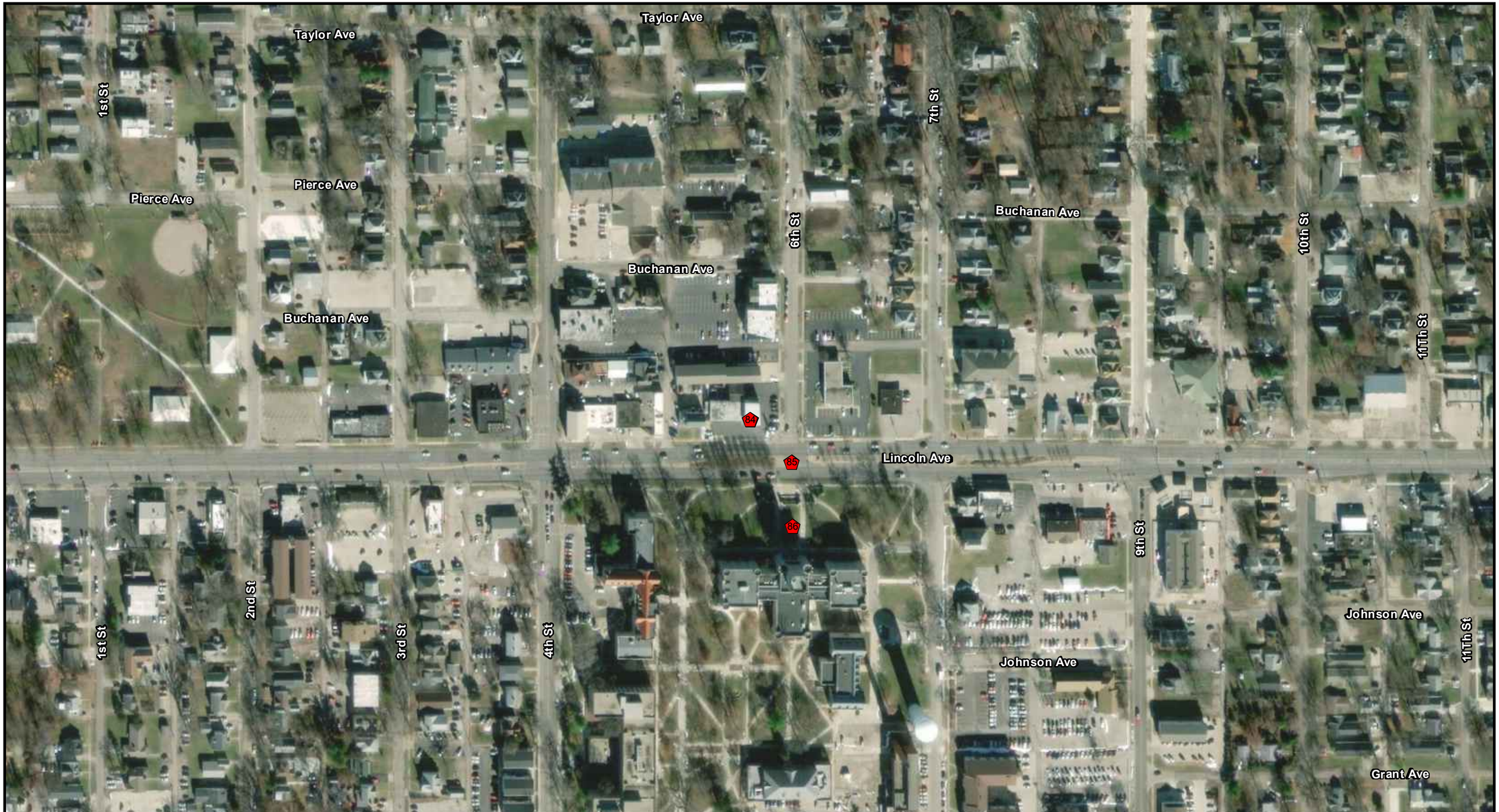
Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 13 of 14

J:\810220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd



0 200 400
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring
- PIP

Huff & Huff, Inc.

Figure 2-1
Soil Boring Location Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 14 of 14

J:\61\0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_PSBLM.mxd

2.3 PHOTOIONIZATION DETECTOR (PID) SCREENING RESULTS

Field screening with a PID (10.6 eV) provided information regarding the potential presence of VOC-based contamination in the soil and was utilized when determining which samples to submit for laboratory analyses. Field PID screening values are provided in Table 2-1. Appendix C contains the PID screening methodology and boring logs.

Table 2-1 PID Screening Summary

Soil Boring	Depth, ft	PID Reading, ppm	Soil Boring	Depth, ft	PID Reading, ppm	Soil Boring	Depth, ft	PID Reading, ppm
	0-1'	0.0		0-1'	0.0		0-1'	0.0
SB-1	**1-3'**	**0.0**	**SB-9**	**1-3'**	**0.0**	**SB-29**	**1-3'**	**0.0**
	3-5'	0.0		**3-5'**	**0.0**		**3-5'**	**0.0**
	0-1'	0.0		0-1'	0.0		0-1'	0.0
SB-2	**1-3'**	**0.0**	**SB-10**	**1-3'**	**0.0**	**SB-30**	**1-3'**	**0.0**
	3-5'	0.0		**3-5'**	**0.0**		**3-5'**	**0.0**
	0-1'	0.0	**SB-11**	**0-1'**	**0.0**		0-1'	0.0
SB-3	**1-3'**	**0.0**	**SB-12**	**0-1'**	**0.0**	**SB-31**	**1-3'**	**0.0**
	3-5'	0.0	**SB-13**	**0-1'**	**0.0**		**3-5'**	**0.0**
	0-1'	0.0	**SB-14**	**0-1'**	**0.0**	**SB-32**	**0-1'**	**0.0**
SB-4	**1-3'**	**0.0**	**SB-15**	**0-1'**	**0.0**	**SB-33**	**0-1'**	**0.0**
	3-5'	**0.0**	**SB-16**	**0-1'**	**0.0**	**SB-34**	**0-1'**	**0.0**
	0-1'	0.0	**SB-17**	**0-1'**	**0.0**	**SB-35**	**0-1'**	**0.0**
SB-5	**1-3'**	**0.0**	**SB-18**	**0-1'**	**0.0**	**SB-36**	**0-1'**	**0.0**
	3-5'	**0.0**	**SB-19/19A**	**0-1'**	**0.0**	**SB-37**	**0-1'**	**0.0**
	0-1'	0.0	**SB-20**	**0-1'**	**0.0**	**SB-38**	**0-1'**	**0.0**
SB-6	**1-3'**	**0.0**	**SB-21**	**0-1'**	**0.0**	**SB-39**	**0-1'**	**0.0**
	3-5'	**0.0**	**SB-22**	**0-1'**	**0.0**	**SB-40**	**0-1'**	**0.0**
	0-1'	0.0	**SB-23**	**0-1'**	**0.0**	**SB-41**	**0-1'**	**0.0**
SB-7	**1-3'**	**0.0**	**SB-24**	**0-1'**	**0.0**	**SB-42**	**0-1'**	**0.0**
	3-5'	**0.0**	**SB-25**	**0-1'**	**0.0**	**SB-43**	**0-1'**	**0.0**
	0-1'	0.0	**SB-26**	**0-1'**	**0.0**	**SB-44**	**0-1'**	**0.0**
SB-8	**1-3'**	**0.0**	**SB-27**	**0-1'**	**0.0**	**SB-45**	**0-1'**	**0.0**
	3-5'	**0.0**	**SB-28**	**0-1'**	**0.0**	**SB-46**	**0-1'**	**0.0**
			SB-29	**0-1'**	**0.0**	**SB-47**	**0-1'**	**0.0**

Bold indicates sample submitted for analytical testing.
"NR" indicates no recovery

2.4 SOIL SAMPLE HANDLING

The Geoprobe unit uses disposable plastic sleeves inside of a metal macrocore sampler, which is driven into the ground with hydraulic percussion. Samples pass through the end of the macrocore sampler though a metal sampling shoe. The Geoprobe macrocore sampling shoe was cleaned per the following procedure to prevent cross-contamination between sampling intervals and locations:

- Alconox wash
- Tap water rinse
- Air dry

Soil samples were collected in glass jars and preserved in the field inside of a cooler ice bath and refrigerated upon reaching the H&H office. Samples were picked up by laboratory courier and transported to the laboratory. The following information was provided on the sample containers and the Chain-of-Custody form:

- Sampler's name
- Date and time of collection
- Sample name
- Sample analyses

2.5 GEOLOGICAL CHARACTERIZATION

Soil boring logs are included in Appendix C. The surficial geologic materials were described in the September 2018 PESA as silt loams and silty clay loams. The PSI soil borings encountered materials consisting predominantly of silty clay, from 0 to 5 feet with several locations having brick and coal fill from 1 to 5 feet. The Soil Survey Map, Potential for Aquifer Contamination Map, and Stack Unit (geology) Map were included in the 2018 PESA Report, which is included in Appendix A (on CD) for reference.

3.0 TIER I AND MAC ASSESSMENT OF SOIL SAMPLE ANALYTICAL RESULTS

Soil samples were preserved, placed in an ice filled cooler, and transmitted to Environmental Monitoring Technologies, Inc (EMT). under Chain of Custody for analysis. The laboratory analytical reports are provided in Appendix D. Table 3-1 presents a summary of the soil samples analyzed and the analyses conducted for this PSI. A summary of analytical results is presented in Tables 3-2 through 3-12. Laboratory analyses and interpretation of results are described below. Table 3-13 presents the soil pH results.

3.1 ASSESSMENT PROCEDURES

TACO is Illinois' risk-based approach to determining site-specific cleanup objectives for the protection of human health and the environment. TACO addresses four exposure pathways (inhalation, soil ingestion, soil component of groundwater ingestion, and groundwater ingestion) and three types of potential receptors (residential, industrial/commercial [I/C], and construction worker [CW]). Numerical concentration standards for chemical compounds for each of the receptor groups are referred to as Remedial Objectives (ROs).

The TACO Tier I CW ingestion and inhalation routes are ROs for construction worker safety. If a constituent is detected above its respective Tier I CW RO, a construction worker caution should be established, and reuse of the soil within the designated area would not be recommended.

MACs are a set of values used to determine if soil meets the IEPA definition of "uncontaminated soil". The MACs are used strictly to determine if soil can be accepted at CCDD facilities. In general, a MAC value is determined by the most stringent TACO Tier I RO, but there are many exceptions. The MACs are found in Title 35 of the Illinois Administrative Code 1100, Subpart F and were finalized on August 27, 2012. Excavated soil is considered "uncontaminated soil" only if it achieves MAC values of Chemical Constituents in Uncontaminated Soil (35 Ill. ADM. Code 1100.Subpart F) and has a soil pH between 6.25 and 9.00.

Analytical results were compared to TACO Tier 1 ROs for Residential, I/C, and CW receptors (inhalation and ingestion routes) and the soil component of groundwater ingestion pathway for Class I Groundwater, as well as the MACs. For purposes of this investigation, soil results were compared to the MAC values to determine the recommended soil disposition method (CCDD-acceptable vs. non-special or special waste) and Tier I ROs (residential, I/C, CW, and soil component of groundwater ingestion route) to evaluate exposure during construction activities and potential reuse on site.

Table 3-1 Analytical Summary

Boring ID	Depth	Relative to PIP#	PNA	TAL	BTEX	pH	VOC	SVOC	TCLP Iron	TCLP Silver	TCLP Thallium	TCLP Chromium	TCLP Lead	SPLP or TCLP Manganese	Total Lead
SB-1	1-3	RR-1, I	X	X	X	X			X		X				
SB-2	1-3	RR-1, I	X	X	X				X						
SB-3	1-3	RR-1	X	X	X				X		X		X		
SB-4	1-3	RR-1	X	X	X	X									
SB-4	3-5	RR-1	X	X					X						
SB-5	1-3	RR-1	X	X	X										
SB-5	3-5	RR-1	X	X											
SB-6	1-3	RR-1, 5	X	X	X										
SB-6	3-5	RR-1, 5	X	X					X						
SB-7	1-3	RR-1, 5	X	X	X										
SB-7	3-5	RR-1, 5	X	X											
SB-8	1-3	RR-1, 5	X	X	X										
SB-8	3-5	RR-1, 5	X	X											
SB-9	1-3	RR-1, 5	X	X	X	X									
SB-9	3-5	RR-1, 5	X	X											
SB-10	1-3	RR-1, 5	X	X	X										
SB-10	3-5	RR-1, 5	X	X					X						
SB-11	0-1	RR-1, 6, 7, O	X	X	X										
SB-12	0-1	RR-1, 6, 7, O	X	X	X										
SB-13	0-1	RR-1, 6, 7, O		X			X	X							
SB-14	0-1	RR-1, 6, 7, O	X	X	X										
SB-15	0-1	RR-1, 6, 7, O		X		X	X	X		X		X		X	
SB-16	0-1	RR-1, 6, 7, 8	X	X	X										
SB-17	0-1	RR-1, 6, 7, 8		X			X	X							
SB-18	0-1	RR-1, 8	X	X	X								X		
SB-19	0-1	RR-1, 8		X			X	X							
SB-19A	0-1	RR-1, 8											X		X
SB-20	0-1	RR-1, 8	X	X	X								X		
SB-21	0-1	RR-1	X	X	X	X			X	X	X	X			
SB-22	0-1	RR-1	X	X											
SB-23	0-1	RR-1	X	X	X										
SB-24	0-1	RR-1	X	X		X									
SB-25	0-1	RR-1	X	X	X										
SB-26	0-1	RR-1	X	X											
SB-27	0-1	RR-1	X	X	X								X		
SB-28	0-1	RR-1	X	X					X						
SB-29	1-3	RR-1	X	X	X	X									
SB-29	3-5	RR-1	X	X											
SB-30	1-3	RR-1	X	X											
SB-30	3-5	RR-1	X	X					X						
SB-31	1-3	RR-1	X	X	X				X	X	X		X		
SB-31	3-5	RR-1	X	X					X						
SB-32	0-1	RR-1, 13	X	X	X										
SB-33	0-1	RR-1, 13	X	X	X										
SB-34	0-1	RR-1, 20		X		X	X	X							
SB-35	0-1	RR-1	X	X		X				X				X	
SB-36	0-1	RR-1	X	X					X		X			X	
SB-37	0-1	RR-1	X	X		X			X	X		X			
SB-38	0-1	RR-1	X	X											
SB-39	0-1	RR-1, 28	X	X	X	X				X	X	X		X	
SB-40	0-1	RR-1, 28	X	X	X										
SB-41	0-1	RR-1, 30	X	X		X			X	X	X	X			
SB-42	0-1	RR-1, 30	X	X											
SB-43	0-1	RR-1	X	X		X	X								
SB-44	0-1	RR-1	X	X			X								
SB-45	0-1	RR-1, 39	X	X	X	X									
SB-46	0-1	RR-1, 42	X	X	X										
SB-47	0-1	RR-1, 42	X	X	X	X									

3.2 COMPARISON OF RESULTS TO MACS AND TIER I OBJECTIVES

Analytical results were compared to Tier 1 ROs and MACs, and the results are summarized by contaminants of concern (COC) below. A comparison of the soil results to the Tier 1 ROs and MACs is presented in Tables 3-2 through 3-8.

3.2.1 VOCs (and subset BTEX)

Thirty-six (36) soil samples were analyzed for VOCs or benzene, toluene, ethylbenzene, and xylenes (BTEX), a subset of VOCs. Table 3-2 presents the soil VOC (and subset BTEX) results compared to the selected Tier 1 ROs. Table 3-3 presents the soil VOC (and subset BTEX) results compared to the MACs for assessment of disposal options.

Seven (7) samples [SB-13 (0-1), SB-15 (0-1), SB-17 (0-1), SB-19 (0-1), SB-34 (0-1), SB-43 (0-1), and SB-44 (0-1)] were submitted for VOC analysis. Twenty-nine (29) additional samples [SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (1-3), SB-5 (1-3), SB-6 (1-3), SB-7 (1-3), SB-8 (1-3), SB-9 (1-3), SB-10 (1-3), SB-11 (0-1), SB-12 (0-1), SB-14 (0-1), SB-16 (0-1), SB-18 (0-1), SB-20 (0-1), SB-21 (0-1), SB-23 (0-1), SB-25 (0-1), SB-27 (0-1), SB-29 (1-3), SB-31 (1-3), SB-32 (0-1), SB-33 (0-1), SB-39 (0-1), SB-40 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1)] were analyzed for BTEX.

Sample SB-8 (1-3) had a detection of benzene above the most stringent Tier 1 ROs and the MACs.

The remaining VOC (and subset BTEX) results are below detection limits for the samples analyzed, achieving the Tier 1 ROs and the MACs.

3.2.2 SVOCs (and subset PNAs)

Fifty-seven (57) soil samples were analyzed for SVOCs or PNAs, a subset of SVOCs. Table 3-4 and 3-6 presents the soil sample SVOC and PNA analytical results compared to each of the Tier 1 ROs. Table 3-5 and 3-7 presents the soil sample SVOC and PNA analytical results compared to the MACs.

Five (5) samples [SB-13 (0-1), SB-15 (0-1), SB-17 (0-1), SB-19 (0-1), and SB-34 (0-1)] were submitted for SVOC analysis. Fifty-two (52) additional samples [SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (1-3), SB-4 (3-5), SB-5 (1-3), SB-5 (3-5), SB-6 (1-3), SB-6 (3-5), SB-7 (1-3), SB-7 (3-5), SB-8 (1-3), SB-8 (3-5), SB-9 (1-3), SB-9 (3-5), SB-10 (1-3), SB-10 (3-5), SB-11 (0-1), SB-12 (0-1), SB-14 (0-1), SB-16 (0-1), SB-18 (0-1), SB-20 (0-1), SB-21 (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-25 (0-1), SB-26 (0-1), SB-27 (0-1), SB-28 (0-1), SB-29 (1-3), SB-29 (3-5), SB-30 (0-1), SB-30 (3-5), SB-31 (1-3), SB-31 (3-5), SB-32 (0-1), SB-33 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-38 (0-1), SB-39 (0-1), SB-40 (0-1), SB-41 (0-1), SB-42 (0-1), SB-43 (0-1), SB-44 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1)] were analyzed for PNAs.

Fifty-six (56) samples contained detectable levels of SVOCs. Fifty-two (52) samples contained detections of SVOCs that exceeded the most stringent MAC values. Exceeding constituents consisted of one or more of the following: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno (1,2,3-cd)pyrene, and naphthalene.

Sample SB-10 (1-3) contained naphthalene and benzo(a)anthracene at a concentration that exceeded the MAC limits for disposal within a populated area in a MSA county excluding Chicago, within Chicago corporate limits, within a populated area in a non-MSA county, and outside of a populated area. In addition, the naphthalene concentration also exceeded the

Tier 1 RO for construction worker inhalation. SB-10 (1-3) also contained benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno (1,2,3-cd)pyrene at concentrations that exceeded the most stringent MAC values.

Further discussion regarding SVOC analytical results are detailed in the tables located in section 4.2.

3.2.3 Total TAL Metals

Fifty-seven soil samples were analyzed for total TAL metals and one sample was analyzed for total lead. Table 3-8 presents the soil sample total RCRA metal and lead analytical results compared to each of the Tier 1 ROs. Tables 3-9 presents the soil sample total RCRA metal and lead analytical results compared to the MACs.

The following samples had detectable concentrations of one or more total TAL metals: SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (1-3), SB-4 (3-5), SB-5 (1-3), SB-5 (3-5), SB-6 (1-3), SB-6 (3-5), SB-7 (1-3), SB-7 (3-5), SB-8 (1-3), SB-8 (3-5), SB-9 (1-3), SB-9 (3-5), SB-10 (1-3), SB-10 (3-5), SB-11 (0-1), SB-12 (0-1), SB-13 (0-1), SB-14 (0-1), SB-15 (0-1), SB-16 (0-1), SB-17 (0-1), SB-18 (0-1), SB-19 (0-1), SB-20 (0-1), SB-21 (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-25 (0-1), SB-26 (0-1), SB-27 (0-1), SB-28 (0-1), SB-29 (1-3), SB-29 (3-5), SB-30 (0-1), SB-30 (3-5), SB-31 (1-3), SB-31 (3-5), SB-32 (0-1), SB-33 (0-1), SB-34 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-38 (0-1), SB-39 (0-1), SB-40 (0-1), SB-41 (0-1), SB-42 (0-1), SB-43 (0-1), SB-44 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1)

Twenty-three (23) soil samples SB-4 (1-3), SB-6 (1-3), SB-7 (1-3), SB-8 (1-3), SB-9 (1-3), SB-11 (0-1), SB-12 (0-1), SB-18 (0-1), SB-9 (0-1), SB-20 (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-27 (0-1), SB-29 (1-3), SB-29 (3-5), SB-30 (1-3), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-43 (0-1), and SB-44 (0-1) contained arsenic at a concentration that exceeded the MAC value (13.0 mg/kg) for soils within a MSA county. Exceedances of the RO and MAC values for arsenic at these locations will preclude these areas from being eligible for CCDD disposal with a MSA county. In addition, one sample, SB-32 (0-1), exceeded the MAC value (11.3 mg/kg) for soils in a non-MSA county. Exceedances of the RO and MAC values for arsenic at this location will preclude this area from being eligible for CCDD disposal with a non-MSA county.

Twenty-six (26) soil samples contained total mercury at concentrations that exceeded the MAC value (0.1 mg/kg) and the construction worker inhalation objective (0.1 mg/kg) but achieved the Residential and Industrial/Commercial ROs. The construction worker caution for mercury is based on elemental mercury, and mercury detected in this location is likely attributed to inorganic mercury salt compounds (association with coal, specifically). Due to the nature of the Project Corridor as a former railroad with potential historic use of coal and coal noted in several of the boring locations, elevated total mercury levels are anticipated to be associated with the coal and are not anticipated to be of the elemental speciation of mercury.

Twelve (12) soil samples had detections of total chromium that exceeded the MAC value (21 mg/kg). Five select soil samples [SB-15 (0-1), SB-21 (0-1), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total chromium exceedances were subsequently analyzed for TCLP chromium which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP chromium results, chromium is considered to achieve the MAC in the five samples analyzed for TCLP chromium. Table 3-10 presents the soil TCLP chromium results compared to the MAC. The remaining seven (7) soil samples with total chromium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Sixteen (16) soil samples had detections of total lead that exceeded the MAC value (107 mg/kg). Total lead was detected at SB-19 (0-1) with a concentration of 5,770 mg/kg. TCLP laboratory analysis was unable to be completed on the sample

due to matrix issues. An additional sample, SB-19A (0-1) was obtained from the same interval and boring location. Total lead was detected at a concentration of 117 mg/kg. Six select soil samples [SB-3 (1-3), SB-18 (0-1), SB-19A (0-1), SB-20 (0-1), SB-27 (0-1), and 31 (1-3)] with total lead exceedances were subsequently analyzed for TCLP lead. Soil samples SB-18 (0-1) and SB-27 (0-1) had detections (0.0161 mg/L and 0.0182 mg/L, respectively) of TCLP lead that exceeded the MAC Value (0.0075 mg/L). The remaining samples had results below the lab detection limit, achieving the MACs. The remaining ten (10) soil samples with total lead exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Forty (40) soil samples had detections of total iron that exceeded the MAC value (15,000 mg/kg). Fourteen select soil samples [SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (3-5), SB-6 (3-5), SB-10 (3-5), SB-21 (0-1), SB-28 (0-1), SB-30 (3-5), SB-31 (1-3), SB-31 (3-5), SB-36 (0-1), SB-37 (0-1), and SB-41 (0-1)] with total iron exceedances were subsequently analyzed for TCLP iron. One sample, SB-10 (3-5), had a detection of TCLP iron, 4.74 mg/L, below the MAC value of 5mg/L. The remaining TCLP lead results were below the lab detection limit, achieving the MAC. Based on the subsequent TCLP iron results, iron is considered to achieve the MAC in the fourteen samples analyzed for TCLP iron. Table 3-10 presents the soil TCLP iron results compared to the MAC. The remaining twenty-six (26) soil samples with total iron exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Twenty-three (23) soil samples had detections of total silver that exceeded the MAC value (4.4 mg/kg). Six select soil samples [SB-15 (0-1), SB-21 (0-1), SB-31 (1-3), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP silver results compared to the MAC. The remaining seventeen (17) soil samples with total silver exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Nineteen (19) soil samples had detections of total thallium that exceeded the MAC value (2.6 mg/kg). Eight select soil samples [SB-1 (1-3), SB-3 (1-3), SB-21 (0-1), SB-31 (1-3), SB-35 (0-1), SB-36 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP thallium results compared to the MAC. The remaining three (3) soil samples with total thallium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Seven (7) soil samples had detections of total manganese that exceeded the MAC value (630 mg/kg). Four select soil samples [SB-15 (0-1), SB-35 (0-1), SB-36 (0-1), and SB-39 (0-1)] with total manganese exceedances were subsequently analyzed for TCLP or SPLP manganese. Two samples, SB-35 (0-1) and SB-36 (0-1), had a detection of SPLP manganese, 0.0378 mg/L and 0.0291 mg/L, below the MAC value of 0.15 mg/L. The remaining SPLP and TCLP manganese results were below the lab detection limit, achieving the MAC. Based on the subsequent SPLP and TCLP manganese results, manganese is considered to achieve the MAC in the four samples analyzed for SPLP and TCLP manganese. Table 3-10 presents the soil SPLP and TCLP manganese results compared to the MAC.

Further discussion regarding TAL metal, TCLP metal, and SPLP metal analytical results are detailed in the tables located in section 4.2.

TABLE 3-2
VOC (& BTEX) SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route***			***Inhalation Exposure Route***			***Soil Component of Groundwater Ingestion (Class I)***	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**SB-6**	**SB-7**	**SB-8**	**SB-9**	**SB-10**	**SB-11**	**SB-12**	**SB-13**	**SB-14**	**SB-15**	**SB-16**	**SB-17**	**SB-18**
Depth, ft	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]		1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent	----------	----------	----------	----------	----------	----------	----------	*mg/kg*	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
Acetone	*70,000*	--	--	*100,000*	*100,000*	*100,000*	*25*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0684	--	<0.0665	--	<0.0744	--
Benzene	*12*	*100*	*2,300*	*0.8*	*1.6*	*2.2*	*0.03*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**0.0721**	<0.03	<0.03	<0.03	<0.03	<0.00195	<0.03	<0.0019	<0.03	<0.00213	<0.03
Bromodichloromethane	*10*	*92*	*2,000*	*3,000*	*3,000*	*3,000*	*0.6*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Bromoform	*81*	*720*	*16,000*	*53*	*100*	*140*	*0.8*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Bromomethane	*110*	*2,900*	*1,000*	*10*	*15*	*3.9*	*0.2*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0195	--	<0.019	--	<0.0213	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0274	--	<0.0266	--	<0.0298	--
Carbon disulfide	*7,800*	*200,000*	*20,000*	*720*	*720*	*9*	*32*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Carbon tetrachloride	*5*	*44*	*410*	*0.3*	*0.64*	*0.9*	*0.07*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chlorobenzene	*1,600*	*41,000*	*4,100*	*130*	*210*	*1.3*	*1*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chlorodibromomethane	*1,600*	*41,000*	*41,000*	*1,300*	*1,300*	*1,300*	*0.4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
Chloroform	*100*	*940*	*2,000*	*0.3*	*0.54*	*0.76*	*0.6*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Chloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
1,1-Dichloroethane	*7,800*	*200,000*	*200,000*	*1,300*	*1,700*	*130*	*23*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
1,2-Dichloroethane	*7*	*63*	*1,400*	*0.4*	*0.7*	*0.99*	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
1,1-Dichloroethene	*3,900*	*100,000*	*10,000*	*290*	*470*	*3*	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
cis-1,2-Dichloroethene	*780*	*20,000*	*20,000*	*1,200*	*1,200*	*1,200*	*0.4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
trans-1,2-Dichloroethene	*1,600*	*41,000*	*41,000*	*3,100*	*3,100*	*3,100*	*0.7*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
1,2-Dichloropropane	*9*	*84*	*1,800*	*15*	*23*	*0.5*	*0.03*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
cis-1,3-Dichloropropene	*6.4*	*57*	*1,200*	*1.1*	*2.1*	*0.39*	*0.004*	--	--	--	--	--	--	--	--	--	--	--	--	<0.004	--	<0.004	--	<0.004	--
trans-1,3-Dichloropropene	*6.4*	*57*	*1,200*	*1.1*	*2.1*	*0.39*	*0.004*	--	--	--	--	--	--	--	--	--	--	--	--	<0.004	--	<0.004	--	<0.004	--
Ethylbenzene	*7,800*	*200,000*	*20,000*	*400*	*400*	*58*	*13*	<0.225	<0.232	<0.199	<0.226	<0.219	<0.204	<0.246	**0.308**	<0.171	<0.29	<0.232	<0.229	<0.00782	<0.202	<0.0076	<0.191	<0.00851	<0.25
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0274	--	<0.0266	--	<0.0298	--
Methyl-tert-butylether (MTBE)	*780*	*20,000*	*2,000*	*8,800*	*8,800*	*140*	*0.32*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0274	--	<0.0266	--	<0.0298	--
Methylene chloride	*85*	*760*	*12,000*	*13*	*24*	*34*	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
Styrene	*16,000*	*410,000*	*41,000*	*1,500*	*1,500*	*430*	*4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Tetrachloroethene	*12*	*110*	*2,400*	*11*	*20*	*28*	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Toluene	*16,000*	*410,000*	*410,000*	*650*	*650*	*42*	*12*	<0.112	<0.116	<0.0996	<0.113	<0.109	<0.102	<0.123	**0.459**	<0.0854	<0.145	<0.116	<0.115	<0.00195	<0.101	<0.0019	<0.0957	<0.00213	<0.125
1,1,1-Trichloroethane	--	--	--	*1,200*	*1,200*	*1,200*	*2*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
1,1,2-Trichloroethane	*310*	*8,200*	*8,200*	*1,800*	*1,800*	*1,800*	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Trichloroethene	*58*	*520*	*1,200*	*5*	*8.9*	*12*	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Vinyl acetate	*78,000*	*1,000,000*	*200,000*	*1,000*	*1,600*	*10*	*170*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0195	--	<0.019	--	<0.0213	--
Vinyl chloride	*0.46*	*7.9*	*170*	*0.28*	*1.1*	*1.1*	*0.01*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Xylene, Total	*16,000*	*410,000*	*41,000*	*320*	*320*	*5.6*	*150*	<0.674	<0.696	<0.597	<0.677	<0.656	<0.613	<0.739	**1.32**	<0.512	<0.871	<0.695	<0.687	<0.0117	<0.607	<0.0114	<0.574	<0.0128	<0.751

[a/] Refers to Remediation Objective from Table B, Appendix B, Part 742 - TACO

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-2
VOC (& BTEX) SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route***			***Inhalation Exposure Route***			***Soil Component of Groundwater Ingestion (Class I)***	**SB-19**	**SB-20**	**SB-21**	**SB-23**	**SB-25**	**SB-27**	**SB-29**	**SB-31**	**SB-32**	**SB-33**	**SB-34**	**SB-39**	**SB-40**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Depth, ft	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]		0-1	0-1	0-1	0-1	0-1	0-1	1-3	1-3	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent	---mg/kg---																								
Acetone	*70,000*	--	--	*100,000*	*100,000*	*100,000*	*25*	<0.0822	--	--	--	--	--	--	--	--	--	<0.0714	--	--	<0.0717	<0.0825	--	--	--
Benzene	*12*	*100*	*2,300*	*0.8*	*1.6*	*2.2*	*0.03*	<0.00235	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.00204	<0.03	<0.03	<0.00205	<0.00236	<0.03	<0.03	<0.03
Bromodichloromethane	*10*	*92*	*2,000*	*3,000*	*3,000*	*3,000*	*0.6*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Bromoform	*81*	*720*	*16,000*	*53*	*100*	*140*	*0.8*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Bromomethane	*110*	*2,900*	*1,000*	*10*	*15*	*3.9*	*0.2*	<0.0235	--	--	--	--	--	--	--	--	--	<0.0204	--	--	<0.0205	<0.0236	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--	--	<0.0329	--	--	--	--	--	--	--	--	--	<0.0286	--	--	<0.0287	<0.033	--	--	--
Carbon disulfide	*7,800*	*200,000*	*20,000*	*720*	*720*	*9*	*32*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	0.00741	<0.00471	--	--	--
Carbon tetrachloride	*5*	*44*	*410*	*0.3*	*0.64*	*0.9*	*0.07*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chlorobenzene	*1,600*	*41,000*	*4,100*	*130*	*210*	*1.3*	*1*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chlorodibromomethane	*1,600*	*41,000*	*41,000*	*1,300*	*1,300*	*1,300*	*0.4*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chloroethane	--	--	--	--	--	--	--	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
Chloroform	*100*	*940*	*2,000*	*0.3*	*0.54*	*0.76*	*0.6*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Chloromethane	--	--	--	--	--	--	--	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
1,1-Dichloroethane	*7,800*	*200,000*	*200,000*	*1,300*	*1,700*	*130*	*23*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
1,2-Dichloroethane	*7*	*63*	*1,400*	*0.4*	*0.7*	*0.99*	*0.02*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
1,1-Dichloroethene	*3,900*	*100,000*	*10,000*	*290*	*470*	*3*	*0.06*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
cis-1,2-Dichloroethene	*780*	*20,000*	*20,000*	*1,200*	*1,200*	*1,200*	*0.4*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
trans-1,2-Dichloroethene	*1,600*	*41,000*	*41,000*	*3,100*	*3,100*	*3,100*	*0.7*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
1,2-Dichloropropane	*9*	*84*	*1,800*	*15*	*23*	*0.5*	*0.03*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
cis-1,3-Dichloropropene	*6.4*	*57*	*1,200*	*1.1*	*2.1*	*0.39*	*0.004*	<0.004	--	--	--	--	--	--	--	--	--	<0.004	--	--	<0.004	<0.004	--	--	--
trans-1,3-Dichloropropene	*6.4*	*57*	*1,200*	*1.1*	*2.1*	*0.39*	*0.004*	<0.004	--	--	--	--	--	--	--	--	--	<0.004	--	--	<0.004	<0.004	--	--	--
Ethylbenzene	*7,800*	*200,000*	*20,000*	*400*	*400*	*58*	*13*	<0.0094	<0.257	<0.221	<0.261	<0.155	<0.221	<0.184	<0.188	<0.199	<0.212	<0.00816	<0.208	<0.196	<0.00819	<0.00943	<0.266	<0.199	<0.234
2-Hexanone	--	--	--	--	--	--	--	<0.0329	--	--	--	--	--	--	--	--	--	<0.0286	--	--	<0.0287	<0.033	--	--	--
Methyl-tert-butylether (MTBE)	*780*	*20,000*	*2,000*	*8,800*	*8,800*	*140*	*0.32*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	--	<0.0329	--	--	--	--	--	--	--	--	--	<0.0286	--	--	<0.0287	<0.033	--	--	--
Methylene chloride	*85*	*760*	*12,000*	*13*	*24*	*34*	*0.02*	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
Styrene	*16,000*	*410,000*	*41,000*	*1,500*	*1,500*	*430*	*4*	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Tetrachloroethene	*12*	*110*	*2,400*	*11*	*20*	*28*	*0.06*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Toluene	*16,000*	*410,000*	*410,000*	*650*	*650*	*42*	*12*	<0.00235	<0.128	<0.111	<0.13	<0.0774	<0.111	<0.0922	<0.0941	<0.0993	<0.106	<0.00204	<0.104	<0.0979	<0.00205	<0.00236	<0.133	<0.0993	<0.117
1,1,1-Trichloroethane	--	--	--	*1,200*	*1,200*	*1,200*	*2*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
1,1,2-Trichloroethane	*310*	*8,200*	*8,200*	*1,800*	*1,800*	*1,800*	*0.02*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Trichloroethene	*58*	*520*	*1,200*	*5*	*8.9*	*12*	*0.06*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Vinyl acetate	*78,000*	*1,000,000*	*200,000*	*1,000*	*1,600*	*10*	*170*	<0.0235	--	--	--	--	--	--	--	--	--	<0.0204	--	--	<0.0205	<0.0236	--	--	--
Vinyl chloride	*0.46*	*7.9*	*170*	*0.28*	*1.1*	*1.1*	*0.01*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Xylene, Total	*16,000*	*410,000*	*41,000*	*320*	*320*	*5.6*	*150*	<0.0141	<0.771	<0.664	<0.782	<0.464	<0.664	<0.553	<0.565	<0.596	<0.637	<0.0122	<0.625	<0.587	<0.0123	<0.0141	<0.797	<0.596	<0.702

[a/] Refers to Remediation Objective from Table B, Appendix B, Part 742 - TACO
-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-3
VOC (& BTEX) SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**SB-6**	**SB-7**	**SB-8**	**SB-9**	**SB-10**	**SB-11**	**SB-12**	**SB-13**	**SB-14**	**SB-15**	**SB-16**	**SB-17**	**SB-18**
Depth, ft	*Concentration* [a/]	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent		----------	----------	----------	----------	----------	----------	----------	---*mg/kg*---	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
Acetone	*25*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0684	--	<0.0665	--	<0.0744	--
Benzene	*0.03*	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**0.0721**	<0.03	<0.03	<0.03	<0.03	<0.00195	<0.03	<0.0019	<0.03	<0.00213	<0.03
Bromodichloromethane	*0.6*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Bromoform	*0.8*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Bromomethane	*0.2*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0195	--	<0.019	--	<0.0213	--
Carbon disulfide	*9*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Carbon tetrachloride	*0.07*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chlorobenzene	*1*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chlorodibromomethane	*0.4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Chloroform	*0.3*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
cis-1,3-Dichloropropene	*0.005*	--	--	--	--	--	--	--	--	--	--	--	--	<0.002	--	<0.002	--	<0.002	--
trans-1,3-Dichloropropene	*0.005*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0004	--	<0.0004	--	<0.0004	--
1,1-Dichloroethane	*23*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
1,2-Dichloroethane	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
1,1-Dichloroethene	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
cis-1,2-Dichloroethene	*0.4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
trans-1,2-Dichloroethene	*0.7*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
1,2-Dichloropropane	*0.03*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Ethylbenzene	*13*	<0.225	<0.232	<0.199	<0.226	<0.219	<0.204	<0.246	0.308	<0.171	<0.29	<0.232	<0.229	<0.00782	<0.202	<0.0076	<0.191	<0.00851	<0.25
Methyl-tert-butylether (MTBE)	*0.32*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Methylene chloride	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
Styrene	*4*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00782	--	<0.0076	--	<0.00851	--
Tetrachloroethene	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Toluene	*12*	<0.112	<0.116	<0.0996	<0.113	<0.109	<0.102	<0.123	0.459	<0.0854	<0.145	<0.116	<0.115	<0.00195	<0.101	<0.0019	<0.0957	<0.00213	<0.125
1,1,1-Trichloroethane	*2*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
1,1,2-Trichloroethane	*0.02*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Trichloroethene	*0.06*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00195	--	<0.0019	--	<0.00213	--
Vinyl acetate	*10*	--	--	--	--	--	--	--	--	--	--	--	--	<0.0195	--	<0.019	--	<0.0213	--
Vinyl chloride	*0.01*	--	--	--	--	--	--	--	--	--	--	--	--	<0.00391	--	<0.0038	--	<0.00425	--
Xylene, Total	*5.6*	<0.674	<0.696	<0.597	<0.677	<0.656	<0.613	<0.739	1.32	<0.512	<0.871	<0.695	<0.687	<0.0117	<0.607	<0.0114	<0.574	<0.0128	<0.751

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-3
VOC (& BTEX) SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-19**	**SB-20**	**SB-21**	**SB-23**	**SB-25**	**SB-27**	**SB-29**	**SB-31**	**SB-32**	**SB-33**	**SB-34**	**SB-39**	**SB-40**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Depth, ft	*Concentration* [a/]	0-1	0-1	0-1	0-1	0-1	0-1	1-3	1-3	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent		---*mg/kg*---																	
Acetone	*25*	<0.0822	--	--	--	--	--	--	--	--	--	<0.0714	--	--	<0.0717	<0.0825	--	--	--
Benzene	*0.03*	<0.00235	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.00204	<0.03	<0.03	<0.00205	<0.00236	<0.03	<0.03	<0.03
Bromodichloromethane	*0.6*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Bromoform	*0.8*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Bromomethane	*0.2*	<0.0235	--	--	--	--	--	--	--	--	--	<0.0204	--	--	<0.0205	<0.0236	--	--	--
Carbon disulfide	*9*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	0.00741	<0.00471	--	--	--
Carbon tetrachloride	*0.07*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chlorobenzene	*1*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chlorodibromomethane	*0.4*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Chloroform	*0.3*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
cis-1,3-Dichloropropene	*0.005*	<0.002	--	--	--	--	--	--	--	--	--	<0.002	--	--	<0.002	<0.002	--	--	--
trans-1,3-Dichloropropene	*0.005*	<0.0004	--	--	--	--	--	--	--	--	--	<0.0004	--	--	<0.0004	<0.0004	--	--	--
1,1-Dichloroethane	*23*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
1,2-Dichloroethane	*0.02*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
1,1-Dichloroethene	*0.06*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
cis-1,2-Dichloroethene	*0.4*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
trans-1,2-Dichloroethene	*0.7*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
1,2-Dichloropropane	*0.03*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Ethylbenzene	*13*	<0.0094	<0.257	<0.221	<0.261	<0.155	<0.221	<0.184	<0.188	<0.199	<0.212	<0.00816	<0.208	<0.196	<0.00819	<0.00943	<0.266	<0.199	<0.234
Methyl-tert-butylether (MTBE)	*0.32*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Methylene chloride	*0.02*	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
Styrene	*4*	<0.0094	--	--	--	--	--	--	--	--	--	<0.00816	--	--	<0.00819	<0.00943	--	--	--
Tetrachloroethene	*0.06*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Toluene	*12*	<0.00235	<0.128	<0.111	<0.13	<0.0774	<0.111	<0.0922	<0.0941	<0.0993	<0.106	<0.00204	<0.104	<0.0979	<0.00205	<0.00236	<0.133	<0.0993	<0.117
1,1,1-Trichloroethane	*2*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
1,1,2-Trichloroethane	*0.02*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Trichloroethene	*0.06*	<0.00235	--	--	--	--	--	--	--	--	--	<0.00204	--	--	<0.00205	<0.00236	--	--	--
Vinyl acetate	*10*	<0.0235	--	--	--	--	--	--	--	--	--	<0.0204	--	--	<0.0205	<0.0236	--	--	--
Vinyl chloride	*0.01*	<0.0047	--	--	--	--	--	--	--	--	--	<0.00408	--	--	<0.0041	<0.00471	--	--	--
Xylene, Total	*5.6*	<0.0141	<0.771	<0.664	<0.782	<0.464	<0.664	<0.553	<0.565	<0.596	<0.637	<0.0122	<0.625	<0.587	<0.0123	<0.0141	<0.797	<0.596	<0.702

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-4
PNA SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Sample ID	*Ingestion Exposure Route* [1]			*Inhalation Exposure Route* [1]			*Migration to Class I Groundwater Exposure Route* [1]	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-4**	**SB-5**	**SB-5**	**SB-6**	**SB-6**	**SB-7**	**SB-7**	**SB-8**	**SB-8**	**SB-9**	**SB-9**	**SB-10**	**SB-10**	**SB-11**	**SB-12**	**SB-14**	**SB-16**	**SB-18**	**SB-20**	**SB-21**	**SB-22**	**SB-23**
Sample Depth	*Residential*	*Industrial / Commercial*	*Construction Worker*	*Residential*	*Industrial / Commercial*	*Construction Worker*		1-3	1-3	1-3	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituents	---mg/kg---																																
Acenaphthene	*4,700*	*120,000*	*120,000*	---	---	---	*570*	<0.00829	<0.00925	<0.00908	<0.00877	<0.00862	0.012	<0.00756	0.028	<0.00877	<0.00937	0.0399	0.0127	0.069	0.0195	0.0381	0.117	0.024	0.0571	0.441	<0.0824	<0.0875	0.0166	<0.00979	<0.00965	0.0251	0.0279
Acenaphthylene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*85* [3]	0.0498	0.077	0.127	0.146	<0.00862	0.374	<0.00756	0.229	0.0175	0.04	0.0174	0.082	0.0259	0.0606	0.0183	0.565	0.0324	1.47	1.12	<0.0824	0.486	0.317	0.226	0.054	0.819	1.13
Anthracene	*23,000*	*610,000*	*610,000*	---	---	---	*12,000*	0.0405	0.0399	0.0917	0.0899	<0.00431	0.205	<0.00378	0.236	0.0205	0.0399	0.0874	0.128	0.166	0.0847	0.0635	0.698	0.0669	0.667	2.23	0.0659	0.252	0.156	0.153	0.0686	0.371	0.585
Benzo(a)anthracene	*0.9* [2]	*8*	*170*	---	---	---	*2*	0.0778	0.141	0.216	0.381	<0.00862	0.807	<0.00756	**1.14**	0.123	0.214	0.3	0.82	0.729	0.445	0.517	**2.15**	0.321	**3.49**	**12.4**	0.216	**1.92**	0.72	0.57	0.208	**1.85**	**2.52**
Benzo(a)pyrene	*0.09* [2]	*0.09* [2]	*17*	---	---	---	*8*	**0.123**	**0.172**	**0.255**	**0.483**	<0.0172	**1.08**	<0.0151	**1.13**	**0.162**	**0.22**	**0.347**	**0.736**	**0.987**	**0.437**	**1**	**1.39**	**0.403**	**3.12**	**14**	**0.372**	**3.56**	**0.905**	**0.634**	**0.198**	**2.12**	**3.57**
Benzo(b)fluoranthene	*0.9* [2]	*8*	*170*	---	---	---	*5*	0.119	0.183	0.278	0.514	<0.0172	**1.2**	<0.0151	**1.2**	0.151	0.214	0.318	0.771	0.813	0.448	0.722	**1.77**	0.341	**7.01**	**15**	0.345	**3.76**	**1.14**	0.784	0.195	**3.06**	**4.69**
Benzo(k)fluoranthene	*9*	*78*	*1,700*	---	---	---	*49*	0.0607	0.0704	0.114	0.196	<0.00862	0.422	<0.00756	0.441	0.0565	0.0781	0.113	0.275	0.263	0.173	0.304	0.476	0.13	1.38	3.01	0.131	0.919	0.358	0.228	0.0565	0.854	1.08
Benzo(ghi)perylene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*27,000* [3]	0.101	0.0957	0.179	0.273	<0.0216	0.623	<0.0189	0.527	0.083	0.0955	0.165	0.326	0.44	0.218	0.407	0.607	0.135	1.73	4.92	0.212	1.3	0.833	0.402	0.0994	1.37	2.2
Chrysene	*88*	*780*	*17,000*	---	---	---	*160*	0.0817	0.132	0.21	0.359	<0.00862	0.705	<0.00756	0.953	0.11	0.181	0.221	0.769	0.506	0.377	0.375	1.62	0.223	3.44	9.83	0.158	1.7	0.738	0.523	0.166	1.6	2.2
Dibenzo(a,h)anthracene	*0.092*	*0.8*	*17*	---	---	---	*2*	<0.0414	<0.0463	<0.0454	0.0574	<0.0431	**0.142**	<0.0378	**0.135**	<0.0438	<0.0469	<0.0497	**0.0909**	**0.132**	0.0662	**0.123**	**0.248**	0.045	**0.591**	**1.51**	<0.412	<0.438	**0.165**	**0.107**	<0.0482	**0.386**	**0.62**
Fluoranthene	*3,100*	*82,000*	*82,000*	---	---	---	*4,300*	0.119	0.193	0.275	0.532	<0.00862	0.944	<0.00756	1.64	0.185	0.261	0.334	1.19	0.755	0.615	0.359	2.9	0.37	5.74	20.1	0.275	2.11	1.23	0.653	0.216	2.21	2.56
Fluorene	*3,100*	*82,000*	*82,000*	---	---	---	*560*	<0.00829	<0.00925	0.014	0.0107	<0.00862	0.0165	<0.00756	0.0372	<0.00877	<0.00937	0.0515	0.0327	0.098	0.037	0.0319	0.407	0.0432	0.114	0.596	<0.0824	<0.0875	0.0328	0.0248	0.0221	0.0428	0.0725
Indeno(1,2,3-cd)pyrene	*0.9* [2]	*8*	*170*	---	---	---	*14*	0.123	0.141	0.216	0.41	<0.00862	**0.969**	<0.00756	0.788	0.175	0.158	0.371	0.503	**0.958**	0.337	**0.928**	**1.05**	0.345	**2.57**	**12.3**	0.357	**3.43**	**0.964**	0.58	0.146	**2.11**	**4.17**
Naphthalene	*1,600*	*41,000*	*4,100*	*170*	*270*	*1.8*	*12*	0.0365	0.0276	0.0471	0.0327	<0.0216	0.0948	<0.0189	0.0832	0.0336	0.117	0.05	0.186	0.0604	0.5	<0.0246	**5.82**	<0.0224	1.73	0.725	<0.206	<0.219	0.202	0.36	0.557	0.159	0.394
Phenanthrene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*210* [3]	0.102	0.11	0.191	0.212	<0.00431	0.333	0.0098	0.735	0.166	0.187	0.715	0.699	1.3	0.864	0.342	6.66	0.23	2.92	14.1	0.152	0.565	0.866	0.977	0.742	0.592	1.14
Pyrene	*2,300*	*61,000*	*61,000*	---	---	---	*4,200*	0.108	0.176	0.285	0.518	<0.0172	1.01	<0.0151	1.6	0.194	0.247	0.335	1.16	0.681	0.651	0.341	2.95	0.293	6.06	21.2	0.272	2.35	1.14	0.703	0.255	2.28	3.25

[1] Refers to Remedial Objective (RO) from Tables A and B, Appendix B, Part 742 - TACO

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H outside of a populated area

[3] Value listed on rescinded non-TACO Table established by Illinois EPA (revision date: 10/30/12) and formerly located at http://www.epa.illinois.gov/topics/cleanup-programs/taco/other-chemicals/index. Value is provided as a tool for comparison and is not a TACO Tier 1 RO.

Bold = Constituent detected above its reporting limit
Bold/Shaded = Constituent detected above its applicable RO
--- Constituent for which RO has not been established

Note: Table only includes samples analyzed for PNAs

Note: Tier 1 ROs have not been established for acenaphthylene, benzo(g,h,i)perylene, or phenanthrene; background concentrations within a populated area in an MSA (excluding Chicago) established as 0.07 mg/kg, 1.7 mg/kg, and 2.5 mg/kg, respectively

TABLE 3-4
PNA SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Sample ID	*Ingestion Exposure Route* [1]			*Inhalation Exposure Route* [1]			*Migration to Class I Groundwater Exposure Route* [1]	**SB-24**	**SB-25**	**SB-26**	**SB-27**	**SB-28**	**SB-29**	**SB-29**	**SB-30**	**SB-30**	**SB-31**	**SB-31**	**SB-32**	**SB-33**	**SB-35**	**SB-36**	**SB-37**	**SB-38**	**SB-39**	**SB-40**	**SB-41**	**SB-42**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Sample Depth	*Residential*	*Industrial / Commercial*	*Construction Worker*	*Residential*	*Industrial / Commercial*	*Construction Worker*		0-1	0-1	0-1	0-1	0-1	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituents	---mg/kg---																																
Acenaphthene	*4,700*	*120,000*	*120,000*	---	---	---	*570*	0.0195	0.0385	0.0306	0.0212	<0.00855	0.0167	<0.00881	0.0285	<0.00978	0.0188	<0.00919	<0.0886	0.0521	<0.0085	<0.00952	<0.00972	<0.0873	0.0145	<0.0853	0.00963	0.13	<0.0898	0.00986	0.0288	<0.0883	<0.0959
Acenaphthylene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*85* [3]	0.643	0.418	0.731	0.452	0.0348	0.262	<0.00881	0.63	<0.00978	0.271	0.0134	1.11	1.64	0.0184	0.0208	0.0412	0.104	0.255	0.632	0.00971	1.05	1.06	0.396	0.925	0.477	1.1
Anthracene	*23,000*	*610,000*	*610,000*	---	---	---	*12,000*	0.305	0.252	0.414	0.241	0.0261	0.181	0.00811	0.381	0.0173	0.159	0.0165	0.572	0.57	0.015	0.0126	0.0283	0.0986	0.157	0.247	0.029	0.519	0.426	0.181	0.508	0.333	0.434
Benzo(a)anthracene	*0.9* [2]	*8*	*170*	---	---	---	*2*	**1.31**	0.839	**1.8**	**1.03**	0.115	**0.947**	0.0504	**2.07**	0.0513	**0.936**	0.0708	**2.62**	**3.73**	0.0749	0.0431	0.12	0.486	0.551	**1.38**	0.165	**1.85**	**2.09**	0.618	**1.62**	**1.47**	**1.82**
Benzo(a)pyrene	*0.09* [2]	*0.09* [2]	*17*	---	---	---	*8*	**1.69**	**1.07**	**2.14**	**1.23**	**0.154**	**1.16**	0.0575	**2.61**	0.0575	**1.24**	0.0727	**5.82**	**4.36**	**0.195**	**0.106**	**0.246**	**0.978**	**0.704**	**2.76**	**0.199**	**3.64**	**3.75**	**0.783**	**1.88**	**2.56**	**4.24**
Benzo(b)fluoranthene	*0.9* [2]	*8*	*170*	---	---	---	*5*	**2.15**	**1.34**	**3.1**	**1.47**	0.161	**1.61**	0.0555	**3.48**	0.0819	**1.46**	0.0902	**6.84**	**5.6**	0.192	0.1	0.262	**0.992**	0.835	**2.77**	0.202	**3.8**	**3.77**	**0.949**	**2.47**	**2.82**	**4.58**
Benzo(k)fluoranthene	*9*	*78*	*1,700*	---	---	---	*49*	0.726	0.459	0.753	0.5	0.0459	0.336	0.0187	0.758	0.0258	0.299	0.024	1.6	1.31	0.0373	0.0239	0.0496	0.299	0.279	0.682	0.0745	1.09	0.89	0.33	0.868	0.664	1.02
Benzo(ghi)perylene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*27,000* [3]	1.05	0.871	1.39	0.69	0.0728	0.508	0.034	0.983	0.0901	0.671	0.0568	2.21	2.41	0.132	0.0754	0.106	0.442	0.423	1.1	0.106	2.03	1.51	0.422	1.21	1.12	2.6
Chrysene	*88*	*780*	*17,000*	---	---	---	*160*	1.12	0.737	1.63	0.936	0.0916	0.923	0.0389	1.94	0.0441	0.899	0.0588	2.38	3.95	0.0756	0.039	0.112	0.47	0.55	1.26	0.154	1.93	1.95	0.583	1.65	1.58	1.87
Dibenzo(a,h)anthracene	*0.092*	*0.8*	*17*	---	---	---	*2*	**0.278**	**0.162**	**0.383**	**0.175**	<0.0427	**0.206**	<0.044	**0.428**	<0.0489	**0.269**	<0.046	**0.647**	**0.907**	<0.0425	<0.0476	<0.0486	<0.436	**0.0999**	<0.426	<0.0455	<0.51	<0.449	**0.122**	**0.297**	<0.442	**0.546**
Fluoranthene	*3,100*	*82,000*	*82,000*	---	---	---	*4,300*	1.57	0.924	2.22	1.26	0.132	1.28	0.0451	2.83	0.0746	0.86	0.0706	3.06	4	0.0892	0.0475	0.145	0.643	0.672	1.55	0.298	2.13	2.72	0.862	2.25	1.99	2.12
Fluorene	*3,100*	*82,000*	*82,000*	---	---	---	*560*	0.0311	0.0319	0.039	0.0287	<0.00855	0.0444	<0.00881	0.127	<0.00978	0.037	<0.00919	0.191	0.157	<0.0085	<0.00952	<0.00972	<0.0873	0.0208	<0.0853	<0.0091	0.163	0.136	0.0204	0.0448	<0.0883	<0.0959
Indeno(1,2,3-cd)pyrene	*0.9* [2]	*8*	*170*	---	---	---	*14*	**1.78**	**1.1**	**2.17**	**1.01**	0.184	**1.22**	0.077	**2.53**	0.165	**1.32**	0.129	**5.83**	**4.8**	0.206	0.115	0.243	**0.931**	0.597	**2.61**	0.148	**3.9**	**3.28**	0.665	**1.7**	**2.28**	**4.78**
Naphthalene	*1,600*	*41,000*	*4,100*	*170*	*270*	*1.8*	*12*	0.0896	0.0436	0.174	0.0697	0.0897	0.763	0.116	1.15	<0.0245	0.185	0.128	0.233	0.584	<0.0213	<0.0238	0.0596	<0.218	0.0887	0.282	<0.0227	0.267	0.523	0.0944	0.115	0.619	<0.24
Phenanthrene	*2,300* [3]	*61,000* [3]	*61,000* [3]	---	---	---	*210* [3]	0.391	0.347	0.913	0.422	0.193	1.78	0.143	3.31	0.115	0.873	0.261	1.59	2.66	0.0244	0.0181	0.14	0.382	0.474	0.789	0.111	0.829	1.45	0.326	0.656	1.74	0.537
Pyrene	*2,300*	*61,000*	*61,000*	---	---	---	*4,200*	1.61	0.96	2.3	1.32	0.141	1.34	0.0481	2.8	0.0664	1.12	0.0866	3.51	5.4	0.0898	0.0522	0.173	0.657	0.712	1.76	0.241	2.46	3.26	0.824	2.47	2.06	2.43

[1] Refers to Remedial Objective (RO) from Tables A and B, Appendix B, Part 742 - TACO

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H outside of a populated area

[3] Value listed on rescinded non-TACO Table established by Illinois EPA (revision date: 10/30/12) and formerly located at http://www.epa.illinois.gov/topics/cleanup-programs/taco/other-chemicals/index. Value is provided as a tool for comparison and is not a TACO Tier 1 RO.

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable RO

--- Constituent for which RO has not been established

Note: Table only includes samples analyzed for PNAs

Note: Tier 1 ROs have not been established for acenaphthylene, benzo(g,h,i)perylene, or phenanthrene; background concentrations within a populated area in an MSA (excluding Chicago) established as 0.07 mg/kg, 1.7 mg/kg, and 2.5 mg/kg, respectively

TABLE 3-5
PNA SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Sample ID	*Maximum Allowable Concentration* [1]				**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-4**	**SB-5**	**SB-5**	**SB-6**	**SB-6**	**SB-7**	**SB-7**	**SB-8**	**SB-8**	**SB-9**	**SB-9**	**SB-10**	**SB-10**	**SB-11**	**SB-12**	**SB-14**	**SB-16**	**SB-18**	**SB-20**	**SB-21**	**SB-22**	**SB-23**
Sample Depth	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	1-3	1-3	1-3	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constiuents	*mg/kg*																													
Acenaphthene	*570*	*570*	*570*	*570*	<0.00829	<0.00925	<0.00908	<0.00877	<0.00862	0.012	<0.00756	0.028	<0.00877	<0.00937	0.0399	0.0127	0.069	0.0195	0.0381	0.117	0.024	0.0571	0.441	<0.0824	<0.0875	0.0166	<0.00979	<0.00965	0.0251	0.0279
Acenaphthylene	*85*	*85*	*85*	*85*	0.0498	0.077	0.127	0.146	<0.00862	0.374	<0.00756	0.229	0.0175	0.04	0.0174	0.082	0.0259	0.0606	0.0183	0.565	0.0324	1.47	1.12	<0.0824	0.486	0.317	0.226	0.054	0.819	1.13
Anthracene	*12,000*	*12,000*	*12,000*	*12,000*	0.0405	0.0399	0.0917	0.0899	<0.00431	0.205	<0.00378	0.236	0.0205	0.0399	0.0874	0.128	0.166	0.0847	0.0635	0.698	0.0669	0.667	2.23	0.0659	0.252	0.156	0.153	0.0686	0.371	0.585
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	0.0778	0.141	0.216	0.381	<0.00862	0.807	<0.00756	**1.14**	0.123	0.214	0.3	0.82	0.729	0.445	0.517	**2.15**	0.321	**3.49**	**12.4**	0.216	**1.92**	0.72	0.57	0.208	**1.85**	**2.52**
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**0.123**	**0.172**	**0.255**	**0.483**	<0.0172	**1.08**	<0.0151	**1.13**	**0.162**	**0.22**	**0.347**	**0.736**	**0.987**	**0.437**	**1**	**1.39**	**0.403**	**3.12**	**14**	**0.372**	**3.56**	**0.905**	**0.634**	**0.198**	**2.12**	**3.57**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	0.119	0.183	0.278	0.514	<0.0172	**1.2**	<0.0151	**1.2**	0.151	0.214	0.318	0.771	0.813	0.448	0.722	**1.77**	0.341	**7.01**	**15**	0.345	**3.76**	**1.14**	0.784	0.195	**3.06**	**4.69**
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	0.0607	0.0704	0.114	0.196	<0.00862	0.422	<0.00756	0.441	0.0565	0.0781	0.113	0.275	0.263	0.173	0.304	0.476	0.13	1.38	3.01	0.131	0.919	0.358	0.228	0.0565	0.854	1.08
Benzo(g,h,i)perylene	*2,300*	*2,300*	*2,300*	*2,300*	0.101	0.0957	0.179	0.273	<0.0216	0.623	<0.0189	0.527	0.083	0.0955	0.165	0.326	0.44	0.218	0.407	0.607	0.135	1.73	4.92	0.212	1.3	0.833	0.402	0.0994	1.37	2.2
Chrysene	*88*	*88*	*88*	*88*	0.0817	0.132	0.21	0.359	<0.00862	0.705	<0.00756	0.953	0.11	0.181	0.221	0.769	0.506	0.377	0.375	1.62	0.223	3.44	9.83	0.158	1.7	0.738	0.523	0.166	1.6	2.2
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	<0.0414	<0.0463	<0.0454	0.0574	<0.0431	**0.142**	<0.0378	**0.135**	<0.0438	<0.0469	<0.0497	**0.0909**	**0.132**	0.0662	**0.123**	**0.248**	0.045	**0.591**	**1.51**	<0.412	<0.438	**0.165**	**0.107**	<0.0482	**0.386**	**0.62**
Fluoranthene	*3,100*	*3,100*	*3,100*	*3,100*	0.119	0.193	0.275	0.532	<0.00862	0.944	<0.00756	1.64	0.185	0.261	0.334	1.19	0.755	0.615	0.359	2.9	0.37	5.74	20.1	0.275	2.11	1.23	0.653	0.216	2.21	2.56
Fluorene	*560*	*560*	*560*	*560*	<0.00829	<0.00925	0.014	0.0107	<0.00862	0.0165	<0.00756	0.0372	<0.00877	<0.00937	0.0515	0.0327	0.098	0.037	0.0319	0.407	0.0432	0.114	0.596	<0.0824	<0.0875	0.0328	0.0248	0.0221	0.0428	0.0725
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	0.123	0.141	0.216	0.41	<0.00862	**0.969**	<0.00756	0.788	0.175	0.158	0.371	0.503	**0.958**	0.337	**0.928**	**1.05**	0.345	**2.57**	**12.3**	0.357	**3.43**	**0.964**	0.58	0.146	**2.11**	**4.17**
Naphthalene	*1.8*	*1.8*	*1.8*	*1.8*	0.0365	0.0276	0.0471	0.0327	<0.0216	0.0948	<0.0189	0.0832	0.0336	0.117	0.05	0.186	0.0604	0.5	<0.0246	**5.82**	<0.0224	1.73	0.725	<0.206	<0.219	0.202	0.36	0.557	0.159	0.394
Phenanthrene	*210*	*210*	*210*	*210*	0.102	0.11	0.191	0.212	<0.00431	0.333	0.0098	0.735	0.166	0.187	0.715	0.699	1.3	0.864	0.342	6.66	0.23	2.92	14.1	0.152	0.565	0.866	0.977	0.742	0.592	1.14
Pyrene	*2,300*	*2,300*	*2,300*	*2,300*	0.108	0.176	0.285	0.518	<0.0172	1.01	<0.0151	1.6	0.194	0.247	0.335	1.16	0.681	0.651	0.341	2.95	0.293	6.06	21.2	0.272	2.35	1.14	0.703	0.255	2.28	3.25

[1] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-5
PNA SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Sample ID	*Maximum Allowable Concentration* [1]				**SB-24**	**SB-25**	**SB-26**	**SB-27**	**SB-28**	**SB-29**	**SB-29**	**SB-30**	**SB-30**	**SB-31**	**SB-31**	**SB-32**	**SB-33**	**SB-35**	**SB-36**	**SB-37**	**SB-38**	**SB-39**	**SB-40**	**SB-41**	**SB-42**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Sample Depth	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	0-1	0-1	0-1	0-1	0-1	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituents	*mg/kg*																													
Acenaphthene	*570*	*570*	*570*	*570*	0.0195	0.0385	0.0306	0.0212	<0.00855	0.0167	<0.00881	0.0285	<0.00978	0.0188	<0.00919	<0.0886	0.0521	<0.0085	<0.00952	<0.00972	<0.0873	0.0145	<0.0853	0.00963	0.13	<0.0898	0.00986	0.0288	<0.0883	<0.0959
Acenaphthylene	*85*	*85*	*85*	*85*	0.643	0.418	0.731	0.452	0.0348	0.262	<0.00881	0.63	<0.00978	0.271	0.0134	1.11	1.64	0.0184	0.0208	0.0412	0.104	0.255	0.632	0.00971	1.05	1.06	0.396	0.925	0.477	1.1
Anthracene	*12,000*	*12,000*	*12,000*	*12,000*	0.305	0.252	0.414	0.241	0.0261	0.181	0.00811	0.381	0.0173	0.159	0.0165	0.572	0.57	0.015	0.0126	0.0283	0.0986	0.157	0.247	0.029	0.519	0.426	0.181	0.508	0.333	0.434
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	**1.31**	0.839	**1.8**	**1.03**	0.115	**0.947**	0.0504	**2.07**	0.0513	**0.936**	0.0708	**2.62**	**3.73**	0.0749	0.0431	0.12	0.486	0.551	**1.38**	0.165	**1.85**	**2.09**	0.618	**1.62**	**1.47**	**1.82**
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**1.69**	**1.07**	**2.14**	**1.23**	**0.154**	**1.16**	0.0575	**2.61**	0.0575	**1.24**	0.0727	**5.82**	**4.36**	**0.195**	**0.106**	**0.246**	**0.978**	**0.704**	**2.76**	**0.199**	**3.64**	**3.75**	**0.783**	**1.88**	**2.56**	**4.24**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	**2.15**	**1.34**	**3.1**	**1.47**	0.161	**1.61**	0.0555	**3.48**	0.0819	**1.46**	0.0902	**6.84**	**5.6**	0.192	0.1	0.262	**0.992**	0.835	**2.77**	0.202	**3.8**	**3.77**	**0.949**	**2.47**	**2.82**	**4.58**
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	0.726	0.459	0.753	0.5	0.0459	0.336	0.0187	0.758	0.0258	0.299	0.024	1.6	1.31	0.0373	0.0239	0.0496	0.299	0.279	0.682	0.0745	1.09	0.89	0.33	0.868	0.664	1.02
Benzo(g,h,i)perylene	*2,300*	*2,300*	*2,300*	*2,300*	1.05	0.871	1.39	0.69	0.0728	0.508	0.034	0.983	0.0901	0.671	0.0568	2.21	2.41	0.132	0.0754	0.106	0.442	0.423	1.1	0.106	2.03	1.51	0.422	1.21	1.12	2.6
Chrysene	*88*	*88*	*88*	*88*	1.12	0.737	1.63	0.936	0.0916	0.923	0.0389	1.94	0.0441	0.899	0.0588	2.38	3.95	0.0756	0.039	0.112	0.47	0.55	1.26	0.154	1.93	1.95	0.583	1.65	1.58	1.87
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	**0.278**	**0.162**	**0.383**	**0.175**	<0.0427	**0.206**	<0.044	**0.428**	<0.0489	**0.269**	<0.046	**0.647**	**0.907**	<0.0425	<0.0476	<0.0486	<0.436	**0.0999**	<0.426	<0.0455	<0.51	<0.449	**0.122**	**0.297**	<0.442	**0.546**
Fluoranthene	*3,100*	*3,100*	*3,100*	*3,100*	1.57	0.924	2.22	1.26	0.132	1.28	0.0451	2.83	0.0746	0.86	0.0706	3.06	4	0.0892	0.0475	0.145	0.643	0.672	1.55	0.298	2.13	2.72	0.862	2.25	1.99	2.12
Fluorene	*560*	*560*	*560*	*560*	0.0311	0.0319	0.039	0.0287	<0.00855	0.0444	<0.00881	0.127	<0.00978	0.037	<0.00919	0.191	0.157	<0.0085	<0.00952	<0.00972	<0.0873	0.0208	<0.0853	<0.0091	0.163	0.136	0.0204	0.0448	<0.0883	<0.0959
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	**1.78**	**1.1**	**2.17**	**1.01**	0.184	**1.22**	0.077	**2.53**	0.165	**1.32**	0.129	**5.83**	**4.8**	0.206	0.115	0.243	**0.931**	0.597	**2.61**	0.148	**3.9**	**3.28**	0.665	**1.7**	**2.28**	**4.78**
Naphthalene	*1.8*	*1.8*	*1.8*	*1.8*	0.0896	0.0436	0.174	0.0697	0.0897	0.763	0.116	1.15	<0.0245	0.185	0.128	0.233	0.584	<0.0213	<0.0238	0.0596	<0.218	0.0887	0.282	<0.0227	0.267	0.523	0.0944	0.115	0.619	<0.24
Phenanthrene	*210*	*210*	*210*	*210*	0.391	0.347	0.913	0.422	0.193	1.78	0.143	3.31	0.115	0.873	0.261	1.59	2.66	0.0244	0.0181	0.14	0.382	0.474	0.789	0.111	0.829	1.45	0.326	0.656	1.74	0.537
Pyrene	*2,300*	*2,300*	*2,300*	*2,300*	1.61	0.96	2.3	1.32	0.141	1.34	0.0481	2.8	0.0664	1.12	0.0866	3.51	5.4	0.0898	0.0522	0.173	0.657	0.712	1.76	0.241	2.46	3.26	0.824	2.47	2.06	2.43

[1] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-6
SVOC SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route*** [1]			***Inhalation Exposure Route*** [1]			***Soil Component of Groundwater Ingestion (Class I)*** [1]	**SB-13**	**SB-15**	**SB-17**	**SB-19**	**SB-34**
Depth, ft	*Residential*	*Industrial / Commerical*	*Constructon Worker*	*Residential*	*Industrial / Commerical*	*Constructon Worker*		0-1	0-1	0-1	0-1	0-1
Constituent	----------	----------	----------	----------	----------	----------	*mg/kg*	----------	----------	----------	----------	----------
Acenaphthene	4700	120000	120000	--	--	--	570	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Acenaphthylene	2300	61000	61000	--	--	--	85	<0.0943	<0.0922	0.0641	0.35	0.0954
Anthracene	23000	610000	610000	--	--	--	12000	0.0518	<0.0461	0.0371	0.179	0.0912
Benzo(a)anthracene	0.9	0.9	0.54	--	--	--	2	0.199	0.177	0.146	0.656	0.487
Benzidine	--	--	--	--	--	--	--	<0.195	<0.191	<0.0481	<0.0494	<0.172
Benzo(a)pyrene	0.09	0.8	17	--	--	--	8	**0.254**	**0.154**	**0.196**	**0.944**	**0.597**
Benzo(b)fluoranthene	0.9	8	170	--	--	--	5	0.409	0.389	0.402	**1.72**	**1.17**
Benzo(g,h,i)perylene	2300	61000	61000	--	--	--	27000	<0.189	<0.369	0.133	0.577	<0.664
Benzo(k)fluoranthene	0.9	78	1700	--	--	--	49	<0.189	<0.369	0.0722	0.379	<0.664
bis(2-chloroethyl) ether	0.6	5	75	0.2	0.47	0.66	0.0004	<0.66	<0.66	<0.348	<0.357	<0.66
bis(2-ethylhexyl)phthalate	46	410	4100	31000	31000	31000	3600	<0.283	<0.276	<0.0696	<0.0714	<0.249
4-Bromophenyl-phenylether	--	--	--	--	--	--	--	<0.141	<0.138	<0.0348	<0.0357	<0.124
Butyl benzyl phthalate	16000	16000		930	930		930	<0.283	<0.276	<0.0696	<0.0714	<0.249
Carbazole	32	290	6200	--	--	--	0.6	<0.0943	<0.0922	<0.0232	0.0976	<0.0829
4-Chloroaniline	310	8200	820	--	--	--	0.7	<0.141	<0.138	<0.0348	<0.0357	<0.124
4-chloro-3-methylphenol	--	--	--	--	--	--	--	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2-Chloronaphthalene	6300	160000	41000	--	--	--	49	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2-Chlorophenol	390	10000	10000	53000	53000	53000	4	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
4-Chlorophenyl-phenylether	--	--	--	--	--	--	--	<0.141	<0.138	<0.0348	<0.0357	<0.124
Chrysene	88	780	17000	--	--	--	160	0.242	0.195	0.18	0.778	0.6
Dibenz(a,h)anthracene	0.09	0.8	17	--	--	--	2	<0.09	<0.09	<0.09	**0.105**	<0.09
1,2-Dichlorobenzene	7000	180000	18000	560	560	310	17	<0.189	<0.184	<0.0464	<0.0476	<0.166
1,3-Dichlorobenzene	--	--	--	--	--	--	--	<0.0276	<0.027	<0.02	<0.02	<0.0243
1,4-Dichlorobenzene	--	--	--	11000	17000	340	2	<0.189	<0.184	<0.0464	<0.0476	<0.166
2,4-Dichlorophenol	230	6100	610	--	--	--	1	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Diethyl phthalate	63000	1000000	1000000	2000	2000	2000	470	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,4-dimethylphenol	1600	41000	41000	--	--	--	9	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Dimethyl phthalate	--	--	200000	--	--	--	--	<0.0471	<0.0461	<0.0116	<0.0119	<0.0415
4,6-dinitro-2-methylphenol	6.3	160	160	--	--	--	--	<1.41	<1.38	<0.348	<0.357	<1.24
2,4-Dinitrophenol	160	4100	410	--	--	--	0.2	<0.465	<0.454	<0.2	<0.2	<0.409
2,4-Dinitrotoluene	0.9	8.4	180	--	--	--	0.0008	<0.25	<0.25	<0.139	<0.143	<0.25
2,6-Dinitrotoluene	0.9	8.4	180	--	--	--	0.0007	<0.26	<0.26	<0.0928	<0.0952	<0.26
Di-n-butyl phthalate	7800	200000	200000	2300	2300	2300	2300	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Di-n-octyl phthalate	1600	41000	4100	10000	10000	10000	10000	<0.377	<0.737	<0.0928	<0.0952	<1.33
Fluoranthene	3100	82000	82000	--	--	--	4300	0.409	0.349	0.286	1.34	1.21
Fluorene	3100	82000	82000	--	--	--	560	<0.0943	<0.0922	<0.0232	0.0283	<0.0829
Hexachlorobenzene	0.4	4	78	1	1.8	2.6	2	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Hexachlorobutadiene	78	2000	200	--	--	--	2.2	<0.189	<0.184	<0.0464	<0.0476	<0.166
Hexachlorocyclopentadiene	550	14000	14000	10	16	1.1	400	<1.89	<1.84	<0.464	<0.476	<1.66
Hexachloroethane	78	2000	2000	--	--	--	0.5	<0.189	<0.184	<0.0464	<0.0476	<0.166
Indeno(1,2,3-cd)Pyrene	0.9	8	170	--	--	--	14	<0.377	<0.737	<0.0928	0.469	<0.9
Isophorone	15600	410000	410000	4600	4600	4600	8	<0.566	<0.553	<0.139	<0.143	<0.498
2-Methylphenol	3900	100000	100000	--	--	--	15	<0.0471	<0.0461	<0.0116	<0.0119	<0.0415
3-Methylphenol	3900	100000	20000	--	--	--	2	<0.189	<0.184	<0.0464	<0.0476	<0.166
4-Methylphenol	7800	200000	4100	100000	170000	3300	3.9	<0.189	<0.184	<0.0464	<0.0476	<0.166
Naphthalene	1600	41000	4100	170	270	1.8	12	<0.189	<0.184	<0.0464	0.0571	<0.166
2-Nitrophenol	--	--	--	--	--	--	--	<0.377	<0.369	<0.0928	<0.0952	<0.332
4-Nitrophenol	--	--	--	--	--	--	--	<1.89	<1.84	<0.464	<0.476	<1.66
Nitrobenzene	39	1000	1000	92	140	9.4	0.1	<0.1	<0.1	<0.0464	<0.0476	<0.1
N-Nitrosodi-n-Propylamine	0.09	0.8	18	--	--	--	0.00005	<0.0442	<0.0432	<0.0109	<0.0112	<0.0389
N-Nitrosodiphenylamine	130	1200	25000	--	--	--	1	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,2'-oxybis(1-Chloropropane)	3100	82000	8200	--	--	--	2.4	<1.89	<1.84	<0.464	<0.476	<1.66
Pentachlorophenol	3	24	520	--	--	--	0.03	<0.254	<0.248	<0.0624	<0.0641	<0.223
Phenanthrene	2300	61000	61000	--	--	--	210	0.166	0.144	0.0928	0.601	0.401
Phenol	23000	610000	61000	--	--	--	100	<0.189	<0.184	<0.0464	<0.0476	<0.166
Pyrene	2300	61000	61000	--	--	--	4200	0.363	0.374	0.278	1.31	1.36
1,2,4-Trichlorobenzene	780	20000	2000	3200	3200	920	5	<0.189	<0.184	<0.0464	<0.0476	<0.166
2,4,5-Trichlorophenol	7800	200000	200000	--	--	--	270	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,4,6-Trichlorophenol	58	520	11000	200	390	540	0.2	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829

[1]Refers to Remedial Objective (RO) from Tables A and B, Appendix B, Part 742 - TACO

[2]Refers to background concentration from 35 IAC 742, Appendix A, Table H within a populated area in an MSA (excluding Chicago)

[3]Value listed on rescinded non-TACO Table established by Illinois EPA (revision date: 10/30/12) and formerly located at http://www.epa.illinois.gov/topics/cleanup-programs/taco/other-chemicals/index. Value is provided as a tool for comparison and is not a TACO Tier 1 RO.

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable RO

--- Constituent for which RO has not been established

Note: Table only includes samples analyzed for PNAs

Note: Tier 1 ROs have not been established for acenaphthylene, benzo(g,h,i)perylene, or phenanthrene; background concentrations within a populated area in an MSA (excluding Chicago) established as 0.07 mg/kg, 1.7 mg/kg, and 2.5 mg/kg, respectively

TABLE 3-7
SVOC SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable Concentration* [1]				**SB-13**	**SB-15**	**SB-17**	**SB-19**	**SB-34**
Depth, ft	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	0-1	0-1	0-1	0-1	0-1
Constituent	----------*mg/kg*----------								
Acenaphthene	*570*	*570*	*570*	*570*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Anthracene	*12000*	*12000*	*12000*	*12000*	0.0518	<0.0461	0.0371	0.179	0.0912
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	0.199	0.177	0.146	0.656	0.487
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**0.254**	**0.154**	**0.196**	**0.944**	**0.597**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	0.409	0.389	0.402	**1.72**	1.17
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	<0.189	<0.369	0.133	0.577	<0.664
bis(2-Chloroethyl)ether	*0.66*	*0.66*	*0.66*	*0.66*	<0.66	<0.66	<0.348	<0.357	<0.66
bis(2-Ethylhexyl)phthalate	*46*	*46*	*46*	*46*	<0.283	<0.276	<0.0696	<0.0714	<0.249
Butyl benzyl phthalate	*930*	*930*	*930*	*930*	<0.283	<0.276	<0.0696	<0.0714	<0.249
Carbazole	*0.6*	*0.6*	*0.6*	*0.6*	<0.0943	<0.0922	<0.0232	0.0976	<0.0829
4-Chloroaniline	*0.7*	*0.7*	*0.7*	*0.7*	<0.141	<0.138	<0.0348	<0.0357	<0.124
2-Chlorophenol	*1.5*	*1.5*	*1.5*	*1.5*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Chrysene	*88*	*88*	*88*	*88*	0.242	0.195	0.18	0.778	0.6
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	<0.09	<0.09	<0.09	**0.105**	<0.09
1,2-Dichlorobenzene	*17*	*17*	*17*	*17*	<0.189	<0.184	<0.0464	<0.0476	<0.166
1,4-Dichlorobenzene	*2*	*2*	*2*	*2*	<0.189	<0.184	<0.0464	<0.0476	<0.166
2,4-Dichlorophenol	*0.48*	*0.48*	*0.48*	*0.48*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Diethyl phthalate	*470*	*470*	*470*	*470*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,4-Dimethylphenol	*9*	*9*	*9*	*9*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Di-n-butyl phthalate	*2300*	*2300*	*2300*	*2300*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,4-Dinitrophenol	*3.3*	*3.3*	*3.3*	*3.3*	<0.465	<0.454	<0.2	<0.2	<0.409
2,4-Dinitrotoluene	*0.25*	*0.25*	*0.25*	*0.25*	<0.25	<0.25	<0.139	<0.143	<0.25
2,6-Dinitrotoluene	*0.26*	*0.26*	*0.26*	*0.26*	<0.26	<0.26	<0.0928	<0.0952	<0.26
Di-n-octylphthalate	*1600*	*1600*	*1600*	*1600*	<0.377	<0.737	<0.0928	<0.0952	<1.33
Fluoranthene	*3100*	*3100*	*3100*	*3100*	0.409	0.349	0.286	1.34	1.21
Fluorene	*560*	*560*	*560*	*560*	<0.0943	<0.0922	<0.0232	0.0283	<0.0829
Hexachlorobenzene	*0.4*	*0.4*	*0.4*	*0.4*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Hexachlorocyclopentadiene	*1.1*	*1.1*	*1.1*	*1.1*	<1.89	<1.84	<0.464	<0.476	<1.66
Hexachloroethane	*0.5*	*0.5*	*0.5*	*0.5*	<0.189	<0.184	<0.0464	<0.0476	<0.166
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	<0.377	<0.737	<0.0928	0.469	<0.9
Isophorone	*8*	*8*	*8*	*8*	<0.566	<0.553	<0.139	<0.143	<0.498
Naphthalene	*1.8*	*1.8*	*1.8*	*2*	<0.189	<0.184	<0.0464	0.0571	<0.166
Nitrobenzene	*0.26*	*0.26*	*0.26*	*0.26*	<0.1	<0.1	<0.0464	<0.0476	<0.1
n-Nitrosodi-n-propylamine	*0.0018*	*0.0018*	*0.0018*	*0.0018*	<0.0442	<0.0432	<0.0109	<0.0112	<0.0389
n-Nitrosodiphenylamine	*1*	*1*	*1*	*1*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
Pentachlorophenol	*0.02*	*0.02*	*0.02*	*0.02*	<0.254	<0.248	<0.0624	<0.0641	<0.223
Phenol	*100*	*100*	*100*	*100*	<0.189	<0.184	<0.0464	<0.0476	<0.166
Pyrene	*2300*	*2300*	*2300*	*2300*	0.363	0.374	0.278	1.31	1.36
1,2,4-Trichlorobenzene	*5*	*5*	*5*	*5*	<0.189	<0.184	<0.0464	<0.0476	<0.166
2,4,5-Trichlorophenol	*26*	*26*	*26*	*26*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829
2,4,6-Trichlorophenol	*0.66*	*0.66*	*0.66*	*0.66*	<0.0943	<0.0922	<0.0232	<0.0238	<0.0829

[1]Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2]Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-8

RCRA METALS SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route***			***Inhalation Exposure Route***			**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-4**	**SB-5**	**SB-5**	**SB-6**	**SB-6**	**SB-7**	**SB-7**	**SB-8**	**SB-8**	**SB-9**	**SB-9**	**SB-10**	**SB-10**	**SB-11**	**SB-12**	**SB-13**	**SB-14**	**SB-15**
Depth, ft	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	1-3	1-3	1-3	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1
Constituent	----------*mg/kg*----------																											
Aluminum	78,000	1,000,000	200,000	1,000,000	1,000,000	870,000	5230	5240	6260	6290	16200	5630	5230	6310	12100	3480	2220	4920	4750	6290	3240	3640	13900	5110	4760	7610	7350	5610
Antimony	31	820	82	--	--	--	<1.39	<1.38	<1.41	<1.39	<1.56	<1.39	<1.39	<1.38	<1.53	<1.59	<1.66	<1.62	<1.63	<1.38	<1.65	<1.56	<1.61	<1.41	<1.34	<1.43	<1.3	<1.33
Arsenic	11.3	--	61	750	1,200	25,000	8.02	7.84	9.93	**13.6**	<11.3	9.28	<11.3	**13.9**	<11.3	**19.2**	<11.3	**36.3**	<11.3	**14.8**	<11.3	11.3	<11.3	**249**	**62.1**	9.81	7.99	8.82
Barium	5,500	140,000	14,000	690,000	910,000	870,000	43.6	42	50.6	53.6	112	49.8	52.9	77	114	82.6	66.8	118	60.9	54.9	48	74.3	112	55.1	59	130	123	37.9
Beryllium	160	4,100	410	1,300	2,100	44,000	<0.56	<0.56	<0.563	<0.56	<0.156	<0.56	<0.139	<0.56	<0.153	<0.635	<0.166	<0.648	<0.163	<0.56	<0.165	<0.623	<0.161	<0.566	<0.56	<0.572	<0.56	<0.133
Cadmium	78	2,000	200	1,800	28,000	59,000	0.695	0.632	0.794	1.07	<0.5	0.755	<0.5	1.1	0.94	1.4	<0.5	1.31	0.711	1.04	<0.5	0.302	0.627	0.741	0.894	0.437	0.299	0.471
Calcium	--	--	--	--	--	--	45700	35300	41600	31700	4650	28500	22300	33500	7170	1160	928	993	1460	748		6510	4080	80300	77900	22500	94100	144000
Chromium, total	230	6,100	4,100	270	420	690	11.1	6.1	15.1	8.89	17.6	8.92	<13	8.47	<13	10	<13	5.46	<13	7.11	<13	17.6	13.5	4.84	6.04	10.4	5.58	24.3
Cobalt	4,700	120,000	12,000	--	--	--	5.54	4.86	6.04	4.8	4.63	7.01	5.21	4.86	6.04	4.84	<1.66	<1.62	2.79	12.5	<1.65	2.33	10.7	4.22	3.28	6.48	2.9	2.95
Copper	2,900	82,000	8,200	--	--	--	94.7	69.6	84.3	77.7	34.9	83.4	27.6	79.2	72.8	49.1	67.4	56.8	133	476	51.6	128	53.1	53.1	78.5	27.9	25.6	13.3
Iron	--	--	--	--	--	--	27800	24600	37900	37200	19500	29700	8230	30000	20200	43000	8450	68100	14400	41600	13600	15700	24000	21000	13300	11700	12000	12400
Lead	400	800	700	--	--	--	73.8	69.1	116	76.4	21.7	92.1	12	123	61.3	93.4	66.7	64	42.6	122	42.2	58.8	32.7	85.3	80.1	78.6	32.5	38.1
Magnesium	325,000	--	730,000	--	--	--	19900	13800	9480	7310	4020	8910	6010	9800	2430	350	258	678	802	649	450	434	2830	9210	10200	9410	17000	34600
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	453	248	275	234	70.9	315	306	335	596	173	9.38	32.5	31.7	592	13.8	18.6	614	437	611	448	464	**675**
Mercury	23	610	61	10	16	0.10	**0.392**	**0.204**	**0.177**	**0.172**	<0.073	**0.161**	<0.065	**0.254**	**0.24**	**0.138**	**0.608**	**0.148**	**0.254**	**0.191**	**0.201**	**0.238**	**0.269**	0.094	**0.165**	<0.067	<0.064	<0.068
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	14.2	11.5	13.8	13.2	12.3	15	12	12.8	15.7	13.4	4.92	4.87	10.5	14.4	6.71	5.5	17.5	12.2	16	11.6	10.3	11.4
Potassium	--	--	--	--	--	--	519	418	655	569	1980	517	831	643	1280	956	758	2760	683	488	764	705	1350	602	533	1990	896	1020
Selenium	390	10,000	1,000	--	--	--	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	390	10,000	1,000	--	--	--	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	4.58	<4.4	<4.4	<4.4	10.1	<4.4	4.84	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	35.6
Sodium	--	--	--	--	--	--	204	320	337	439	128	331	97.8	226	130	632	267	3120	328	384	292	142	67.9	184	230	1060	258	289
Thallium	6.3	160	160	--	--	--	2.84	2.2	2.78	2.27	<3.5	2.75	<2.2	2.46	<4.2	4.11	<1.4	3.99	<2.2	3.83	<2.2	2.78	<3.9	2.32	2.6	2.13	1.82	1.99
Vanadium	550	14,000	1,400	--	--	--	18.7	14.8	27.6	19	33.7	24	17.8	18.6	18.9	24.2	13.1	27.1	13.8	19.6	12.7	30.1	24	12.1	11.3	20.8	12.6	9.89
Zinc	23,000	610,000	61,000	--	--	--	69.2	55.4	66.5	80.3	40.1	70.9	31.7	131	113	81.3	11.7	17.8	82.2	93.4	14.7	12.3	46.7	82.6	114	82.6	48.7	45

[a/] Refers to Remediation Objective from Table B, Appendix B, Part 742 - TACO

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-8
RCRA METALS SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route***			***Inhalation Exposure Route***			**SB-16**	**SB-17**	**SB-18**	**SB-19**	**SB-19A**	**SB-20**	**SB-21**	**SB-22**	**SB-23**	**SB-24**	**SB-25**	**SB-26**	**SB-27**	**SB-28**	**SB-29**	**SB-29**	**SB-30**	**SB-30**	**SB-31**	**SB-31**	**SB-32**	**SB-33**
Depth, ft	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1
Constituent	---mg/kg---																											
Aluminum	78,000	1,000,000	200,000	1,000,000	1,000,000	870,000	5720	3900	10800	12000	--	10600	9520	3970	5100	7750	7350	4940	12500	10200	6730	11700	5680	16500	7500	4360	4450	3550
Antimony	31	820	82	--	--	--	<1.34	<1.31	<1.43	<1.48	--	<1.48	<1.41	<1.35	<1.4	<1.53	<1.4	<1.47	<1.43	<1.46	<1.5	<1.59	<1.63	<1.56	<1.39	<1.55	<1.22	<1.31
Arsenic	11.3	--	61	750	1,200	25,000	10.1	9.01	**28.8**	**22**	--	**12.7**	8.87	**14.9**	**20.6**	**22.2**	7.73	**17.4**	**13**	<11.3	**49.8**	**13.9**	**370**	<11.3	10.4	<11.3	**11.9**	**26.2**
Barium	5,500	140,000	14,000	690,000	910,000	870,000	95.1	38.4	140	266	--	139	81.5	45.5	85.4	123	51.9	65.9	166	72.1	93.6	95.3	111	163	80.5	65.3	62.2	41
Beryllium	160	4,100	410	1,300	2,100	44,000	<0.56	<0.56	<0.573	<0.59	--	<0.591	<0.141	<0.135	<0.56	<0.153	<0.561	<0.147	<0.572	<0.146	<0.15	<0.159	<0.651	<0.156	<0.56	<0.155	<0.56	<0.56
Cadmium	78	2,000	200	1,800	28,000	59,000	0.485	0.574	1.45	2.84	--	1.77	0.846	1.08	1.27	1.13	0.348	1.23	0.76	1.04	1.64	1.11	2.06	1.06	1.54	1.28	1.28	1.26
Calcium	--	--	--	--	--	--	145000	93200	94400	40900	--	21800	7790	76500	65400	29800	46100	27300	52300	14300	9150	3830	25100	4180	22800	10400	42900	46300
Chromium, total	230	6,100	4,100	270	420	690	6.13	3.06	8.01	11.1	--	9.33	42	<13	12.2	15.9	10.1	<13	12.4	<13	67	15.6	10.4	18.1	8.3	<13	7.69	11.8
Cobalt	4,700	120,000	12,000	--	--	--	2.65	2.08	4.84	9.15	--	5.49	7.44	3.37	4.66	5.8	3.65	3.51	6	6.58	6.03	8.66	6.65	10.7	6.06	5.93	4.14	4.27
Copper	2,900	82,000	8,200	--	--	--	25.2	77.5	119	504	--	264	51.4	67.8	109	55.9	18.3	76.1	836	57.9	97.7	59.2	149	42.3	83	84.2	91.9	52.9
Iron	--	--	--	--	--	--	14800	15000	25400	33800	--	32800	26900	22100	37000	17200	11000	17400	22400	24300	34500	29100	43400	29700	34300	28100	31600	39000
Lead	400	800	700	--	--	--	63.1	44	280	**5770**	117	184	55.3	80.3	147	72.9	21.8	111	286	69.3	134	57.8	209	21.4	118	81.7	161	111
Magnesium	325,000	--	730,000	--	--	--	22800	34800	8830	6500	--	4440	2690	13400	6470	7280	5080	7080	16300	8270	2220	2230	6640	3610	9120	4220	8350	8060
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	549	404	**823**	467	--	349	304	210	344	604	271	240	451	409	289	462	485	590	258	156	317	317
Mercury	23	610	61	10	16	0.10	**0.168**	0.081	**0.164**	**0.525**	--	**0.477**	0.088	**0.113**	**0.137**	<0.073	<0.064	**0.142**	<0.067	<0.071	<0.071	<0.077	**0.123**	<0.072	0.094	0.083	0.098	0.094
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	8.9	7.19	15.2	26.8	--	13.9	18.7	10.3	13.4	18.2	8.17	11.2	13.7	16.5	18.3	21	18.4	31.7	19.4	14.6	11.5	13.9
Potassium	--	--	--	--	--	--	780	568	1170	1170	--	957	1070	585	701	980	751	606	1190	813	709	971	754	1220	738	441	395	392
Selenium	390	10,000	1,000	--	--	--	<1.3	<1.3	<1.3	<1.3	--	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	390	10,000	1,000	--	--	--	<4.4	<4.4	4.79	5.84	--	4.82	44.5	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	79.8	<4.4	4.91	<4.4	6.54	<4.4	4.79	<4.4
Sodium	--	--	--	--	--	--	464	344	1250	1090	--	438	215	236	186	107	56.1	205	151	193	376	216	337	97.6	378	168	145	106
Thallium	6.3	160	160	--	--	--	2.04	1.71	3.58	3.62	--	3.22	2.7	<2.7	2.93	<4.1	1.79	<2.8	2.73	<3.9	3.45	<3.9	4.03	<4.2	3.15	<3.2	2.31	2.45
Vanadium	550	14,000	1,400	--	--	--	10.5	7.63	27.9	30.5	--	24.7	24	12	16.3	18.7	18.2	13.2	17.6	18.4	24.7	27.7	21.9	25.4	20.2	19.3	11.8	10.1
Zinc	23,000	610,000	61,000	--	--	--	89.2	67.5	370	646	--	269	79	82	126	86.8	32.7	98.1	162	74.3	133	94	181	77.8	148	80.8	167	157

[a/] Refers to Remediation Objective from Table B, Appendix B, Part 742 - TACO

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-8
RCRA METALS SOIL RESULTS COMPARED TO TIER 1 REMEDIAL OBJECTIVES

Soil Boring	***Ingestion Exposure Route***			***Inhalation Exposure Route***			**SB-34**	**SB-35**	**SB-36**	**SB-37**	**SB-38**	**SB-39**	**SB-40**	**SB-41**	**SB-42**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Depth, ft	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	*Residential* [a/]	*Industrial / Commerical* [a/]	*Constructon Worker* [a/]	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent	---*mg/kg*---																			
Aluminum	78,000	1,000,000	200,000	1,000,000	1,000,000	870,000	2860	2220	11400	11200	3670	8980	3010	8500	5480	6810	11000	7970	5160	4620
Antimony	31	820	82	--	--	--	<1.26	<1.31	<1.41	<1.48	<1.26	<1.5	<1.24	<1.35	<1.47	<1.33	<1.39	<1.52	<1.4	<1.48
Arsenic	11.3	--	61	750	1,200	25,000	4.72	2.91	9.63	7.53	**13.8**	8.36	**16.8**	7.42	8.73	**14.2**	**15.5**	9.33	9.49	8.27
Barium	5,500	140,000	14,000	690,000	910,000	870,000	46.4	43.1	138	94.3	31.1	155	49.8	90.2	61.2	57.3	100	78.3	69.4	66.5
Beryllium	160	4,100	410	1,300	2,100	44,000	<0.126	<0.131	<0.564	<0.148	<0.56	<0.15	<0.56	<0.135	<0.147	<0.133	<0.139	<0.152	<0.14	<0.148
Cadmium	78	2,000	200	1,800	28,000	59,000	0.389	0.314	0.443	0.497	0.394	0.515	2.29	0.63	0.581	1.07	0.65	0.706	1.32	0.748
Calcium	--	--	--	--	--	--	137000	206000	32300	25900	171000	10500	184000	53400	101000	44900	25000	86600	82200	218000
Chromium, total	230	6,100	4,100	270	420	690	18.5	12.5	12.8	33.9	2.93	35.3	2.71	34.9	25.7	51.9	40.3	35.2	30.6	25.2
Cobalt	4,700	120,000	12,000	--	--	--	1.77	1.32	8.22	4.95	2.01	6.22	2.5	6.02	3.64	4.88	6.75	5.16	3.24	2.81
Copper	2,900	82,000	8,200	--	--	--	12.4	7.78	21.1	24.8	14.3	22.1	16.8	21	21.4	32.8	33.9	30.7	41.9	24.3
Iron	--	--	--	--	--	--	12900	9740	23200	16500	13600	11500	10300	18700	16800	32300	19500	20500	14200	18200
Lead	400	800	700	--	--	--	15.9	13.4	22.6	19.3	9.97	18.1	42.4	81.4	18.6	27.3	38.2	42.2	196	53.4
Magnesium	325,000	--	730,000	--	--	--	14900	10300	2960	3250	13200	2670	16400	9190	10500	11200	7390	15600	15000	10800
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	**760**	**719**	**706**	282	**767**	**678**	539	623	486	337	466	499	386	567
Mercury	23	610	61	10	16	0.10	<0.062	<0.064	<0.067	<0.07	<0.063	**0.109**	<0.06	<0.07	<0.077	<0.063	<0.066	<0.08	**0.115**	<0.067
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	7.44	5.72	14.3	11.7	7.07	12.4	7.85	13	10.8	12.2	14.5	12.9	11.5	11
Potassium	--	--	--	--	--	--	536	510	1020	1550	473	1970	391	1150	1080	782	1040	1160	739	839
Selenium	390	10,000	1,000	--	--	--	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	390	10,000	1,000	--	--	--	30	18	<4.4	31.9	<4.4	37.3	<4.4	31.5	29.7	64.1	41.3	36.3	43.6	26.6
Sodium	--	--	--	--	--	--	91.2	224	81.7	108	104	89.8	168	69.6	137	731	149	130	203	156
Thallium	6.3	160	160	--	--	--	2.22	2.37	3.55	2.27	2.2	3.4	1.44	2.66	2.4	2.4	2.6	2.42	2.2	2
Vanadium	550	14,000	1,400	--	--	--	9.11	4.22	28.3	23.2	7.16	27.4	11.2	18	14.4	44.7	26.8	20.5	14.1	11.3
Zinc	23,000	610,000	61,000	--	--	--	30.6	15.9	45.9	51.6	28.6	58.3	53.3	88.7	63.8	76.5	82.6	83.6	104	83.8

[a/] Refers to Remediation Objective from Table B, Appendix B, Part 742 - TACO

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-9
RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-4**	**SB-5**	**SB-5**	**SB-6**	**SB-6**	**SB-7**	**SB-7**	**SB-8**	**SB-8**	**SB-9**	**SB-9**	**SB-10**	**SB-10**	**SB-11**	**SB-12**	**SB-13**	**SB-14**	**SB-15**
Depth, ft	*Concentration* [a/]	1-3	1-3	1-3	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1	0-1	0-1	0-1
Constituent	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
											mg/kg												
Antimony	5	<1.39	<1.38	<1.41	<1.39	<1.56	<1.39	<1.39	<1.38	<1.53	<1.59	<1.66	<1.62	<1.63	<1.38	<1.65	<1.56	<1.61	<1.41	<1.34	<1.43	<1.3	<1.33
Arsenic	11.3/13	8.02	7.84	9.93	**13.6**	<11.3	9.28	<11.3	**13.9**	<11.3	**19.2**	<11.3	**36.3**	<11.3	**14.8**	<11.3	11.3	<11.3	**249**	**62.1**	9.81	7.99	8.82
Barium	1,500	43.6	42	50.6	53.6	112	49.8	52.9	77	114	82.6	66.8	118	60.9	54.9	48	74.3	112	55.1	59	130	123	37.9
Beryllium	22	<0.56	<0.56	<0.563	<0.56	<0.156	<0.56	<0.139	<0.56	<0.153	<0.635	<0.166	<0.648	<0.163	<0.56	<0.165	<0.623	<0.161	<0.566	<0.56	<0.572	<0.56	<0.133
Cadmium	5.2	0.695	0.632	0.794	1.07	<0.5	0.755	<0.5	1.1	0.94	1.4	<0.5	1.31	0.711	1.04	<0.5	0.302	0.627	0.741	0.894	0.437	0.299	0.471
Calcium	--	45700	35300	41600	31700	4650	28500	22300	33500	7170	1160	928	993	1460	748		6510	4080	80300	77900	22500	94100	144000
Chromium, total	21	11.1	6.1	15.1	8.89	17.6	8.92	<13	8.47	<13	10	<13	5.46	<13	7.11	<13	17.6	13.5	4.84	6.04	10.4	5.58	**24.3**
Cobalt	20	5.54	4.86	6.04	4.8	4.63	7.01	5.21	4.86	6.04	4.84	<1.66	<1.62	2.79	12.5	<1.65	2.33	10.7	4.22	3.28	6.48	2.9	2.95
Copper	2,900	94.7	69.6	84.3	77.7	34.9	83.4	27.6	79.2	72.8	49.1	67.4	56.8	133	476	51.6	128	53.1	53.1	78.5	27.9	25.6	13.3
Iron	15,000/15,900	**27800**	**24600**	**37900**	**37200**	**19500**	**29700**	8230	**30000**	**20200**	**43000**	8450	**68100**	14400	**41600**	13600	**15700**	**24000**	**21000**	13300	11700	12000	12400
Lead	107	73.8	69.1	**116**	76.4	21.7	92.1	12	**123**	61.3	93.4	66.7	64	42.6	**122**	42.2	58.8	32.7	85.3	80.1	78.6	32.5	38.1
Magnesium	325,000	19900	13800	9480	7310	4020	8910	6010	9800	2430	350	258	678	802	649	450	434	2830	9210	10200	9410	17000	34600
Manganese	630/636	453	248	275	234	70.9	315	306	335	596	173	9.38	32.5	31.7	592	13.8	18.6	614	437	611	448	464	**675**
Mercury	0.1	**0.392**	**0.204**	**0.177**	**0.172**	<0.073	**0.161**	<0.065	**0.254**	**0.24**	**0.138**	**0.608**	**0.148**	**0.254**	**0.191**	**0.201**	**0.238**	**0.269**	0.094	**0.165**	<0.067	<0.064	<0.068
Nickel	100	14.2	11.5	13.8	13.2	12.3	15	12	12.8	15.7	13.4	4.92	4.87	10.5	14.4	6.71	5.5	17.5	12.2	16	11.6	10.3	11.4
Potassium	--	519	418	655	569	1980	517	831	643	1280	956	758	2760	683	488	764	705	1350	602	533	1990	896	1020
Selenium	1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**4.58**	<4.4	<4.4	<4.4	**10.1**	<4.4	**4.84**	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**35.6**
Sodium	--	204	320	337	439	128	331	97.8	226	130	632	267	3120	328	384	292	142	67.9	184	230	1060	258	289
Thallium	2.6	**2.84**	2.2	**2.78**	2.27	<3.5	**2.75**	<2.2	2.46	<4.2	**4.11**	<1.4	**3.99**	<2.2	**3.83**	<2.2	**2.78**	<3.9	2.32	2.6	2.13	1.82	1.99
Vanadium	550	18.7	14.8	27.6	19	33.7	24	17.8	18.6	18.9	24.2	13.1	27.1	13.8	19.6	12.7	30.1	24	12.1	11.3	20.8	12.6	9.89
Zinc	5,100	69.2	55.4	66.5	80.3	40.1	70.9	31.7	131	113	81.3	11.7	17.8	82.2	93.4	14.7	12.3	46.7	82.6	114	82.6	48.7	45

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-9
RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-16**	**SB-17**	**SB-18**	**SB-19**	**SB-19A**	**SB-20**	**SB-21**	**SB-22**	**SB-23**	**SB-24**	**SB-25**	**SB-26**	**SB-27**	**SB-28**	**SB-29**	**SB-29**	**SB-30**	**SB-30**	**SB-31**	**SB-31**	**SB-32**	**SB-33**
Depth, ft	*Concentration* [a/]	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-3	3-5	1-3	3-5	1-3	3-5	0-1	0-1
Constituent	----------*mg/kg*----------																						
Antimony	5	<1.34	<1.31	<1.43	<1.48	--	<1.48	<1.41	<1.35	<1.4	<1.53	<1.4	<1.47	<1.43	<1.46	<1.5	<1.59	<1.63	<1.56	<1.39	<1.55	<1.22	<1.31
Arsenic	11.3/13	10.1	9.01	**28.8**	**22**	--	**12.7**	8.87	**14.9**	**20.6**	**22.2**	7.73	**17.4**	**13**	<11.3	**49.8**	**13.9**	**370**	<11.3	10.4	<11.3	**11.9**	**26.2**
Barium	1,500	95.1	38.4	140	266	--	139	81.5	45.5	85.4	123	51.9	65.9	166	72.1	93.6	95.3	111	163	80.5	65.3	62.2	41
Beryllium	22	<0.56	<0.56	<0.573	<0.59	--	<0.591	<0.141	<0.135	<0.56	<0.153	<0.561	<0.147	<0.572	<0.146	<0.15	<0.159	<0.651	<0.156	<0.56	<0.155	<0.56	<0.56
Cadmium	5.2	0.485	0.574	1.45	2.84	--	1.77	0.846	1.08	1.27	1.13	0.348	1.23	0.76	1.04	1.64	1.11	2.06	1.06	1.54	1.28	1.28	1.26
Calcium	--	145000	93200	94400	40900	--	21800	7790	76500	65400	29800	46100	27300	52300	14300	9150	3830	25100	4180	22800	10400	42900	46300
Chromium, total	21	6.13	3.06	8.01	11.1	--	9.33	**42**	<13	12.2	15.9	10.1	<13	12.4	<13	**67**	15.6	10.4	18.1	8.3	<13	7.69	11.8
Cobalt	20	2.65	2.08	4.84	9.15	--	5.49	7.44	3.37	4.66	5.8	3.65	3.51	6	6.58	6.03	8.66	6.65	10.7	6.06	5.93	4.14	4.27
Copper	2,900	25.2	77.5	119	504	--	264	51.4	67.8	109	55.9	18.3	76.1	836	57.9	97.7	59.2	149	42.3	83	84.2	91.9	52.9
Iron	15,000/15,900	14800	15000	**25400**	**33800**	--	**32800**	**26900**	**22100**	**37000**	**17200**	11000	**17400**	**22400**	**24300**	**34500**	**29100**	**43400**	**29700**	**34300**	**28100**	**31600**	**39000**
Lead	107	63.1	44	**280**	**5770**	**117**	**184**	55.3	80.3	**147**	72.9	21.8	**111**	**286**	69.3	**134**	57.8	**209**	21.4	**118**	81.7	**161**	**111**
Magnesium	325,000	22800	34800	8830	6500	--	4440	2690	13400	6470	7280	5080	7080	16300	8270	2220	2230	6640	3610	9120	4220	8350	8060
Manganese	630/636	549	404	**823**	467	--	349	304	210	344	604	271	240	451	409	289	462	485	590	258	156	317	317
Mercury	0.1	**0.168**	0.081	**0.164**	**0.525**	--	**0.477**	0.088	**0.113**	**0.137**	<0.073	<0.064	**0.142**	<0.067	<0.071	<0.071	<0.077	**0.123**	<0.072	0.094	0.083	0.098	0.094
Nickel	100	8.9	7.19	15.2	26.8	--	13.9	18.7	10.3	13.4	18.2	8.17	11.2	13.7	16.5	18.3	21	18.4	31.7	19.4	14.6	11.5	13.9
Potassium	--	780	568	1170	1170	--	957	1070	585	701	980	751	606	1190	813	709	971	754	1220	738	441	395	392
Selenium	1.3	<1.3	<1.3	<1.3	<1.3	--	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	<4.4	<4.4	**4.79**	**5.84**	--	**4.82**	**44.5**	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**79.8**	<4.4	**4.91**	<4.4	**6.54**	<4.4	**4.79**	<4.4
Sodium	--	464	344	1250	1090	--	438	215	236	186	107	56.1	205	151	193	376	216	337	97.6	378	168	145	106
Thallium	2.6	2.04	1.71	**3.58**	**3.62**	--	**3.22**	**2.7**	<2.7	**2.93**	<4.1	1.79	<2.8	**2.73**	<3.9	**3.45**	<3.9	**4.03**	<4.2	**3.15**	<3.2	2.31	2.45
Vanadium	550	10.5	7.63	27.9	30.5	--	24.7	24	12	16.3	18.7	18.2	13.2	17.6	18.4	24.7	27.7	21.9	25.4	20.2	19.3	11.8	10.1
Zinc	5,100	89.2	67.5	370	646	--	269	79	82	126	86.8	32.7	98.1	162	74.3	133	94	181	77.8	148	80.8	167	157

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-9
RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-34**	**SB-35**	**SB-36**	**SB-37**	**SB-38**	**SB-39**	**SB-40**	**SB-41**	**SB-42**	**SB-43**	**SB-44**	**SB-45**	**SB-46**	**SB-47**
Depth, ft	*Concentration* [a/]	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent	----------	----------	----------	----------	----------	----------	*mg/kg*	----------	----------	----------	----------	----------	----------	----------	----------
Antimony	5	<1.26	<1.31	<1.41	<1.48	<1.26	<1.5	<1.24	<1.35	<1.47	<1.33	<1.39	<1.52	<1.4	<1.48
Arsenic	11.3/13	4.72	2.91	9.63	7.53	**13.8**	8.36	**16.8**	7.42	8.73	**14.2**	**15.5**	9.33	9.49	8.27
Barium	1,500	46.4	43.1	138	94.3	31.1	155	49.8	90.2	61.2	57.3	100	78.3	69.4	66.5
Beryllium	22	<0.126	<0.131	<0.564	<0.148	<0.56	<0.15	<0.56	<0.135	<0.147	<0.133	<0.139	<0.152	<0.14	<0.148
Cadmium	5.2	0.389	0.314	0.443	0.497	0.394	0.515	2.29	0.63	0.581	1.07	0.65	0.706	1.32	0.748
Calcium	--	137000	206000	32300	25900	171000	10500	184000	53400	101000	44900	25000	86600	82200	218000
Chromium, total	21	18.5	12.5	12.8	**33.9**	2.93	**35.3**	2.71	**34.9**	**25.7**	**51.9**	**40.3**	**35.2**	**30.6**	**25.2**
Cobalt	20	1.77	1.32	8.22	4.95	2.01	6.22	2.5	6.02	3.64	4.88	6.75	5.16	3.24	2.81
Copper	2,900	12.4	7.78	21.1	24.8	14.3	22.1	16.8	21	21.4	32.8	33.9	30.7	41.9	24.3
Iron	15,000/15,900	12900	9740	**23200**	**16500**	13600	11500	10300	**18700**	**16800**	**32300**	**19500**	**20500**	14200	**18200**
Lead	107	15.9	13.4	22.6	19.3	9.97	18.1	42.4	81.4	18.6	27.3	38.2	42.2	**196**	53.4
Magnesium	325,000	14900	10300	2960	3250	13200	2670	16400	9190	10500	11200	7390	15600	15000	10800
Manganese	630/636	**760**	**719**	**706**	282	**767**	**678**	539	623	486	337	466	499	386	567
Mercury	0.1	<0.062	<0.064	<0.067	<0.07	<0.063	**0.109**	<0.06	<0.07	<0.077	<0.063	<0.066	<0.08	**0.115**	<0.067
Nickel	100	7.44	5.72	14.3	11.7	7.07	12.4	7.85	13	10.8	12.2	14.5	12.9	11.5	11
Potassium	--	536	510	1020	1550	473	1970	391	1150	1080	782	1040	1160	739	839
Selenium	1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	**30**	**18**	<4.4	**31.9**	<4.4	**37.3**	<4.4	**31.5**	**29.7**	**64.1**	**41.3**	**36.3**	**43.6**	**26.6**
Sodium	--	91.2	224	81.7	108	104	89.8	168	69.6	137	731	149	130	203	156
Thallium	2.6	2.22	2.37	**3.55**	2.27	2.2	**3.4**	1.44	**2.66**	2.4	2.4	2.6	2.42	2.2	2
Vanadium	550	9.11	4.22	28.3	23.2	7.16	27.4	11.2	18	14.4	44.7	26.8	20.5	14.1	11.3
Zinc	5,100	30.6	15.9	45.9	51.6	28.6	58.3	53.3	88.7	63.8	76.5	82.6	83.6	104	83.8

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-10
TCLP/SPLP METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-6**	**SB-10**	**SB-15**	**SB-18**	**SB-19A**	**SB-20**	**SB-21**	**SB-27**	**SB-28**	**SB-30**	**SB-31**	**SB-31**	**SB-35**	**SB-36**	**SB-37**	**SB-39**	**SB-41**
Depth, ft	*Concentration* [a/]	1-3'	1-3'	1-3'	3-5'	3-5'	3-5'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	3-5'	1-3'	3-5'	0-1'	0-1'	0-1'	0-1'	0-1'
Constituent	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	---*mg/L*---	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
SPLP Manganese	0.15	--	--	--	--	--	--	<0.025	--	--	--	--	--	--	--	--	--	0.0378	0.0291	--	--	--
TCLP Chromium	0.1	--	--	--	--	--	--	<0.025	--	--	--	<0.025	--	--	--	--	--	--	--	<0.025	<0.025	<0.025
TCLP Iron	5	<0.125	<0.125	<0.125	<0.125	<0.125	4.74	--	--	--	--	<0.125	--	<0.125	<0.125	<0.125	<0.125	--	<0.125	<0.125	--	<0.125
TCLP Lead	0.0075	--	--	<0.0075	--	--	--	--	**0.0161**	<0.0075	<0.0075	--	**0.0182**	--	--	<0.0075	--	--	--	--	--	--
TCLP Manganese	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.025	--
TCLP Silver	0.05	--	--	--	--	--	--	<0.0025	--	--	--	<0.0025	--	--	--	<0.0025	--	--	--	<0.0025	<0.0025	<0.0025
TCLP Thallium	0.002	<0.002	--	<0.002	--	--	--	--	--	--	--	<0.002	--	--	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

3.3 SOIL PH RESULTS

Table 3-11 presents the soil pH results. Soil samples were preserved and transferred to First Environmental Laboratories, Inc., under Chain-of-Custody for analysis. The laboratory analytical reports are provided in Appendix D. CCDD regulations require soil pH between 6.25 and 9.00 to be acceptable for disposal at a CCDD or soil-only facility. Fifteen samples were submitted for soil pH analysis and are considered representative of the Project Corridor. The pH results ranged from 6.43 to 8.91, and are within the acceptable 6.25 to 9.00 range. Therefore, soils from this Project Corridor are considered to achieve the CCDD soil pH criteria.

Table 3-11 Soil pH Results Compared to the Soil pH Requirement for CCDD Disposal

SOIL BORING ID	DEPTH, FT	SOIL PH RESULT
SB-1	1-3’	7.77
SB-4	1-3’	7.74
SB-9	1-3’	6.43
SB-15	0-1’	8.68
SB-21	0-1’	8.08
SB-24	0-1’	8.18
SB-29	1-3’	7.78
SB-34	0-1’	8.41
SB-35	0-1’	8.91
SB-37	0-1’	7.89
SB-39	0-1’	7.59
SB-41	0-1’	7.92
SB-43	0-1’	7.96
SB-45	0-1’	7.7
SB-47	0-1’	8.1
CCDD Soil pH Requirement: between 6.25 - 9.0		

4.0 CONCLUSIONS AND SOIL MANAGEMENT RECOMMENDATIONS

4.1 CONCLUSIONS

H&H prepared a PESA in 2018 and this PSI was completed to evaluate the potential for natural and man-made hazards that may be encountered within the Project Corridor during construction activities. Based on the information presented in the PESA, forty-one (41) PIPs were identified in connection to the Project Corridor.

To further address the PIPs from an environmental perspective and characterize the soils within the planned roadway improvement area for future soil management, forty-seven (47) soil borings were advanced on December 12th, 2018, and soil samples were screened in the field. Select soil samples were submitted for laboratory analyses consistent with contaminants of concern at the respective PIPs. Soil borings were advanced to depths of approximately one (1) to five (5) feet bgs to reflect the maximum anticipated depth of excavation. Soil sample analyses were performed at the laboratory among which included VOCs, BTEX, SVOCs, PNAs, and total TAL metals. In addition, soil pH was tested for compatibility with disposal requirements at CCDD facilities. The borings, soil sampling, and analyses are considered to provide coverage to address soil conditions within the Project Corridor.

Fifteen samples were analyzed for soil pH using laboratory analysis. The results range from 6.43 to 8.91, within the required range for CCDD disposal (6.25 to 9.0).

Sample SB-8 (1-3) had a detection of benzene above the most stringent Tier 1 ROs and the MACs. The remaining VOC (and subset BTEX) results are below detection limits for the samples analyzed, achieving the Tier 1 ROs and the MACs.

Fifty-six (56) samples contained detectable levels of SVOCs. Fifty-two (52) samples contained detections of SVOCs that exceeded the most stringent MAC values. Exceeding constituents consisted of one or more of the following: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno (1,2,3-cd)pyrene, and naphthalene.

Sample SB-10 (1-3) contained naphthalene and benzo(a)anthracene at a concentration that exceeded the MAC limits for disposal within a populated area in a MSA county excluding Chicago, within Chicago corporate limits, within a populated area in a non-MSA county, and outside of a populated area. In addition, the naphthalene concentration also exceeded the Tier 1 RO for construction worker inhalation. SB-10 (1-3) also contained benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno (1,2,3-cd)pyrene at concentrations that exceeded the most stringent MAC values.

Twenty-three (23) soil samples SB-4 (1-3), SB-6 (1-3), SB-7 (1-3), SB-8 (1-3), SB-9 (1-3), SB-11 (0-1), SB-12 (0-1), SB-18 (0-1), SB-9 (0-1), SB-20 (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-27 (0-1), SB-29 (1-3), SB-29 (3-5), SB-30 (1-3), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-43 (0-1), and SB-44 (0-1) contained arsenic at a concentration that exceeded the MAC value (13.0 mg/kg) for soils within a MSA county. Exceedances of the RO and MAC values for arsenic at these locations will preclude these areas from being eligible for CCDD disposal with a MSA county. In addition, one sample, SB-32 (0-1), exceeded the MAC value (11.3 mg/kg) for soils in a non-MSA county. Exceedances of the RO and MAC values for arsenic at this location will preclude this area from being eligible for CCDD disposal with a non-MSA county.

Twenty-six (26) soil samples contained total mercury at concentrations that exceeded the MAC value (0.1 mg/kg) and the construction worker inhalation objective (0.1 mg/kg) but achieved the Residential and Industrial/Commercial ROs. The construction worker caution for mercury is based on elemental mercury, and mercury detected in this location is likely attributed to inorganic mercury salt compounds (association with coal, specifically). Due to the nature of the Project Corridor as a former railroad with potential historic use of coal and coal noted in several of the boring locations, elevated

total mercury levels are anticipated to be associated with the coal and are not anticipated to be of the elemental speciation of mercury.

Twelve (12) soil samples had detections of total chromium that exceeded the MAC value (21 mg/kg). Five select soil samples [SB-15 (0-1), SB-21 (0-1), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total chromium exceedances were subsequently analyzed for TCLP chromium which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP chromium results, chromium is considered to achieve the MAC in the five samples analyzed for TCLP chromium. Table 3-10 presents the soil TCLP chromium results compared to the MAC. The remaining seven (7) soil samples with total chromium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Sixteen (16) soil samples had detections of total lead that exceeded the MAC value (107 mg/kg). Total lead was detected at SB-19 (0-1) with a concentration of 5770 mg/kg. TCLP laboratory analysis was unable to be completed on the sample due to matrix issues. An additional sample, SB-19A (0-1) was obtained from the same interval and boring location. Total lead was detected at a concentration of 117 mg/kg. Six select soil samples [SB-3 (1-3), SB-18 (0-1), SB-19A (0-1), SB-20 (0-1), SB-27 (0-1), and 31 (1-3)] with total lead exceedances were subsequently analyzed for TCLP lead. Soil samples SB-18 (0-1) and SB-27 (0-1) had detections (0.0161 mg/L and 0.0182 mg/L, respectively) of TCLP lead that exceeded the MAC Value (0.0075 mg/L). The remaining samples had results below the lab detection limit, achieving the MACs. The remaining ten (10) soil samples with total lead exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Forty (40) soil samples had detections of total iron that exceeded the MAC value (15,000 mg/kg). Fourteen select soil samples [SB-1 (1-3), SB-2 (1-3), SB-3 (1-3), SB-4 (3-5), SB-6 (3-5), SB-10 (3-5), SB-21 (0-1), SB-28 (0-1), SB-30 (3-5), SB-31 (1-3), SB-31 (3-5), SB-36 (0-1), SB-37 (0-1), and SB-41 (0-1)] with total iron exceedances were subsequently analyzed for TCLP iron. One sample, SB-10 (3-5), had a detection of TCLP iron, 4.74 mg/L, below the MAC value of 5mg/L. The remaining TCLP lead results were below the lab detection limit, achieving the MAC. Based on the subsequent TCLP iron results, iron is considered to achieve the MAC in the fourteen samples analyzed for TCLP iron. Table 3-10 presents the soil TCLP iron results compared to the MAC. The remaining twenty-six (26) soil samples with total iron exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Twenty-three (23) soil samples had detections of total silver that exceeded the MAC value (4.4 mg/kg). Six select soil samples [SB-15 (0-1), SB-21 (0-1), SB-31 (1-3), SB-37 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP silver results compared to the MAC. The remaining seventeen (17) soil samples with total silver exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Nineteen (19) soil samples had detections of total thallium that exceeded the MAC value (2.6 mg/kg). Eight select soil samples [SB-1 (1-3), SB-3 (1-3), SB-21 (0-1), SB-31 (1-3), SB-35 (0-1), SB-36 (0-1), SB-39 (0-1), and SB-41 (0-1)] with total sliver exceedances were subsequently analyzed for TCLP silver which had results below the lab detection limit, achieving the MAC. Based on the subsequent TCLP silver results, silver is considered to achieve the MAC in the six samples analyzed for TCLP silver. Table 3-10 presents the soil TCLP thallium results compared to the MAC. The remaining three (3) soil samples with total thallium exceedances also had exceedances of other constituents, precluding them from being eligible for CCDD disposal.

Seven (7) soil samples had detections of total manganese that exceeded the MAC value (630 mg/kg). Four select soil samples [SB-15 (0-1), SB-35 (0-1), SB-36 (0-1), and SB-39 (0-1)] with total manganese exceedances were subsequently analyzed for TCLP or SPLP manganese. Two samples, SB-35 (0-1) and SB-36 (0-1), had a detection of SPLP manganese, 0.0378 mg/L and 0.0291 mg/L, below the MAC value of 0.15 mg/L. The remaining SPLP and TCLP manganese results were below the lab detection limit, achieving the MAC. Based on the subsequent SPLP and TCLP manganese results, manganese is considered to achieve the MAC in the four samples analyzed for SPLP and TCLP manganese. Table 3-10 presents the soil SPLP and TCLP manganese results compared to the MAC.

4.2 SOIL MANAGEMENT RECOMMENDATIONS

Based on detections of SVOCs that exceeded the Maximum Allowable Concentration (MACs) values at various locations throughout the Project Corridor in addition to the detections of arsenic that exceeded the MAC values at twenty-four locations, exclusion zones have been established around these locations. The soil generated from these borings is **NOT** certified for CCDD disposal but must be managed as a non-special waste with final disposition at a Subtitle D Sanitary Landfill. The CCDD exclusion zones along Broadway Street, are depicted on Figure 4-1.

Soils within the areas characterized by SB-4 (0-3), SB-6 (0-3), SB-7 (0-3), SB-8 (0-3), SB-9 (0-3), SB-10 (0-3), SB-11 (0-1), SB-12 (0-1), SB-16 (0-1), SB-18 (0-1), SB-19/SB-19A (0-1), SB-22 (0-1), SB-23 (0-1), SB-24 (0-1), SB-26 (0-1), SB-29 (0-5), SB-30 (0-3), SB-32 (0-1), SB-33 (0-1), SB-38 (0-1), SB-40 (0-1), SB-42 (0-1), SB-43 (0-1), SB-44 (0-1), SB-45 (0-1), SB-46 (0-1), and SB-47 (0-1) are considered to be a(5) soils per Article 669.05 of IDOT Standard Specifications for Road and Bridge Construction, which must be managed and disposed of off-site as non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-5 (1-3), SB-8 (3-5), SB-9 (3-5), SB-25 (0-1), and SB-31 (1-3) are considered to be 669.05 a(4) soils, which can be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized by SB-1 (0-5), SB-2 (0-5), SB-3 (0-5), SB-6 (3-5), SB-7 (3-5), SB-10 (3-5), SB-13 (0-1), SB-14 (0-1), SB-15 (0-1), SB-17 (0-1), SB-20 (0-1), SB-21 (0-1), SB-28 (0-1), SB-34 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-39 (0-1), SB-41 (0-1) are considered to be 669.05 a(3) soils, which may be utilized within the construction limits as fill, when suitable, or managed and disposed of off-site as "uncontaminated soil" at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25-9.0, inclusive.

Soils within the area characterized SB-27 (0-1) are considered to be 669.05 a(1) soils. Soil in the vicinity of these soil borings may be utilized within the construction limits as fill, when suitable. If the soils cannot be utilized within the construction limits, they shall be managed and disposed of off-site as a non-special waste, special waste, or hazardous waste as applicable.

Soils within the area characterized by SB-4 (3-5), SB-5 (3-5), SB-30 (3-5), and SB-31 (3-5) achieves the MACs, are considered unrestricted, and may be managed on site or off site, including disposal at a CCDD/USFO facility using the attached LPC-663 form in Appendix D.

Should soils be encountered within the areas identified as CCDD acceptable that are not representative of the soils encountered during the PSI boring activities (odors, staining, or debris), those soils would need to be reassessed prior to disposal at a "clean fill" facility.

CCDD Soil Classifications:

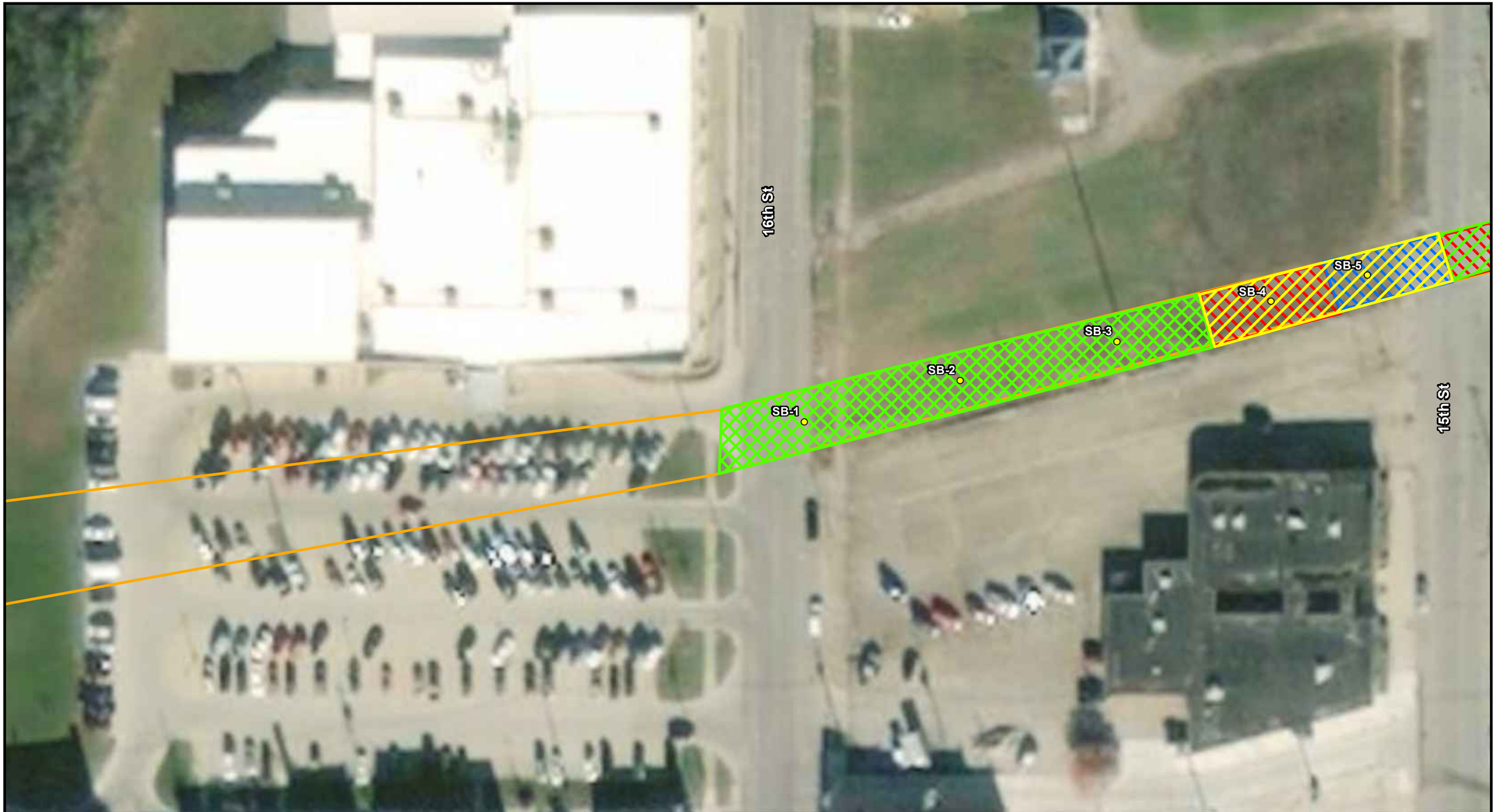
Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-1	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP iron and thallium below detection limits, achieving respective MAC Values
SB-2	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value, TCLP iron below detection limits, achieving respective MAC Values
SB-3	1-3	0-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron, mercury, thallium, and lead exceed most stringent Tier 1 ROs and MAC Value; TCLP iron, thallium, and lead below detection limits, achieving respective MAC Values
SB-4	1-3	0-3	a(5): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-5	1-3*	0-3	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county *total iron exceeds most stringent Tier 1 ROs and MAC Value. TCLP analysis was not analyzed. The TCLP results of 14 other samples were analyzed and achieved the MAC values. It is the professional opinion of Huff & Huff that total iron is not a contaminate of concern in this sample.
	3-5	3-5	Unrestricted: Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-6	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-7	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total mercury exceed most stringent Tier 1 ROs and MAC Value
SB-8	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
SB-9	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
	3-5	3-5	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county

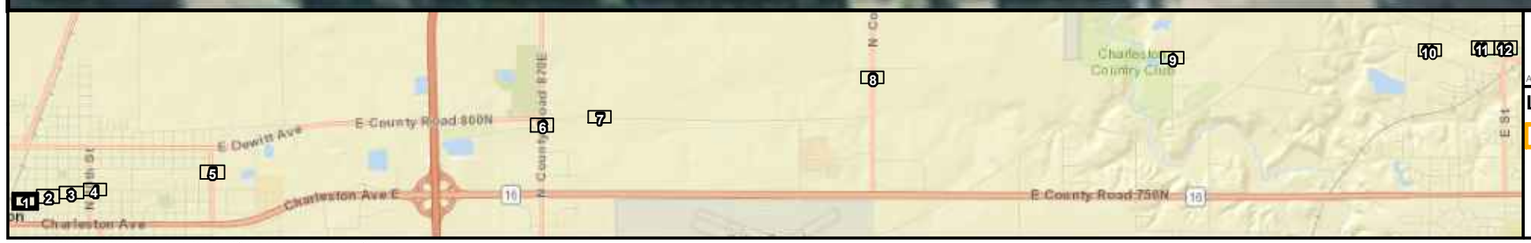
Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-10	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total iron, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances. Naphthalene exceedances above construction worker inhalation.
	3-5	3-5	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron and mercury exceed most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-11	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA and arsenic exceedances.
SB-12	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA and arsenic exceedances.
SB-13	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value
SB-14	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value
SB-15	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, manganese, and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese, TCLP chromium and silver below detection limits, achieving respective MAC Values
SB-16	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total mercury exceeds most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-17	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value
SB-18	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, manganese, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-19 / SB-19A	0-1	0-1	a(5): detections of PNA above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance. **Total lead result was 5,770 mg/kg, TCLP lead was unable to be run for lead due to matrix issues within the lab. An additional sample was later collected from the same interval within the boring location, total lead result was 117mg/kg with TCLP lead below detection limits.**
SB-20	0-1	0-1	a(2)/a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; a(2) due to arsenic value between 11.3 and 13.0, a(3) due to PNA exceedance above most stringent RO.
SB-21	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, iron, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, silver, and thallium below detection limits, achieving respective MAC Values

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-22	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-23	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-24	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-25	0-1	0-1	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
SB-26	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and mercury exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-27	0-1	0-1	a(1): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and thallium above most stringent Tier 1 ROs and MAC Value; TCLP lead exceeds MAC Value.
SB-28	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values
SB-29	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, lead, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
	3-5	3-5	a(5): total arsenic and iron exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-30	1-3	0-3	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-31	1-3	0-3	a(4): detections of indeno(1,2,3-c,d)pyrene above most stringent Tier 1 ROs and MAC Value for within Chicago corporate limits/within a populated area in a non-MSA county
	3-5	3-5	Unrestricted: total iron exceeds most stringent Tier 1 ROs and MAC Value; TCLP iron below detection limits, achieving respective MAC Values. Soil achieves the MACs and may be managed on site or off site, including disposal at a CCDD/USFO facility.
SB-32	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, lead, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-33	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, iron, and lead exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-34	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total manganese and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP silver results are below detection limits, achieving respective MAC Values

Boring ID	Sample Depth (ft)	Class Depth (ft)	IDOT Soil Classification
SB-35	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total manganese and silver exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP silver results are below detection limits, achieving respective MAC Values
SB-36	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total iron, manganese and thallium exceed most stringent Tier 1 ROs and MAC Value; SPLP manganese and TCLP iron and thallium results are below detection limits, achieving respective MAC Values
SB-37	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, and silver results are below detection limits, achieving respective MAC Values
SB-38	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, and manganese exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedance.
SB-39	0-1	0-1	a(3): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, manganese, mercury, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, manganese, silver, and thallium results are below detection limits, achieving respective MAC Values
SB-40	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic exceeds most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-41	0-1	0-1	a(3): detections of benzo(a)pyrene above most stringent Tier 1 ROs and MAC Value; total chromium, iron, silver, and thallium exceed most stringent Tier 1 ROs and MAC Value; TCLP chromium, iron, silver, and thallium results are below detection limits, achieving respective MAC Values
SB-42	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-43	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic and PNA exceedances.
SB-44	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total arsenic, chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to arsenic exceedances.
SB-45	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-46	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, lead, mercury, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.
SB-47	0-1	0-1	a(5): detections of PNAs above most stringent Tier 1 ROs and MAC Value; total chromium, iron, and silver exceed most stringent Tier 1 ROs and MAC Value. a(5) due to PNA exceedances.

The CCDD regulations require completion of Uncontaminated Soil Certification by Licensed Professional Engineer or Geologist (LPC-663) prior to placement of soils at either a CCDD or soil-only facility, in cases where PIPs have been identified. PIPs have been identified along the entire Project Corridor, making an LPC-663 necessary for this project. The completed LPC-663 Form is included in Appendix E.





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Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 1 of 12

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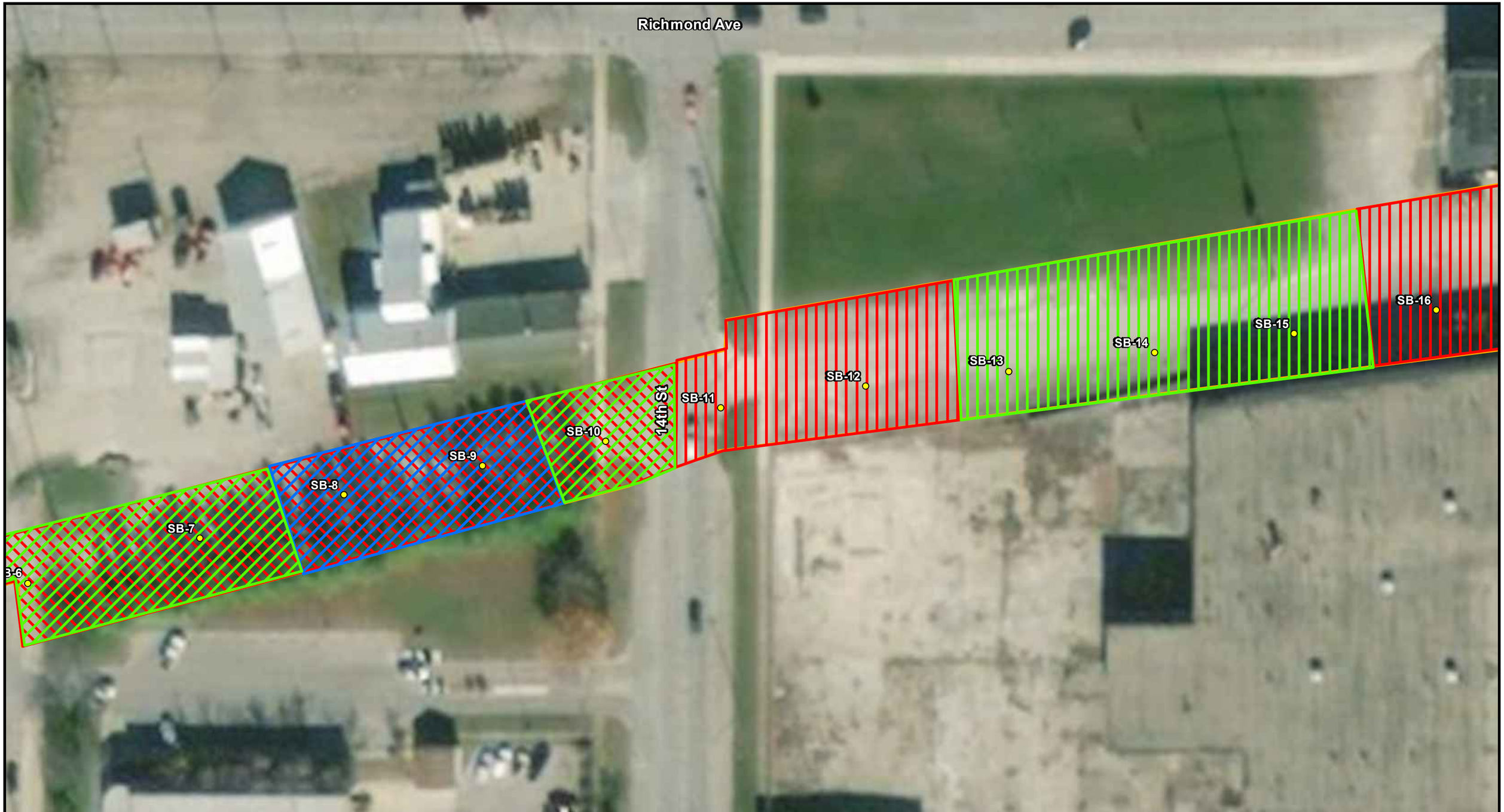

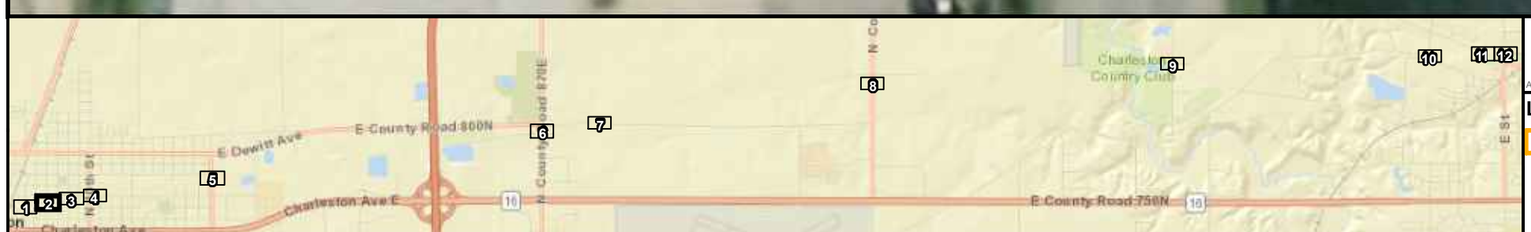

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Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(3)
- a(4)
- a(5)
- Unrestricted

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 2 of 12

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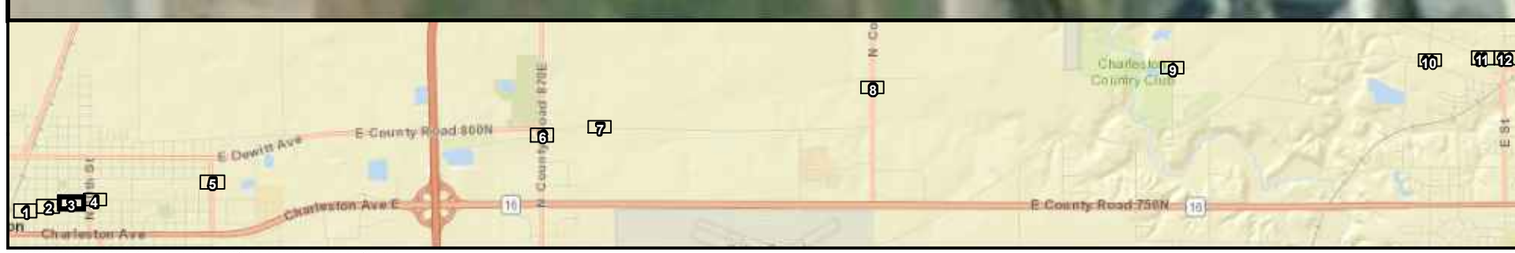

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Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 3 of 12

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SB-29
SB-30
SB-31
SB-32
SB-33
SB-28
10th St
Richmond Ave
9th St

0 50 100 200
Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth	Soil Classification	
0-1'	a(1)	a(5)
0-3'	a(3)	Unrestricted
3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 4 of 12

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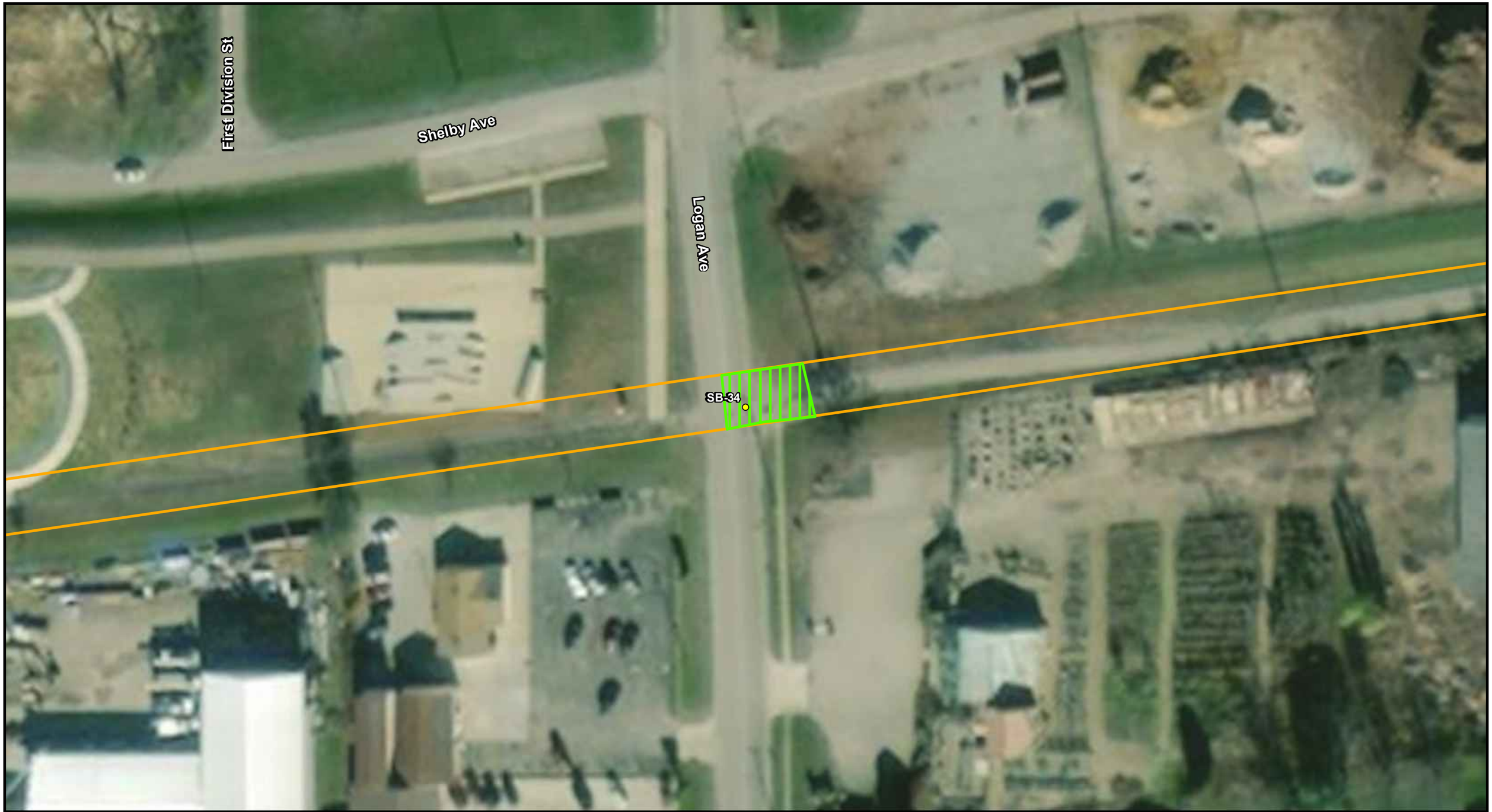

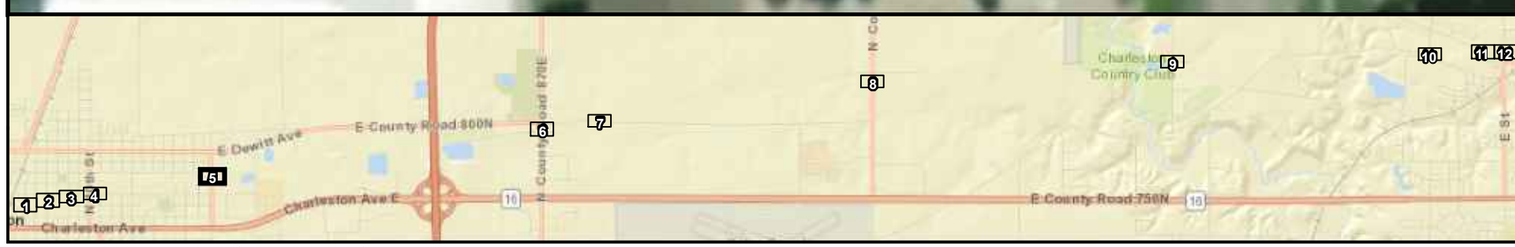

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Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 5 of 12

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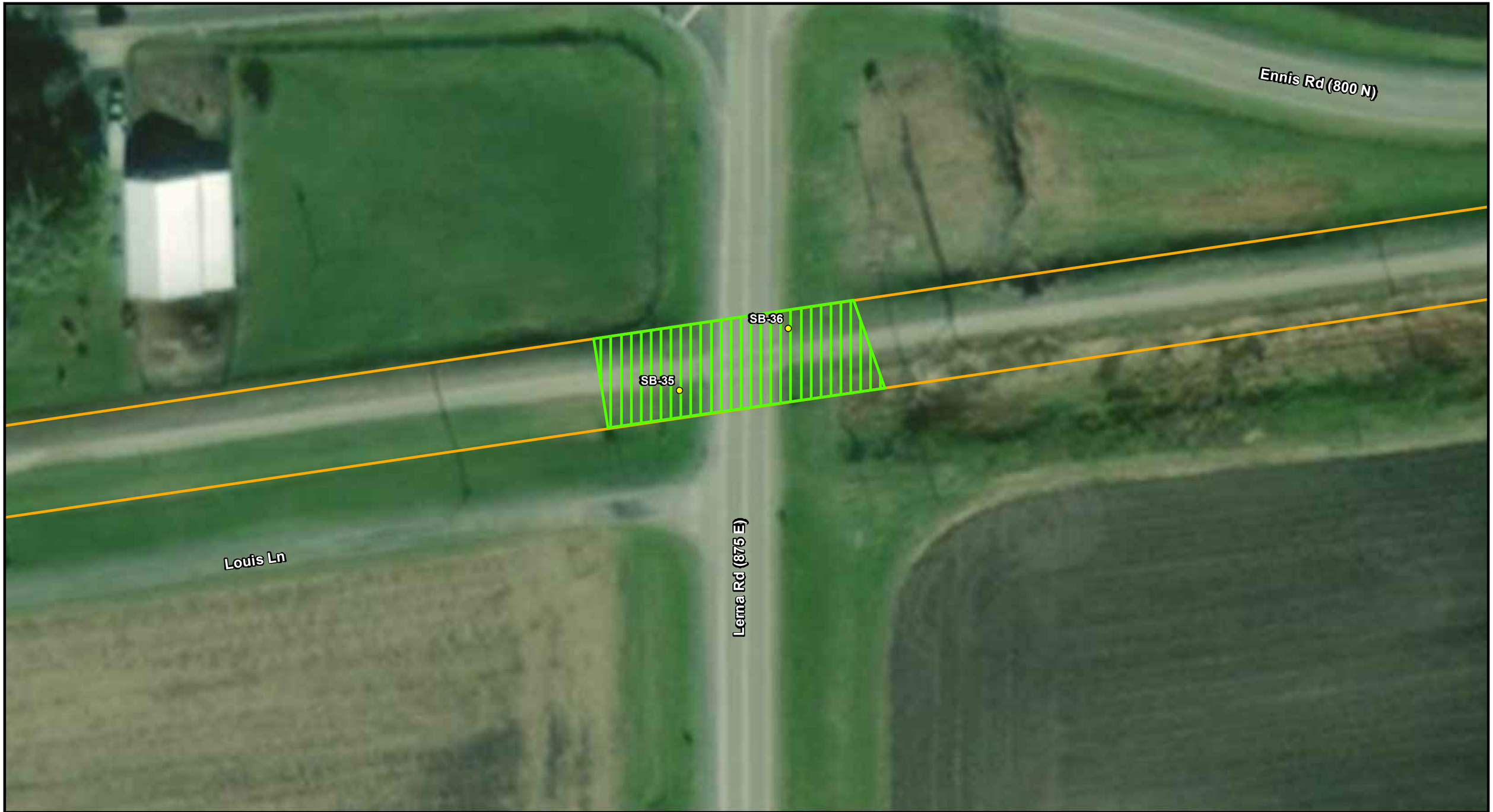

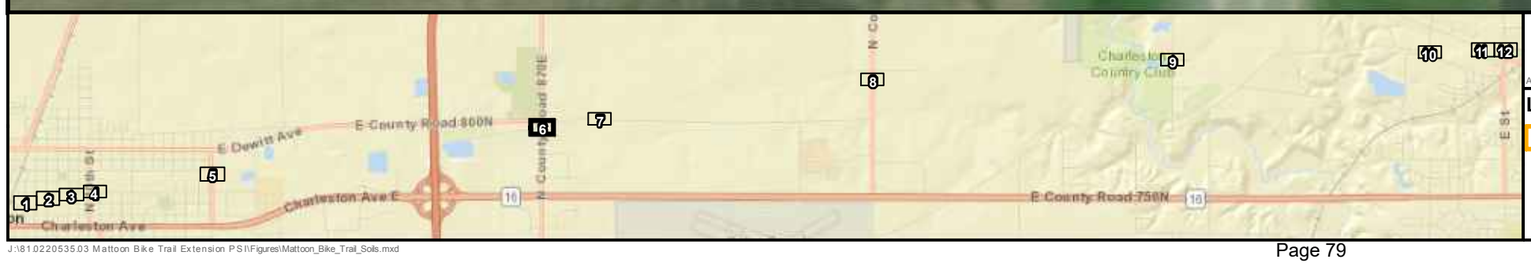

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Aerial Source: ESRI Online World Imagery

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 6 of 12

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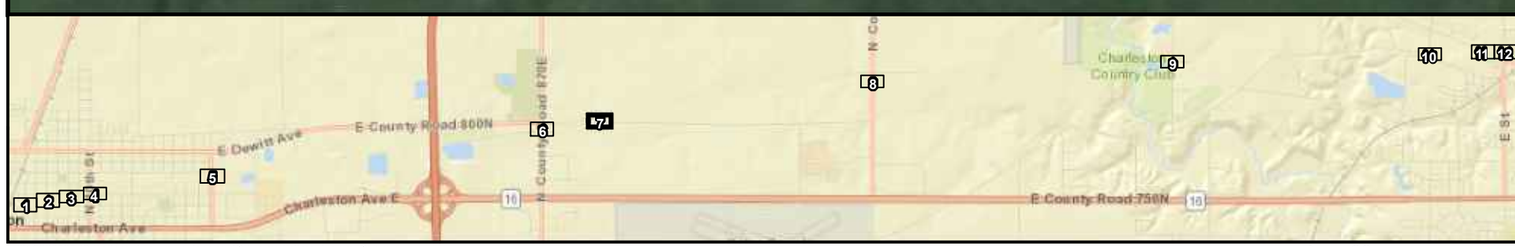
SB-37

SB-38

Ennis Rd (800 N)



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 7 of 12

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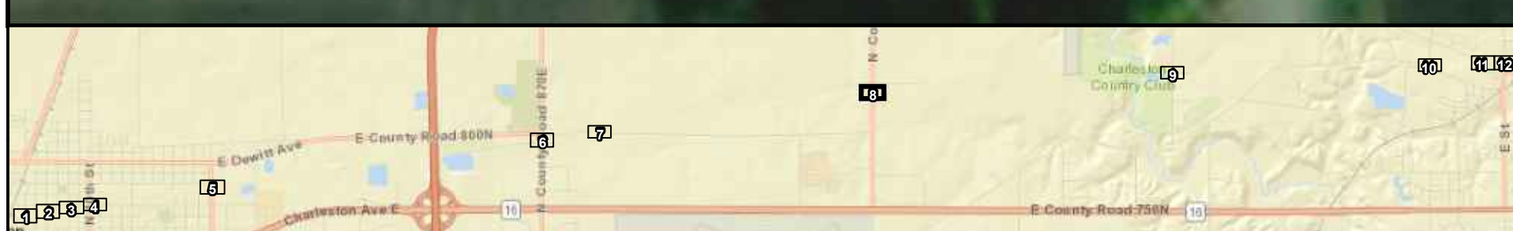
In Loxa

SB-39

SB-40

Loxa Rd 100 E



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 8 of 12

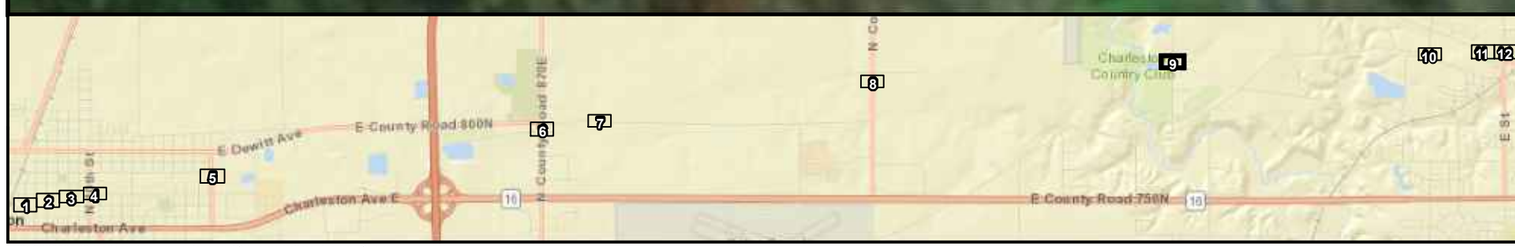
J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

1325 E

SB-41

SB-42

Country Crub Rd



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 9 of 12

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Old State Rd

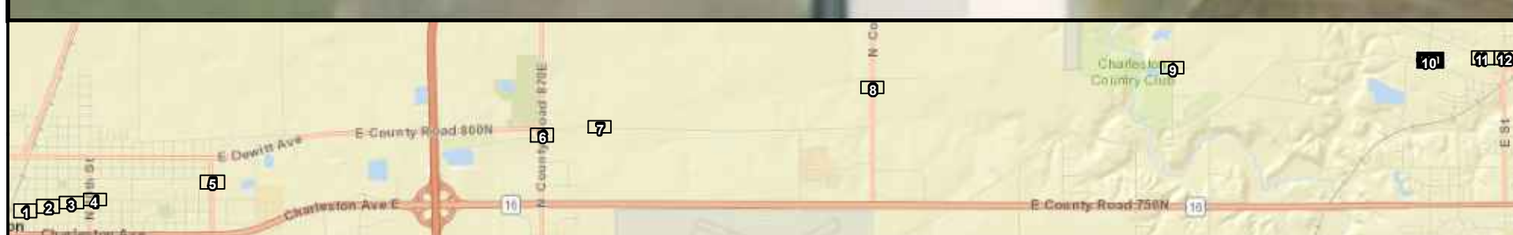
Decker Springs Rd

SB-44

SB-43

Madison

Madison Ave



0 50 100 200

Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 10 of 12

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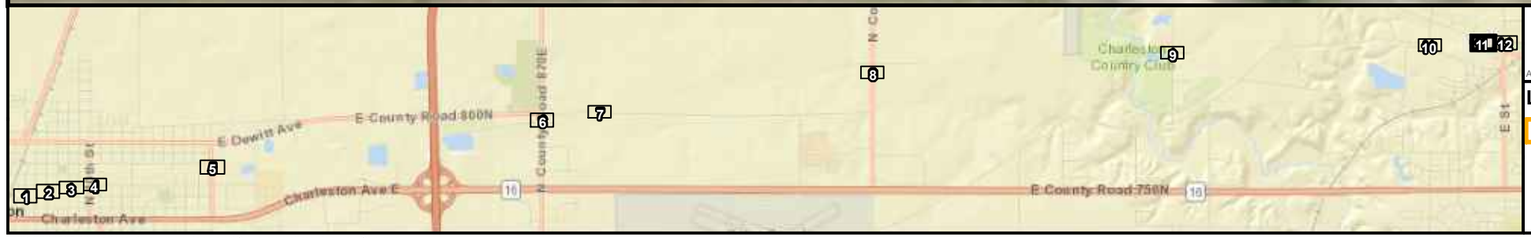

0 50 100 200
Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 11 of 12

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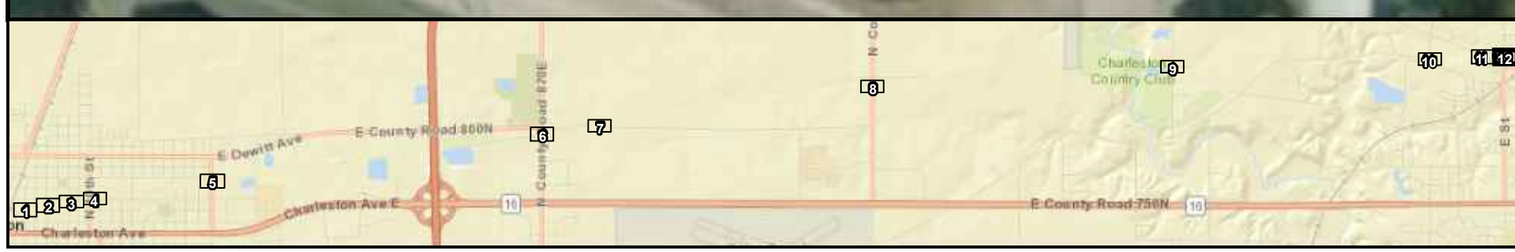


0 50 100 200
Feet

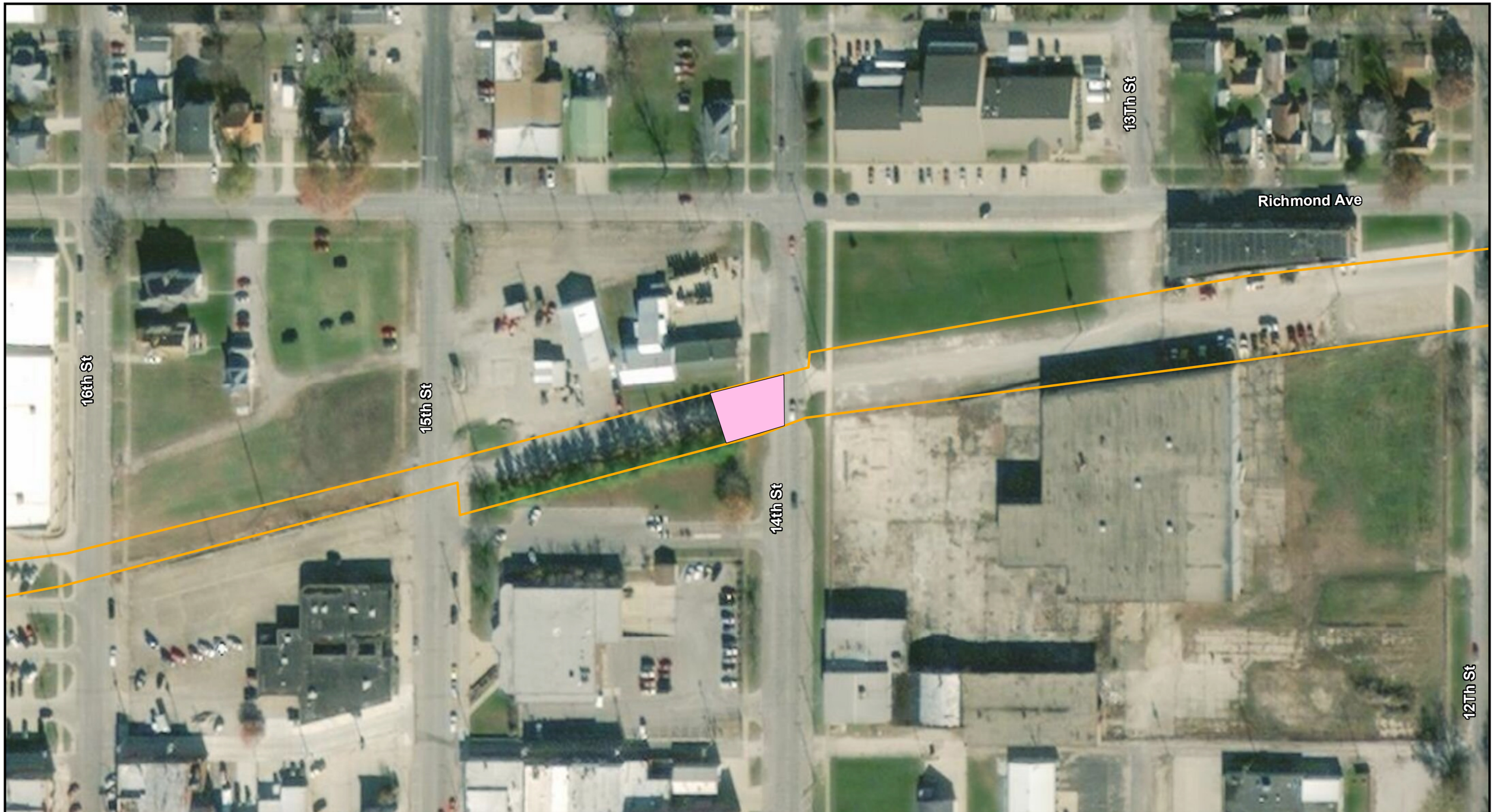
Aerial Source: ESRI Online World Imagery

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 12 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd



0 100 200
Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend

- Mattoon Project Corridor
- Construction Worker Caution

Huff & Huff, Inc.

Figure 4-2
Construction Worker Caution Area Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL

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5.0 ENDORSEMENTS

The scope and depth of this study are consistent with those proposed and accepted by the City of Mattoon. The field observations and results reported herein are considered sufficient in detail and scope to form an informed and professional opinion as to the obvious potential environmental hazards along the Project Corridor. This assessment is complete and is believed to be accurate. Huff & Huff, Inc. cannot guarantee or warrant that the information provided is fully representative of all conditions across the entire Project Corridor.

Author: _____ Date ***February 18, 2019***
Adam Kittler, Project Geologist

Consultant Reviewer: _____ Date ***February 18, 2019***
Jill Connolly, Project Manager

Principal: _____ Date ***February 18, 2019***
Jeremy J. Reynolds, P.G., Associate Principal
State of Illinois License # 196-001170

6.0 INFORMATION SOURCES

Maps

" City of Mattoon Zoning Map" Map. City of Mattoon, Web. July. 2018.

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United States Geological Survey (U.S.G.S) 7.5 Minute Series Topographic Map, Toledo, Illinois Quadrangle

United States Geological Survey (U.S.G.S) 7.5 Minute Series Topographic Map, Mattoon, Illinois Quadrangle

*Information Sources for all remaining maps are noted on Figures

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APPENDIX A

PHOTOGRAPH LOG

Photograph 1:	Advancement of SB-4, facing northwest

Photograph 2:	Advancement of SB-5, facing east

Photograph 3:	Advancement of SB-10, facing west

Photograph 4:	Advancement of SB-15, facing northwest

City of Mattoon
Bike Trail Extension and Improvements Project
LPC-663 Photo Log

Mattoon and Charleston, Coles County, Illinois

Photograph 5:	Advancement of SB-19, facing northwest

Photograph 6:	Advancement of SB-29, facing west

Photograph 7:	Advancement of SB-31, facing south

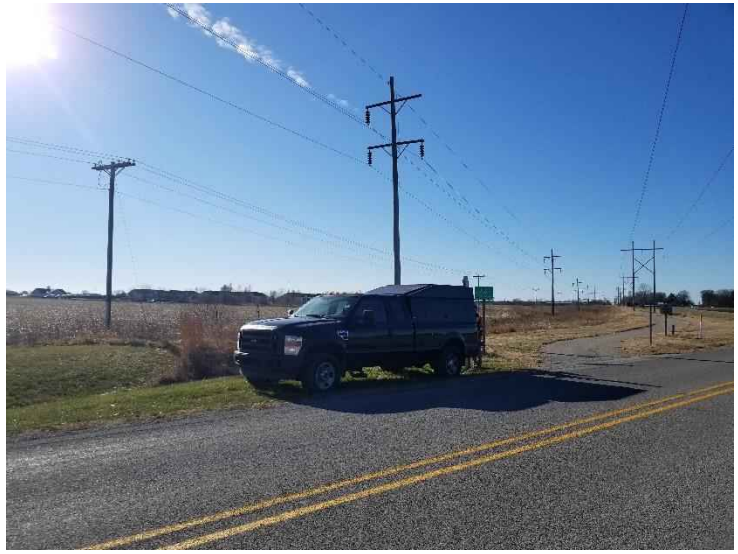
Photograph 8:	Advancement of SB-33, facing northwest

Huff&Huff incorporated

City of Mattoon
Bike Trail Extension and Improvements Project
LPC-663 Photo Log

Mattoon and Charleston, Coles County, Illinois

Photograph 9:	Advancement of SB-34, facing southwest



Photograph 10:	Advancement of SB-37, facing west

Photograph 11:	Advancement of SB-38, facing west

Photograph 12:	Advancement of SB-39, facing northwest

City of Mattoon
Bike Trail Extension and Improvements Project
LPC-663 Photo Log

Mattoon and Charleston, Coles County, Illinois

Photograph 13:	Advancement of SB-41, facing northwest

Photograph 14:	Advancement of SB-42, facing northeast

Photograph 15:	Advancement of SB-45, facing southwest

Photograph 16:	Advancement of SB-47, facing south

City of Mattoon
Bike Trail Extension and Improvements Project
LPC-663 Photo Log

Mattoon and Charleston, Coles County, Illinois

APPENDIX B

2018 PESA

SEE PESA IN SEPARATE FILE

APPENDIX C

BORING LOGS

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-01

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 736 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Soft, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; brown and gray, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-02

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 736 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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Oak Brook, IL 60523
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BORING NUMBER SB-03

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Very Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown and gray, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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BORING NUMBER SB-04

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Soft, silty CLAY (CL-ML), low plasticity; little Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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BORING NUMBER SB-05

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown and gray, moist	3	S-3 (3-5)	0.0	2	
4							
5							

: End of boring at 5' BGS. Boring immediately backfilled with remaining soil

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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BORING NUMBER SB-06

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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Oak Brook, IL 60523
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BORING NUMBER SB-07

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 6-inches GRAVEL					
		S-1: Soft, silty Clay (FILL), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Brick and Coal (FILL); trace Gravel, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Brick and Coal (FILL); trace Gravel, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-08

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 6-inches GRAVEL					
		S-1: Soft, silty Clay (FILL), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Brick and Coal (FILL); trace Gravel, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Brick and Coal (FILL); trace Gravel, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-09

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 6-inches GRAVEL					
		S-1: Soft, silty Clay (FILL), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Brick and Coal (FILL); trace Gravel, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-10

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		S-2: Very Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown, moist	2	S-2 (1-3)	0.0	2	
2							
3		S-3: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	3	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected
3. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-11

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-12

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-13

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
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(630)-984-9100

BORING NUMBER SB-14

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-15

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-16

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 735 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-17

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 734 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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BORING NUMBER SB-18

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 733 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-19

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 733 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches GRAVEL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-20

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 732 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-21

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 732 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-22

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 731 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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(630)-984-9100

BORING NUMBER SB-23

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 731 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-24

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 730 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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BORING NUMBER SB-25

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 730 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-26

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 731 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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BORING NUMBER SB-27

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 731 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-28

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 731 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-29

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 730 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist		S-1 (0-1)	0.0	1	
1		S-2: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; brown, moist	1	S-2 (1-3)	0.0	2	
2							
3		S-3: Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown and gray, moist	2	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-30

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 730 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist		S-1 (0-1)	0.0	1	
1		S-2: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; brown, moist	1	S-2 (1-3)	0.0	2	
2							
3		S-3: Very Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; brown and gray, moist	2	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-31

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 730 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	5	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist		S-1 (0-1)	0.0	1	
1		S-2: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown, moist	1	S-2 (1-3)	0.0	2	
2							
3		S-3: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; brown and gray, moist	2	S-3 (3-5)	0.0	2	
4							
5		: End of boring at 5' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected
2. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-32

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 729 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-33

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 729 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
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(630)-984-9100

BORING NUMBER SB-34

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 721 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-35

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 700 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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(630)-984-9100

BORING NUMBER SB-36

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 700 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Trace, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-37

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 692 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-38

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 692 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-39

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 672 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
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(630)-984-9100

BORING NUMBER SB-40

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 672 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
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Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-41

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 647 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-42

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 647 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
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(630)-984-9100

BORING NUMBER SB-43

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 656 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; little Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-44

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 656 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Soft, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-45

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 662 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-46

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 661 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Stiff, silty CLAY (CL-ML), low plasticity; trace Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

Huff & Huff, Inc.
915 Harger Road, Suite 330
Oak Brook, IL 60523
(630)-984-9100

BORING NUMBER SB-47

CLIENT City of Mattoon
PROJECT NAME Bike Trail Extension and Improvemnts
PROJECT NUMBER
PROJECT LOCATION Mattoon, Coles County, IL
DATE STARTED 12/12/18 **COMPLETED** 12/12/18
GROUND ELEVATION 660 +/- 2 **HOLE SIZE** 2 inches
DRILLING CONTRACTOR Environmental Soil Probing Corporation
DRILLING METHOD Direct Push
LOGGED BY AHK **CHECKED BY** JJR
DRILL RIG 5400 Truck Geoprobe

GROUND WATER LEVELS (ft, bgs):

DATE	TIME	DEPTH	CASING	STAB
12/12/18	DD	DRY	1	N/A

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	PID RESULTS (PPM)	RECOVERY (feet)	POCKET PEN. (tsf)
0		Surface: 4-inches black TOPSOIL					
		S-1: Very Stiff, silty CLAY (CL-ML), low plasticity; with Gravel, fine; black, moist	1	S-1 (0-1)	0.0	1	
1		: End of boring at 1' BGS. Boring immediately backfilled with remaining soil					

REMARKS

1. Sample collected

ENVIRONMENTAL BH COLUMN W/ REMARKS - GINT STD US LAB.GDT - 2/18/19 07:04 - J:\81.0220535.03 MATTOON BIKE TRAIL EXTENSION PSI\REPORTS\PSI\APPENDIX C\IL ROUTE 38 PSI.GPJ

APPENDIX D

LABORATORY ANALYTICAL REPORT

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Analytical Report

Adam Kittler
Huff & Huff, A subsidiary of GZA
915 Harger Road, Suite 330
Oak Brook, IL 60523

January 30, 2019

Work Order: 18L0509

RE: TACO Listed Parameters 2018
Mattoon Bike Trail

Dear Adam Kittler:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

This is a revised report, that supersedes all previous reports. Please see case narrative for an explanation of revision.

Sincerely,

Tim Witrzek
Federal Program Manager
847.967.6666
twitrzek@emt.com
Approved for release: 1/30/2019 8:29:13AM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674

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Environmental Monitoring and Technologies, Inc.

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 1-3'	18L0509-02	Soil	12/12/18 10:55	12/14/18 09:40
SB-2 1-3'	18L0509-05	Soil	12/12/18 11:01	12/14/18 09:40
SB-3 1-3'	18L0509-08	Soil	12/12/18 11:07	12/14/18 09:40
SB-4 1-3'	18L0509-11	Soil	12/12/18 11:12	12/14/18 09:40
SB-4 3-5'	18L0509-12	Soil	12/12/18 11:13	12/14/18 09:40
SB-5 1-3'	18L0509-14	Soil	12/12/18 11:16	12/14/18 09:40
SB-5 3-5'	18L0509-15	Soil	12/12/18 11:17	12/14/18 09:40
SB-6 1-3'	18L0509-17	Soil	12/12/18 11:19	12/14/18 09:40
SB-6 3-5'	18L0509-18	Soil	12/12/18 11:20	12/14/18 09:40
SB-7 1-3'	18L0509-20	Soil	12/12/18 11:25	12/14/18 09:40
SB-7 3-5'	18L0509-21	Soil	12/12/18 11:26	12/14/18 09:40
SB-8 1-3'	18L0509-23	Soil	12/12/18 11:28	12/14/18 09:40
SB-8 3-5'	18L0509-24	Soil	12/12/18 11:29	12/14/18 09:40
SB-9 1-3'	18L0509-26	Soil	12/12/18 11:31	12/14/18 09:40
SB-9 3-5'	18L0509-27	Soil	12/12/18 11:32	12/14/18 09:40
SB-10 1-3'	18L0509-29	Soil	12/12/18 00:00	12/14/18 09:40
SB-10 3-5'	18L0509-30	Soil	12/12/18 00:00	12/14/18 09:40
SB-11 0-1'	18L0509-31	Soil	12/12/18 11:38	12/14/18 09:40
SB-12 0-1'	18L0509-32	Soil	12/12/18 11:42	12/14/18 09:40
SB-13 0-1'	18L0509-33	Soil	12/12/18 11:45	12/14/18 09:40
SB-14 0-1'	18L0509-34	Soil	12/12/18 11:49	12/14/18 09:40
SB-15 0-1'	18L0509-35	Soil	12/12/18 11:53	12/14/18 09:40
SB-16 0-1'	18L0509-36	Soil	12/12/18 11:58	12/14/18 09:40
SB-17 0-1'	18L0509-37	Soil	12/12/18 12:02	12/14/18 09:40
SB-18 0-1'	18L0509-38	Soil	12/12/18 12:05	12/14/18 09:40
SB-19 0-1'	18L0509-39	Soil	12/12/18 12:07	12/14/18 09:40
SB-20 0-1'	18L0509-40	Soil	12/12/18 12:10	12/14/18 09:40
SB-21 0-1'	18L0509-41	Soil	12/12/18 12:16	12/14/18 09:40
SB-22 0-1'	18L0509-42	Soil	12/12/18 12:18	12/14/18 09:40
SB-23 0-1'	18L0509-43	Soil	12/12/18 12:21	12/14/18 09:40
SB-24 0-1'	18L0509-44	Soil	12/12/18 12:25	12/14/18 09:40
SB-25 0-1'	18L0509-45	Soil	12/12/18 12:27	12/14/18 09:40
SB-26 0-1'	18L0509-46	Soil	12/12/18 12:30	12/14/18 09:40
SB-27 0-1'	18L0509-47	Soil	12/12/18 12:33	12/14/18 09:40
SB-28 0-1'	18L0509-48	Soil	12/12/18 12:37	12/14/18 09:40
SB-29 1-3'	18L0509-49	Soil	12/12/18 12:39	12/14/18 09:40
SB-29 3-5'	18L0509-50	Soil	12/12/18 12:40	12/14/18 09:40
SB-30 1-3'	18L0509-51	Soil	12/12/18 12:42	12/14/18 09:40
SB-30 3-5'	18L0509-52	Soil	12/12/18 12:43	12/14/18 09:40
SB-31 1-3'	18L0509-53	Soil	12/12/18 12:44	12/14/18 09:40
SB-31 3-5'	18L0509-54	Soil	12/12/18 12:45	12/14/18 09:40
SB-32 0-1'	18L0509-55	Soil	12/12/18 12:47	12/14/18 09:40
SB-33 0-1'	18L0509-56	Soil	12/12/18 12:51	12/14/18 09:40
SB-34 0-1'	18L0509-57	Soil	12/12/18 12:54	12/14/18 09:40
SB-35 0-1'	18L0509-58	Soil	12/12/18 13:02	12/14/18 09:40
SB-36 0-1'	18L0509-59	Soil	12/12/18 13:08	12/14/18 09:40
SB-37 0-1'	18L0509-60	Soil	12/12/18 13:17	12/14/18 09:40
SB-38 0-1'	18L0509-61	Soil	12/12/18 13:20	12/14/18 09:40
SB-39 0-1'	18L0509-62	Soil	12/12/18 13:38	12/14/18 09:40
SB-40 0-1'	18L0509-63	Soil	12/12/18 13:35	12/14/18 09:40

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SB-41 0-1'	18L0509-64	Soil	12/12/18 13:49	12/14/18 09:40
SB-42 0-1'	18L0509-65	Soil	12/12/18 13:51	12/14/18 09:40
SB-43 0-1'	18L0509-66	Soil	12/12/18 14:02	12/14/18 09:40
SB-44 0-1'	18L0509-67	Soil	12/12/18 14:05	12/14/18 09:40
SB-45 0-1'	18L0509-68	Soil	12/12/18 14:11	12/14/18 09:40
SB-46 0-1'	18L0509-69	Soil	12/12/18 14:15	12/14/18 09:40
SB-47 0-1'	18L0509-70	Soil	12/12/18 14:18	12/14/18 09:40

Environmental Monitoring and Technologies, Inc.

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Case Narrative

Client: Huff & Huff, A subsidiary of GZA **Date:** 01/30/2019
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 18L0509
The samples were received on 12/14/18 09:40. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was:

Cooler	Temp C°
Default Cooler	4.8

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

On 1/4/19 client added addtional analyses TCLP, SPLP and Sim PNAs to several samples. Client is aware that Sim PNA samples are passed hold time.

On 1/16/19 client added TCLP Fe analysis to several samples.

On 1/22/19 client added additional TCLP analysis to two samples.

6010 Total Metals:
B8L0552-BS1: The LCS had multiple analytes below the laboratory control limit, but all are within 15% of the target value. The bracketing CCV recoveries in the run are within the acceptance limits.

6010_Ca, Fe, and K:
There were trace detection of these analytes in the blank, but the levels of the analytes in the samples was well above 10% of the blank level. The levels detected in the blank are not significant for the level found in the samples.

The Batch B8L0552 QC for the MS, MSD, DUP, and PS had many outliers, most likely due to the sample matrices combined with some of the high levels for some of the target analytes.

B9A0160: Elevated limit for Tl due to biases caused by spectral overlap from high concentrations of interfering elements .

Environmental Monitoring and Technologies, Inc.

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8270_PNA_SIM

Samples 20 and 23, the surrogate spike compound, fluoranthene-d10 recovered outside control criteria due to matrix.

Sample 56 was utilized for matrix spike / matrix spike (MS/MSD) duplicate analysis. Due to matrix and relatively high concentration of analytes in the sample, several MS/MSD compounds were outside control criteria.

8270D_SVOC

Sample 39 was utilized for matrix spike / matrix spike duplicate analysis. Due to sample matrix some compounds recovered outside control criteria.

The internal standard perylene-d12 recovered outside control criteria for samples 33, 35 (2X dilution reported), 37, 39 and 57 at 45%, 37%, 40%, 42%,and 32%, respectfully. Control criteria for the internal standards are 50% to 200%. Those with recoveries above 40% were reported to maintain the detection limits for the associated analytes. Samples 35 and 57 were run initially at a 1X dilution and repeated at a 2Xwhich was then reported.

The analytes associated with this internal standard would be:

benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene.

8260B_VOC_5035_LOW

The surrogate spike compound, 1,2-dichloroethane-d4, for sample 66 recovered outside control criteria due to sample matrix.

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Client Sample Results

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-1 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 10:55
Matrix: Soil
Lab ID: 18L0509-02

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5230**	69.5		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Arsenic	**8.02**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Barium	**43.6**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Cadmium	**0.695**	0.139		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Calcium	**45700**	695		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Chromium	**11.1**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Cobalt	**5.54**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Copper	**94.7**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Iron	**27800**	278		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Lead	**73.8**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Magnesium	**19900**	695		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Manganese	**453**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Nickel	**14.2**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Potassium	**519**	6.95		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Sodium	**204**	6.95		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Thallium	**2.84**	0.367		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Vanadium	**18.7**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Zinc	**69.2**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:16	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:16	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.392**	0.063		mg/Kg dry	12/19/18 10:57	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.9**	0.100		% (Percent)	12/15/18 06:50	B8L0496	MKP	1
Method: SW9045C								
pH	**7.77**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Ethylbenzene	< 225	225		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Toluene	< 112	112		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Xylenes, Total	< 674	674		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-1 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 10:55
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-02 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: Fluorobenzene				*Recovery: 99%*	*Limits: 91-106*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 119%*	*Limits: 85-119*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**58.0**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
2-Methylnaphthalene	**67.9**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Acenaphthene	< 8.29	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Acenaphthylene	**49.8**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Anthracene	**40.5**	4.14		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(a)anthracene	**77.8**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(a)pyrene	**123**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(b)fluoranthene	**119**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(g,h,i)perylene	**101**	20.7		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(k)fluoranthene	**60.7**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Chrysene	**81.7**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 41.4	41.4		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Fluoranthene	**119**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Fluorene	< 8.29	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**123**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Naphthalene	**36.5**	20.7		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Phenanthrene	**102**	4.14		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Pyrene	**108**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 61%*	*Limits: 50-150*	*12/22/18 01:21*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 52%*	*Limits: 50-150*	*12/22/18 01:21*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-2 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:01
Matrix: Soil
Lab ID: 18L0509-05

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5240**	69.0		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Antimony	< 1.38	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Arsenic	**7.84**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Barium	**42.0**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Cadmium	**0.632**	0.138		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Calcium	**35300**	690		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Chromium	**6.10**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Cobalt	**4.86**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Copper	**69.6**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Iron	**24600**	276		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Lead	**69.1**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Magnesium	**13800**	690		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Manganese	**248**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Nickel	**11.5**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Potassium	**418**	6.90		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Sodium	**320**	6.90		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Thallium	**2.20**	0.365		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Vanadium	**14.8**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Zinc	**55.4**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:17	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.204**	0.065		mg/Kg dry	12/19/18 11:00	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.1**	0.100		% (Percent)	12/15/18 06:52	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Ethylbenzene	< 232	232		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Toluene	< 116	116		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Xylenes, Total	< 696	696		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%* *Limits: 91-106*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 105%* *Limits: 85-119*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-2 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:01
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-05 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**63.8**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
2-Methylnaphthalene	**71.5**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Acenaphthene	< 9.25	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Acenaphthylene	**77.0**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Anthracene	**39.9**	4.63		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(a)anthracene	**141**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(a)pyrene	**172**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(b)fluoranthene	**183**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(g,h,i)perylene	**95.7**	23.1		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(k)fluoranthene	**70.4**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Chrysene	**132**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 46.3	46.3		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Fluoranthene	**193**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Fluorene	< 9.25	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**141**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Naphthalene	**27.6**	23.1		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Phenanthrene	**110**	4.63		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Pyrene	**176**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 67%*	*Limits: 50-150*	*12/22/18 01:57*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 56%*	*Limits: 50-150*	*12/22/18 01:57*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-3 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:07
Matrix: Soil
Lab ID: 18L0509-08

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6260**	70.4		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Arsenic	**9.93**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Barium	**50.6**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Beryllium	< 0.563	0.563		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Cadmium	**0.794**	0.141		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Calcium	**41600**	704		mg/Kg dry	12/18/18 15:24	B8L0514	KJ1	100
Chromium	**15.1**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Cobalt	**6.04**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Copper	**84.3**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Iron	**37900**	282		mg/Kg dry	12/18/18 15:24	B8L0514	KJ1	100
Lead	**116**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Magnesium	**9480**	70.4		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Manganese	**275**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Nickel	**13.8**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Potassium	**655**	7.04		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Sodium	**337**	7.04		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Thallium	**2.78**	0.372		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Vanadium	**27.6**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Zinc	**66.5**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:19	B9A0188	AG	5
Lead, TCLP	< 0.00750	0.00750		mg/L	01/08/19 18:19	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:19	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.177**	0.066		mg/Kg dry	12/19/18 11:02	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.9**	0.100		% (Percent)	12/15/18 06:54	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Ethylbenzene	< 199	199		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Toluene	< 99.6	99.6		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Xylenes, Total	< 597	597		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 92%* *Limits: 91-106*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-3 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:07
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-08 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: Toluene-d8				*Recovery: 85%*	*Limits: 71-112*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 100%*	*Limits: 85-119*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**88.1**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
2-Methylnaphthalene	**91.8**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Acenaphthene	< 9.08	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Acenaphthylene	**127**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Anthracene	**91.7**	4.54		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(a)anthracene	**216**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(a)pyrene	**255**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(b)fluoranthene	**278**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(g,h,i)perylene	**179**	22.7		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(k)fluoranthene	**114**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Chrysene	**210**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 45.4	45.4		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Fluoranthene	**275**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Fluorene	**14.0**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**216**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Naphthalene	**47.1**	22.7		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Phenanthrene	**191**	4.54		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Pyrene	**285**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 69%*	*Limits: 50-150*	*12/22/18 02:34*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 56%*	*Limits: 50-150*	*12/22/18 02:34*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-4 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:12
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-11

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6290**	69.6		mg/Kg dry	12/18/18 15:56	B8L0514	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Arsenic	**13.6**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Barium	**53.6**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 15:56	B8L0514	KJ1	10
Cadmium	**1.07**	0.139		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Calcium	**31700**	696		mg/Kg dry	12/18/18 15:28	B8L0514	KJ1	100
Chromium	**8.89**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Cobalt	**4.80**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Copper	**77.7**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Iron	**37200**	279		mg/Kg dry	12/18/18 15:28	B8L0514	KJ1	100
Lead	**76.4**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Magnesium	**7310**	69.6		mg/Kg dry	12/18/18 15:56	B8L0514	KJ1	10
Manganese	**234**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Nickel	**13.2**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Potassium	**569**	6.96		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:56	B8L0514	KJ1	10
Sodium	**439**	6.96		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Thallium	**2.27**	0.368		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Vanadium	**19.0**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Zinc	**80.3**	1.39		mg/Kg dry	12/18/18 16:42	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.172**	0.065		mg/Kg dry	12/19/18 11:05	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.5**	0.100		% (Percent)	12/15/18 06:56	B8L0496	MKP	1
Method: SW9045C								
pH	**7.74**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 06:44	B8L0740	JL	50
Ethylbenzene	< 226	226		ug/Kg dry	12/18/18 06:44	B8L0740	JL	50
Toluene	< 113	113		ug/Kg dry	12/18/18 06:44	B8L0740	JL	50
Xylenes, Total	< 677	677		ug/Kg dry	12/18/18 06:44	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 98%* *Limits: 91-106*	*12/18/18 06:44*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 06:44*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 99%* *Limits: 85-119*	*12/18/18 06:44*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-4 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:12
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-11 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**69.4**	17.5		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
2-Methylnaphthalene	**68.5**	17.5		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Acenaphthene	< 8.77	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Acenaphthylene	**146**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Anthracene	**89.9**	4.39		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Benzo(a)anthracene	**381**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Benzo(a)pyrene	**483**	17.5		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Benzo(b)fluoranthene	**514**	17.5		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Benzo(g,h,i)perylene	**273**	21.9		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Benzo(k)fluoranthene	**196**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Chrysene	**359**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Dibenzo(a,h)anthracene	**57.4**	43.9		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Fluoranthene	**532**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Fluorene	**10.7**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**410**	8.77		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Naphthalene	**32.7**	21.9		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Phenanthrene	**212**	4.39		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Pyrene	**518**	17.5		ug/Kg dry		12/22/18 03:10	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 73%*	*Limits: 50-150*	*12/22/18 03:10*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 64%*	*Limits: 50-150*	*12/22/18 03:10*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-4 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:13
Matrix: Soil
Lab ID: 18L0509-12

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**16200**	778		mg/Kg dry	01/08/19 17:41	B9A0160	KJ1	100
Antimony	< 1.56	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Barium	**112**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Beryllium	< 0.156	0.156		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Calcium	**4650**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Chromium	**17.6**	13.0		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Cobalt	**4.63**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Copper	**34.9**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Iron	**19500**	311		mg/Kg dry	01/08/19 17:41	B9A0160	KJ1	100
Lead	**21.7**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Magnesium	**4020**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Manganese	**70.9**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Nickel	**12.3**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Potassium	**1980**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Sodium	**128**	7.78		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Thallium	< 3.50	3.50		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Vanadium	**33.7**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Zinc	**40.1**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:05	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.073	0.073		mg/Kg dry	01/08/19 12:26	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.4**	0.100	H	% (Percent)	01/08/19 08:20	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
2-Methylnaphthalene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Acenaphthene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Acenaphthylene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Anthracene	< 4.31	4.31	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Benzo(a)anthracene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Benzo(a)pyrene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-4 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:13
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-12 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(b)fluoranthene	< 17.2	17.2	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Benzo(g,h,i)perylene	< 21.6	21.6	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Benzo(k)fluoranthene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Chrysene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 43.1	43.1	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Fluoranthene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Fluorene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Naphthalene	< 21.6	21.6	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Phenanthrene	< 4.31	4.31	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Pyrene	< 17.2	17.2	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 07:33*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 85%*	*Limits: 50-150*	*01/09/19 07:33*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-5 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:16
Matrix: Soil
Lab ID: 18L0509-14

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5630**	69.4		mg/Kg dry	12/18/18 16:00	B8L0514	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Arsenic	**9.28**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Barium	**49.8**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 16:00	B8L0514	KJ1	10
Cadmium	**0.755**	0.139		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Calcium	**28500**	694		mg/Kg dry	12/18/18 15:32	B8L0514	KJ1	100
Chromium	**8.92**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Cobalt	**7.01**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Copper	**83.4**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Iron	**29700**	278		mg/Kg dry	12/18/18 15:32	B8L0514	KJ1	100
Lead	**92.1**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Magnesium	**8910**	69.4		mg/Kg dry	12/18/18 16:00	B8L0514	KJ1	10
Manganese	**315**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Nickel	**15.0**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Potassium	**517**	6.94		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 16:00	B8L0514	KJ1	10
Sodium	**331**	6.94		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Thallium	**2.75**	0.367		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Vanadium	**24.0**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Zinc	**70.9**	1.39		mg/Kg dry	12/18/18 16:47	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.161**	0.066		mg/Kg dry	12/19/18 11:07	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**89.7**	0.100		% (Percent)	12/15/18 06:58	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 07:16	B8L0740	JL	50
Ethylbenzene	< 219	219		ug/Kg dry	12/18/18 07:16	B8L0740	JL	50
Toluene	< 109	109		ug/Kg dry	12/18/18 07:16	B8L0740	JL	50
Xylenes, Total	< 656	656		ug/Kg dry	12/18/18 07:16	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%* *Limits: 91-106*	*12/18/18 07:16*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 89%* *Limits: 71-112*	*12/18/18 07:16*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 89%* *Limits: 85-119*	*12/18/18 07:16*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-5 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:16
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-14 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**107**	17.1		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
2-Methylnaphthalene	**120**	17.1		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Acenaphthene	**12.0**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Acenaphthylene	**374**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Anthracene	**205**	4.27		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Benzo(a)anthracene	**807**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Benzo(a)pyrene	**1080**	17.1		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Benzo(b)fluoranthene	**1200**	17.1		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Benzo(g,h,i)perylene	**623**	21.4		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Benzo(k)fluoranthene	**422**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Chrysene	**705**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Dibenzo(a,h)anthracene	**142**	42.7		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Fluoranthene	**944**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Fluorene	**16.5**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**969**	8.54		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Naphthalene	**94.8**	21.4		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Phenanthrene	**333**	4.27		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Pyrene	**1010**	17.1		ug/Kg dry		12/22/18 03:47	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 64%*	*Limits: 50-150*	*12/22/18 03:47*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 57%*	*Limits: 50-150*	*12/22/18 03:47*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-5 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:17
Matrix: Soil
Lab ID: 18L0509-15

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5230**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Antimony	< 1.39	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Barium	**52.9**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Beryllium	< 0.139	0.139		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Calcium	**22300**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cobalt	**5.21**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Copper	**27.6**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Iron	**8230**	278		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Lead	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Magnesium	**6010**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Manganese	**306**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Nickel	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Potassium	**831**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:28	B9A0160	KJ1	10
Sodium	**97.8**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Vanadium	**17.8**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Zinc	**31.7**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.065	0.065		mg/Kg dry	01/08/19 12:28	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.7**	0.100	H	% (Percent)	01/08/19 08:22	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
2-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthylene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Anthracene	< 3.78	3.78	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)anthracene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)pyrene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(b)fluoranthene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(g,h,i)perylene	< 18.9	18.9	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(k)fluoranthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Chrysene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 37.8	37.8	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-5 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:17
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-15 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Fluorene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Naphthalene	< 18.9	18.9	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Phenanthrene	**9.80**	3.78	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Pyrene	< 15.1	15.1	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 91%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-6 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:19
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-17

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6310**	69.0		mg/Kg dry	12/18/18 17:33	B8L0514	KJ1	10
Antimony	< 1.38	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Arsenic	**13.9**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Barium	**77.0**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 17:33	B8L0514	KJ1	10
Cadmium	**1.10**	0.138		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Calcium	**33500**	690		mg/Kg dry	12/18/18 17:20	B8L0514	KJ1	100
Chromium	**8.47**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Cobalt	**4.86**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Copper	**79.2**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Iron	**30000**	276		mg/Kg dry	12/18/18 17:20	B8L0514	KJ1	100
Lead	**123**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Magnesium	**9800**	69.0		mg/Kg dry	12/18/18 17:33	B8L0514	KJ1	10
Manganese	**335**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Nickel	**12.8**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Potassium	**643**	6.90		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Silver	**4.58**	4.40		mg/Kg dry	12/18/18 17:33	B8L0514	KJ1	10
Sodium	**226**	6.90		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Thallium	**2.46**	0.364		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Vanadium	**18.6**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Zinc	**131**	1.38		mg/Kg dry	12/18/18 18:17	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.254**	0.064		mg/Kg dry	12/19/18 11:10	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.2**	0.100		% (Percent)	12/15/18 07:00	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 07:48	B8L0740	JL	50
Ethylbenzene	< 204	204		ug/Kg dry	12/18/18 07:48	B8L0740	JL	50
Toluene	< 102	102		ug/Kg dry	12/18/18 07:48	B8L0740	JL	50
Xylenes, Total	< 613	613		ug/Kg dry	12/18/18 07:48	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 100%* *Limits: 91-106*	*12/18/18 07:48*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 07:48*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 106%* *Limits: 85-119*	*12/18/18 07:48*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-6 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:19
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-17 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**112**	17.2		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
2-Methylnaphthalene	**119**	17.2		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Acenaphthene	**28.0**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Acenaphthylene	**229**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Anthracene	**236**	4.29		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Benzo(a)anthracene	**1140**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Benzo(a)pyrene	**1130**	17.2		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Benzo(b)fluoranthene	**1200**	17.2		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Benzo(g,h,i)perylene	**527**	21.5		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Benzo(k)fluoranthene	**441**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Chrysene	**953**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Dibenzo(a,h)anthracene	**135**	42.9		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Fluoranthene	**1640**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Fluorene	**37.2**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**788**	8.58		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Naphthalene	**83.2**	21.5		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Phenanthrene	**735**	4.29		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Pyrene	**1600**	17.2		ug/Kg dry		12/22/18 04:24	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 68%*	*Limits: 50-150*	*12/22/18 04:24*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 58%*	*Limits: 50-150*	*12/22/18 04:24*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-6 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:20
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-18

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**12100**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Antimony	< 1.53	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Barium	**114**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Beryllium	< 0.153	0.153		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Cadmium	**0.940**	0.500		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Calcium	**7170**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Cobalt	**6.04**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Copper	**72.8**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Iron	**20200**	306		mg/Kg dry	01/08/19 17:49	B9A0160	KJ1	100
Lead	**61.3**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Magnesium	**2430**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Manganese	**596**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Nickel	**15.7**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Potassium	**1280**	7.66		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Sodium	**130**	7.66		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Thallium	< 4.20	4.20		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Vanadium	**18.9**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Zinc	**113**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:07	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.240**	0.071		mg/Kg dry	01/08/19 12:30	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**81.5**	0.100	H	% (Percent)	01/08/19 08:24	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**73.7**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
2-Methylnaphthalene	**80.3**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Acenaphthene	< 8.77	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Acenaphthylene	**17.5**	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Anthracene	**20.5**	4.38	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(a)anthracene	**123**	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(a)pyrene	**162**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(b)fluoranthene	**151**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-6 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:20
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-18 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**83.0**	21.9	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Benzo(k)fluoranthene	**56.5**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Chrysene	**110**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 43.8	43.8	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Fluoranthene	**185**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Fluorene	< 8.77	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**175**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Naphthalene	**33.6**	21.9	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Phenanthrene	**166**	4.38	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Pyrene	**194**	17.5	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 08:48*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 08:48*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-7 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:25
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-20

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3480**	79.4		mg/Kg dry	12/18/18 17:37	B8L0514	KJ1	10
Antimony	< 1.59	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Arsenic	**19.2**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Barium	**82.6**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Beryllium	< 0.635	0.635		mg/Kg dry	12/18/18 17:37	B8L0514	KJ1	10
Cadmium	**1.40**	0.159		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Calcium	**1160**	7.94		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Chromium	**10.0**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Cobalt	**4.84**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Copper	**49.1**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Iron	**43000**	318		mg/Kg dry	12/18/18 17:24	B8L0514	KJ1	100
Lead	**93.4**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Magnesium	**350**	7.94		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Manganese	**173**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Nickel	**13.4**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Potassium	**956**	7.94		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 17:37	B8L0514	KJ1	10
Sodium	**632**	7.94		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Thallium	**4.11**	0.419		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Vanadium	**24.2**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Zinc	**81.3**	1.59		mg/Kg dry	12/18/18 18:22	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.138**	0.079		mg/Kg dry	12/26/18 13:17	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.6**	0.100		% (Percent)	12/15/18 07:02	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 08:20	B8L0740	JL	50
Ethylbenzene	< 246	246		ug/Kg dry	12/18/18 08:20	B8L0740	JL	50
Toluene	< 123	123		ug/Kg dry	12/18/18 08:20	B8L0740	JL	50
Xylenes, Total	< 739	739		ug/Kg dry	12/18/18 08:20	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 99%* *Limits: 91-106*	*12/18/18 08:20*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 08:20*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 102%* *Limits: 85-119*	*12/18/18 08:20*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-7 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:25
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-20 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**209**	18.7		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
2-Methylnaphthalene	**243**	18.7		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Acenaphthene	< 9.37	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Acenaphthylene	**40.0**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Anthracene	**39.9**	4.69		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Benzo(a)anthracene	**214**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Benzo(a)pyrene	**220**	18.7		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Benzo(b)fluoranthene	**214**	18.7		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Benzo(g,h,i)perylene	**95.5**	23.4		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Benzo(k)fluoranthene	**78.1**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Chrysene	**181**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 46.9	46.9		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Fluoranthene	**261**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Fluorene	< 9.37	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**158**	9.37		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Naphthalene	**117**	23.4		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Phenanthrene	**187**	4.69		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Pyrene	**247**	18.7		ug/Kg dry		12/22/18 05:01	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 62%*	*Limits: 50-150*	*12/22/18 05:01*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10			*S*	*Recovery: 42%*	*Limits: 50-150*	*12/22/18 05:01*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-7 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:26
Matrix: Soil
Lab ID: 18L0509-21

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2220**	83.2		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Antimony	< 1.66	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Barium	**66.8**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Beryllium	< 0.166	0.166		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Calcium	**928**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Cobalt	< 1.66	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Copper	**67.4**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Iron	**8450**	33.3		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Lead	**66.7**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Magnesium	**258**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Manganese	**9.38**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Nickel	**4.92**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Potassium	**758**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Sodium	**267**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Thallium	< 1.40	1.40		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Vanadium	**13.1**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Zinc	**11.7**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.608**	0.074		mg/Kg dry	01/08/19 12:32	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**73.4**	0.100	H	% (Percent)	01/08/19 08:26	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**102**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
2-Methylnaphthalene	**82.6**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Acenaphthene	**39.9**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Acenaphthylene	**17.4**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Anthracene	**87.4**	4.97	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(a)anthracene	**300**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(a)pyrene	**347**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(b)fluoranthene	**318**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(g,h,i)perylene	**165**	24.8	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(k)fluoranthene	**113**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Chrysene	**221**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 49.7	49.7	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-7 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:26
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-21 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**334**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Fluorene	**51.5**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**371**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Naphthalene	**50.0**	24.8	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Phenanthrene	**715**	4.97	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Pyrene	**335**	19.9	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 95%*	*Limits: 50-150*	*01/09/19 09:27*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 81%*	*Limits: 50-150*	*01/09/19 09:27*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-8 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:28
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-23

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4920**	81.0		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Antimony	< 1.62	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Arsenic	**36.3**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Barium	**118**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Beryllium	< 0.648	0.648		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Cadmium	**1.31**	0.162		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Calcium	**993**	8.10		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Chromium	**5.46**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Cobalt	< 1.62	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Copper	**56.8**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Iron	**68100**	324		mg/Kg dry	12/18/18 15:36	B8L0514	KJ1	100
Lead	**64.0**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Magnesium	**678**	81.0		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Manganese	**32.5**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Nickel	**4.87**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Potassium	**2760**	81.0		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Silver	**10.1**	4.40		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Sodium	**3120**	81.0		mg/Kg dry	12/18/18 16:21	B8L0514	KJ1	10
Thallium	**3.99**	0.428		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Vanadium	**27.1**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Zinc	**17.8**	1.62		mg/Kg dry	12/18/18 16:51	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.148**	0.081		mg/Kg dry	12/26/18 13:20	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**73.1**	0.100		% (Percent)	12/15/18 07:04	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	**72.1**	30.0		ug/Kg dry	12/18/18 08:53	B8L0740	JL	50
Ethylbenzene	**308**	231		ug/Kg dry	12/18/18 08:53	B8L0740	JL	50
Toluene	**459**	115		ug/Kg dry	12/18/18 08:53	B8L0740	JL	50
Xylenes, Total	**1320**	692		ug/Kg dry	12/18/18 08:53	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/18/18 08:53*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 91%* *Limits: 71-112*	*12/18/18 08:53*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%* *Limits: 85-119*	*12/18/18 08:53*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-8 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:28
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-23 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**287**	21.6		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
2-Methylnaphthalene	**328**	21.6		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Acenaphthene	**12.7**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Acenaphthylene	**82.0**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Anthracene	**128**	5.39		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Benzo(a)anthracene	**820**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Benzo(a)pyrene	**736**	21.6		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Benzo(b)fluoranthene	**771**	21.6		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Benzo(g,h,i)perylene	**326**	26.9		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Benzo(k)fluoranthene	**275**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Chrysene	**769**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Dibenzo(a,h)anthracene	**90.9**	53.9		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Fluoranthene	**1190**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Fluorene	**32.7**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**503**	10.8		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Naphthalene	**186**	26.9		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Phenanthrene	**699**	5.39		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Pyrene	**1160**	21.6		ug/Kg dry		12/22/18 05:39	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 64%*	*Limits: 50-150*	*12/22/18 05:39*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10			*S*	*Recovery: 47%*	*Limits: 50-150*	*12/22/18 05:39*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-8 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:29
Matrix: Soil
Lab ID: 18L0509-24

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4750**	81.5		mg/Kg dry	01/08/19 19:40	B9A0160	KJ1	10
Antimony	< 1.63	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Barium	**60.9**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Beryllium	< 0.163	0.163		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Cadmium	**0.711**	0.500		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Calcium	**1460**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Cobalt	**2.79**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Copper	**133**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Iron	**14400**	326		mg/Kg dry	01/08/19 18:14	B9A0160	KJ1	100
Lead	**42.6**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Magnesium	**802**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Manganese	**31.7**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Nickel	**10.5**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Potassium	**683**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:40	B9A0160	KJ1	10
Sodium	**328**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Vanadium	**13.8**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Zinc	**82.2**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.254**	0.073		mg/Kg dry	01/08/19 12:35	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.4**	0.100	H	% (Percent)	01/08/19 08:28	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**136**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
2-Methylnaphthalene	**103**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Acenaphthene	**69.0**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Acenaphthylene	**25.9**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Anthracene	**166**	5.40	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(a)anthracene	**729**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(a)pyrene	**987**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(b)fluoranthene	**813**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(g,h,i)perylene	**440**	27.0	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(k)fluoranthene	**263**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Chrysene	**506**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Dibenzo(a,h)anthracene	**132**	54.0	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-8 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:29
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-24 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**755**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Fluorene	**98.0**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**958**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Naphthalene	**60.4**	27.0	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Phenanthrene	**1300**	5.40	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Pyrene	**681**	21.6	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 10:04*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 10:04*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-9 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:31
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-26

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6290**	69.1		mg/Kg dry	12/18/18 16:25	B8L0514	KJ1	10
Antimony	< 1.38	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Arsenic	**14.8**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Barium	**54.9**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 16:25	B8L0514	KJ1	10
Cadmium	**1.04**	0.138		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Calcium	**748**	6.91		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Chromium	**7.11**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Cobalt	**12.5**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Copper	**476**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Iron	**41600**	276		mg/Kg dry	12/18/18 15:40	B8L0514	KJ1	100
Lead	**122**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Magnesium	**649**	69.1		mg/Kg dry	12/18/18 16:25	B8L0514	KJ1	10
Manganese	**592**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Nickel	**14.4**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Potassium	**488**	6.91		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Silver	**4.84**	4.40		mg/Kg dry	12/18/18 16:25	B8L0514	KJ1	10
Sodium	**384**	6.91		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Thallium	**3.83**	0.365		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Vanadium	**19.6**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Zinc	**93.4**	1.38		mg/Kg dry	12/18/18 16:56	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.191**	0.066		mg/Kg dry	12/26/18 13:22	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.9**	0.100		% (Percent)	12/15/18 07:06	B8L0496	MKP	1
Method: SW9045C								
pH	**6.43**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 19:51	B8L0744	JL	50
Ethylbenzene	< 171	171		ug/Kg dry	12/18/18 19:51	B8L0744	JL	50
Toluene	< 85.4	85.4		ug/Kg dry	12/18/18 19:51	B8L0744	JL	50
Xylenes, Total	< 512	512		ug/Kg dry	12/18/18 19:51	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 98%* *Limits: 91-106*	*12/18/18 19:51*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 93%* *Limits: 71-112*	*12/18/18 19:51*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 95%* *Limits: 85-119*	*12/18/18 19:51*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-9 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:31
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-26 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**979**	18.1		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
2-Methylnaphthalene	**1130**	18.1		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Acenaphthene	**19.5**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Acenaphthylene	**60.6**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Anthracene	**84.7**	4.53		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Benzo(a)anthracene	**445**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Benzo(a)pyrene	**437**	18.1		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Benzo(b)fluoranthene	**448**	18.1		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Benzo(g,h,i)perylene	**218**	22.7		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Benzo(k)fluoranthene	**173**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Chrysene	**377**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Dibenzo(a,h)anthracene	**66.2**	45.3		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Fluoranthene	**615**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Fluorene	**37.0**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**337**	9.07		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Naphthalene	**500**	22.7		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Phenanthrene	**864**	4.53		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Pyrene	**651**	18.1		ug/Kg dry		12/22/18 15:22	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 85%*	*Limits: 50-150*	*12/22/18 15:22*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 83%*	*Limits: 50-150*	*12/22/18 15:22*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-9 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:32
Matrix: Soil
Lab ID: 18L0509-27

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3240**	82.6		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Antimony	< 1.65	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Barium	**48.0**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Beryllium	< 0.165	0.165		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Cobalt	< 1.65	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Copper	**51.6**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Iron	**13600**	33.0		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Lead	**42.2**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Magnesium	**450**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Manganese	**13.8**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Nickel	**6.71**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Potassium	**764**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Sodium	**292**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Vanadium	**12.7**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Zinc	**14.7**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.201**	0.076		mg/Kg dry	01/08/19 12:37	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.1**	0.100	H	% (Percent)	01/08/19 08:30	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**50.1**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
2-Methylnaphthalene	**42.8**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Acenaphthene	**38.1**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Acenaphthylene	**18.3**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Anthracene	**63.5**	4.92	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(a)anthracene	**517**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(a)pyrene	**1000**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(b)fluoranthene	**722**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(g,h,i)perylene	**407**	24.6	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(k)fluoranthene	**304**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Chrysene	**375**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Dibenzo(a,h)anthracene	**123**	49.2	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Fluoranthene	**359**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-9 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:32
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-27 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluorene	**31.9**	9.85	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**928**	9.85	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Naphthalene	< 24.6	24.6	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Phenanthrene	**342**	4.92	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Pyrene	**341**	19.7	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 89%*	*Limits: 50-150*	*01/09/19 13:35*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 77%*	*Limits: 50-150*	*01/09/19 13:35*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-10 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 00:00
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-29

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3640**	77.9		mg/Kg dry	12/18/18 17:41	B8L0514	KJ1	10
Antimony	< 1.56	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Arsenic	**11.3**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Barium	**74.3**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Beryllium	< 0.623	0.623		mg/Kg dry	12/18/18 17:41	B8L0514	KJ1	10
Cadmium	**0.302**	0.156		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Calcium	**6510**	77.9		mg/Kg dry	12/18/18 17:41	B8L0514	KJ1	10
Chromium	**17.6**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Cobalt	**2.33**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Copper	**128**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Iron	**15700**	311		mg/Kg dry	12/18/18 17:29	B8L0514	KJ1	100
Lead	**58.8**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Magnesium	**434**	7.79		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Manganese	**18.6**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Nickel	**5.50**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Potassium	**705**	7.79		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 17:41	B8L0514	KJ1	10
Sodium	**142**	7.79		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Thallium	**2.78**	0.411		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Vanadium	**30.1**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Zinc	**12.3**	1.56		mg/Kg dry	12/18/18 18:26	B8L0514	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.238**	0.074		mg/Kg dry	12/26/18 13:25	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.5**	0.100		% (Percent)	12/15/18 07:08	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 20:23	B8L0744	JL	50
Ethylbenzene	< 290	290		ug/Kg dry	12/18/18 20:23	B8L0744	JL	50
Toluene	< 145	145		ug/Kg dry	12/18/18 20:23	B8L0744	JL	50
Xylenes, Total	< 871	871		ug/Kg dry	12/18/18 20:23	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 100%* *Limits: 91-106*	*12/18/18 20:23*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 90%* *Limits: 71-112*	*12/18/18 20:23*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 107%* *Limits: 85-119*	*12/18/18 20:23*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-10 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 00:00
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-29 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**10100**	203		ug/Kg dry		12/27/18 03:37	B8L0673	LP	10
2-Methylnaphthalene	**13500**	203		ug/Kg dry		12/27/18 03:37	B8L0673	LP	10
Acenaphthene	**117**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Acenaphthylene	**565**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Anthracene	**698**	5.08		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Benzo(a)anthracene	**2150**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Benzo(a)pyrene	**1390**	20.3		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Benzo(b)fluoranthene	**1770**	20.3		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Benzo(g,h,i)perylene	**607**	25.4		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Benzo(k)fluoranthene	**476**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Chrysene	**1620**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Dibenzo(a,h)anthracene	**248**	50.8		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Fluoranthene	**2900**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Fluorene	**407**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1050**	10.2		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Naphthalene	**5820**	254		ug/Kg dry		12/27/18 03:37	B8L0673	LP	10
Phenanthrene	**6660**	50.8		ug/Kg dry		12/27/18 03:37	B8L0673	LP	10
Pyrene	**2950**	20.3		ug/Kg dry		12/22/18 17:53	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/22/18 17:53*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 77%*	*Limits: 50-150*	*12/22/18 17:53*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-10 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 00:00
Matrix: Soil
Lab ID: 18L0509-30

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**13900**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Antimony	< 1.61	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Barium	**112**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Beryllium	< 0.161	0.161		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Cadmium	**0.627**	0.500		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Calcium	**4080**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Chromium	**13.5**	13.0		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Cobalt	**10.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Copper	**53.1**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Iron	**24000**	321		mg/Kg dry	01/08/19 18:22	B9A0160	KJ1	100
Lead	**32.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Magnesium	**2830**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Manganese	**614**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Nickel	**17.5**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Potassium	**1350**	8.04		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Sodium	**67.9**	8.04		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Thallium	< 3.90	3.90		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Vanadium	**24.0**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Zinc	**46.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	**4.74**	0.125		mg/L	01/21/19 15:09	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.269**	0.076		mg/Kg dry	01/08/19 12:47	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**77.1**	0.100	H	% (Percent)	01/08/19 08:32	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**29.3**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
2-Methylnaphthalene	**27.6**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Acenaphthene	**24.0**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Acenaphthylene	**32.4**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Anthracene	**66.9**	4.48	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(a)anthracene	**321**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(a)pyrene	**403**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(b)fluoranthene	**341**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-10 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 00:00
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-30 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**135**	22.4	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Benzo(k)fluoranthene	**130**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Chrysene	**223**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Dibenzo(a,h)anthracene	**45.0**	44.8	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Fluoranthene	**370**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Fluorene	**43.2**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**345**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Naphthalene	< 22.4	22.4	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Phenanthrene	**230**	4.48	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Pyrene	**293**	17.9	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 93%*	*Limits: 50-150*	*01/09/19 14:14*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 94%*	*Limits: 50-150*	*01/09/19 14:14*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-11 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:38
Matrix: Soil
Lab ID: 18L0509-31

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5110**	70.7		mg/Kg dry	12/18/18 21:17	B8L0552	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Arsenic	**249**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Barium	**55.1**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Beryllium	< 0.566	0.566		mg/Kg dry	12/18/18 21:17	B8L0552	KJ1	10
Cadmium	**0.741**	0.141		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Calcium	**80300**	707	B	mg/Kg dry	12/18/18 19:27	B8L0552	KJ1	100
Chromium	**4.84**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Cobalt	**4.22**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Copper	**53.1**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Iron	**21000**	283		mg/Kg dry	12/18/18 19:27	B8L0552	KJ1	100
Lead	**85.3**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Magnesium	**9210**	707		mg/Kg dry	12/18/18 19:27	B8L0552	KJ1	100
Manganese	**437**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Nickel	**12.2**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Potassium	**602**	7.07	B	mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:17	B8L0552	KJ1	10
Sodium	**184**	7.07		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Thallium	**2.32**	0.374		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Vanadium	**12.1**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Zinc	**82.6**	1.41		mg/Kg dry	12/18/18 23:25	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.094**	0.068		mg/Kg dry	12/26/18 13:28	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.9**	0.100		% (Percent)	12/15/18 07:10	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 20:56	B8L0744	JL	50
Ethylbenzene	< 232	232		ug/Kg dry	12/18/18 20:56	B8L0744	JL	50
Toluene	< 116	116		ug/Kg dry	12/18/18 20:56	B8L0744	JL	50
Xylenes, Total	< 695	695		ug/Kg dry	12/18/18 20:56	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/18/18 20:56*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 88%* *Limits: 71-112*	*12/18/18 20:56*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 101%* *Limits: 85-119*	*12/18/18 20:56*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-11 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:38
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-31 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**2180**	18.1		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
2-Methylnaphthalene	**2780**	18.1		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Acenaphthene	**57.1**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Acenaphthylene	**1470**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Anthracene	**667**	4.53		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Benzo(a)anthracene	**3490**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Benzo(a)pyrene	**3120**	18.1		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Benzo(b)fluoranthene	**7010**	90.6		ug/Kg dry		12/27/18 03:01	B8L0673	LP	5
Benzo(g,h,i)perylene	**1730**	22.6		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Benzo(k)fluoranthene	**1380**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Chrysene	**3440**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Dibenzo(a,h)anthracene	**591**	45.3		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Fluoranthene	**5740**	45.3		ug/Kg dry		12/27/18 03:01	B8L0673	LP	5
Fluorene	**114**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**2570**	9.06		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Naphthalene	**1730**	22.6		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Phenanthrene	**2920**	4.53		ug/Kg dry		12/22/18 18:31	B8L0673	LP	1
Pyrene	**6060**	90.6		ug/Kg dry		12/27/18 03:01	B8L0673	LP	5
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/22/18 18:31*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/22/18 18:31*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-12 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:42
Matrix: Soil
Lab ID: 18L0509-32

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4760**	67.1		mg/Kg dry	12/18/18 21:21	B8L0552	KJ1	10
Antimony	< 1.34	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Arsenic	**62.1**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Barium	**59.0**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:21	B8L0552	KJ1	10
Cadmium	**0.894**	0.134		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Calcium	**77900**	671	B	mg/Kg dry	12/18/18 19:31	B8L0552	KJ1	100
Chromium	**6.04**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Cobalt	**3.28**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Copper	**78.5**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Iron	**13300**	268		mg/Kg dry	12/18/18 19:31	B8L0552	KJ1	100
Lead	**80.1**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Magnesium	**10200**	67.1		mg/Kg dry	12/18/18 21:21	B8L0552	KJ1	10
Manganese	**611**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Nickel	**16.0**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Potassium	**533**	6.71	B	mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:21	B8L0552	KJ1	10
Sodium	**230**	6.71		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Thallium	**2.60**	0.354		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Vanadium	**11.3**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Zinc	**114**	1.34		mg/Kg dry	12/18/18 23:30	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.165**	0.068		mg/Kg dry	12/26/18 13:31	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.4**	0.100		% (Percent)	12/15/18 07:12	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 21:28	B8L0744	JL	50
Ethylbenzene	< 229	229		ug/Kg dry	12/18/18 21:28	B8L0744	JL	50
Toluene	< 115	115		ug/Kg dry	12/18/18 21:28	B8L0744	JL	50
Xylenes, Total	< 687	687		ug/Kg dry	12/18/18 21:28	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 91-106*	*12/18/18 21:28*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 90%* *Limits: 71-112*	*12/18/18 21:28*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 101%* *Limits: 85-119*	*12/18/18 21:28*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-12 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:42
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-32 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**1160**	17.9		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
2-Methylnaphthalene	**1090**	17.9		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Acenaphthene	**441**	8.97		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Acenaphthylene	**1120**	8.97		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Anthracene	**2230**	4.48		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Benzo(a)anthracene	**12400**	89.7		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Benzo(a)pyrene	**14000**	179		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Benzo(b)fluoranthene	**15000**	179		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Benzo(g,h,i)perylene	**4920**	224		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Benzo(k)fluoranthene	**3010**	8.97		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Chrysene	**9830**	89.7		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Dibenzo(a,h)anthracene	**1510**	44.8		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Fluoranthene	**20100**	89.7		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Fluorene	**596**	8.97		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**12300**	89.7		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Naphthalene	**725**	22.4		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Phenanthrene	**14100**	44.8		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Pyrene	**13100**	17.9		ug/Kg dry		12/22/18 19:09	B8L0673	LP	1
Pyrene	**21200**	179		ug/Kg dry		12/27/18 04:14	B8L0673	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 99%*	*Limits: 50-150*	*12/22/18 19:09*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 95%*	*Limits: 50-150*	*12/22/18 19:09*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-13 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:45
Matrix: Soil
Lab ID: 18L0509-33

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7610**	715		mg/Kg dry	12/18/18 19:35	B8L0552	KJ1	100
Antimony	< 1.43	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Arsenic	**9.81**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Barium	**130**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Beryllium	< 0.572	0.572		mg/Kg dry	12/18/18 21:26	B8L0552	KJ1	10
Cadmium	**0.437**	0.143		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Calcium	**22500**	715	B	mg/Kg dry	12/18/18 19:35	B8L0552	KJ1	100
Chromium	**10.4**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Cobalt	**6.48**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Copper	**27.9**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Iron	**11700**	286		mg/Kg dry	12/18/18 19:35	B8L0552	KJ1	100
Lead	**78.6**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Magnesium	**9410**	715		mg/Kg dry	12/18/18 19:35	B8L0552	KJ1	100
Manganese	**448**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Nickel	**11.6**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Potassium	**1990**	71.5	B	mg/Kg dry	12/18/18 21:26	B8L0552	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:26	B8L0552	KJ1	10
Sodium	**1060**	7.15		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Thallium	**2.13**	0.377		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Vanadium	**20.8**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Zinc	**82.6**	1.43		mg/Kg dry	12/18/18 23:34	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.067	0.067		mg/Kg dry	12/26/18 13:39	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.0**	0.100		% (Percent)	12/15/18 07:14	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,1,2-Trichloroethane	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,1-Dichloroethane	< 3.91	3.91		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,1-Dichloroethene	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,2-Dichloroethane	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1,2-Dichloropropane	< 1.95	1.95		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
1-Butanol	< 195	195		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
2-Butanone	< 27.4	27.4		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1
2-Hexanone	< 27.4	27.4		ug/Kg dry	12/21/18 08:08	B8L0747	JL	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-13 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:45
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-33 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
4-Methyl-2-pentanone	< 27.4	27.4		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Acetone	< 68.4	68.4		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Acrylonitrile	< 0.957	0.957		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Benzene	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Bromodichloromethane	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Bromoform	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Bromomethane	< 19.5	19.5		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Carbon disulfide	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Carbon tetrachloride	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Chlorobenzene	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Chloroethane	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Chloroform	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Chloromethane	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
cis-1,2-Dichloroethene	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Dibromochloromethane	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Ethylbenzene	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
m,p-Xylene	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Methyl tert-butyl ether	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Methylene chloride	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
o-Xylene	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Styrene	< 7.82	7.82		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Tetrachloroethene	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Toluene	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
trans-1,2-Dichloroethene	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Trichloroethene	< 1.95	1.95		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Vinyl acetate	< 19.5	19.5		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Vinyl chloride	< 3.91	3.91		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Xylenes, Total	< 11.7	11.7		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 08:08	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 120%*	*Limits: 88-136*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 126%*	*Limits: 71-136*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 95%*	*Limits: 81-114*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%*	*Limits: 85-116*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%*	*Limits: 79-119*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 110%*	*Limits: 90-142*	*12/21/18 08:08*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-13 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:45
Matrix: Soil
Lab ID: 18L0509-33 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,2-Dichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,3-Dichlorobenzene	< 27.6	27.6		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,4-Dichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dimethylphenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dinitrophenol	< 465	465		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Chloronaphthalene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Chlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Methylphenol	< 47.1	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Nitrophenol	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
3 & 4-Methylphenol	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1410	1410		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chloroaniline	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Nitrophenol	< 1890	1890		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Acenaphthene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Acenaphthylene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Anthracene	**51.8**	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzidine	< 195	195		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(a)anthracene	**199**	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(a)pyrene	**254**	90.0		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(b)fluoranthene	**409**	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(g,h,i)perylene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(k)fluoranthene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1890	1890		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 283	283		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Butyl benzyl phthalate	< 283	283		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Carbazole	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Chrysene	**242**	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Diethyl phthalate	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Dimethyl phthalate	< 47.1	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Di-n-butyl phthalate	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Di-n-octyl phthalate	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Fluoranthene	**409**	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Fluorene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Hexachlorobenzene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-13 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:45
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-33 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1890	1890		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Hexachloroethane	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 377	377		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Isophorone	< 566	566		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Naphthalene	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 44.2	44.2		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 94.3	94.3		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Pentachlorophenol	< 254	254		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Phenanthrene	**166**	94.3		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Phenol	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Pyrene	**363**	47.1		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 74%*	*Limits: 8-125*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 79%*	*Limits: 17-131*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 80%*	*Limits: 8-117*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 80%*	*Limits: 15-124*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 77%*	*Limits: 26-120*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 97%*	*Limits: 42-143*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-14 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:49
Matrix: Soil
Lab ID: 18L0509-34

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7350**	64.9		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Antimony	< 1.30	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Arsenic	**7.99**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Barium	**123**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Cadmium	**0.299**	0.130		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Calcium	**94100**	649	B	mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Chromium	**5.58**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Cobalt	**2.90**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Copper	**25.6**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Iron	**12000**	260		mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Lead	**32.5**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Magnesium	**17000**	649		mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Manganese	**464**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Nickel	**10.3**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Potassium	**896**	6.49	B	mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Sodium	**258**	6.49		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Thallium	**1.82**	0.343		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Vanadium	**12.6**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Zinc	**48.7**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 13:42	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**93.8**	0.100		% (Percent)	12/15/18 07:16	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Ethylbenzene	< 202	202		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Toluene	< 101	101		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Xylenes, Total	< 607	607		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%* *Limits: 91-106*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%* *Limits: 71-112*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 92%* *Limits: 85-119*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-14 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:49
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-34 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 165	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
2-Methylnaphthalene	< 165	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Acenaphthene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Acenaphthylene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Anthracene	**65.9**	41.2		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(a)anthracene	**216**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(a)pyrene	**372**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(b)fluoranthene	**345**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(g,h,i)perylene	**212**	206		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(k)fluoranthene	**131**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Chrysene	**158**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Dibenzo(a,h)anthracene	< 412	412		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Fluoranthene	**275**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Fluorene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Indeno(1,2,3-cd)pyrene	**357**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Naphthalene	< 206	206		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Phenanthrene	**152**	41.2		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Pyrene	**272**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 04:51*	*B8L0673*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 04:51*	*B8L0673*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-15 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:53
Matrix: Soil
Lab ID: 18L0509-35

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5610**	66.6		mg/Kg dry	12/19/18 22:15	B8L0622	KJ1	10
Antimony	< 1.33	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Arsenic	**8.82**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Barium	**37.9**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Beryllium	< 0.133	0.133		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Cadmium	**0.471**	0.133		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Calcium	**144000**	6660		mg/Kg dry	12/20/18 22:58	B8L0622	KJ1	1000
Chromium	**24.3**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Cobalt	**2.95**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Copper	**13.3**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Iron	**12400**	266	B	mg/Kg dry	12/19/18 21:02	B8L0622	KJ1	100
Lead	**38.1**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Magnesium	**34600**	666		mg/Kg dry	12/19/18 21:02	B8L0622	KJ1	100
Manganese	**675**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Nickel	**11.4**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Potassium	**1020**	6.66		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Silver	**35.6**	4.40		mg/Kg dry	12/19/18 22:15	B8L0622	KJ1	10
Sodium	**289**	6.66		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Thallium	**1.99**	0.351		mg/Kg dry	12/20/18 23:14	B8L0622	KJ1	1
Vanadium	**9.89**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Zinc	**45.0**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:21	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:21	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	< 0.0250	0.0250		mg/L	01/10/19 11:55	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.068	0.068		mg/Kg dry	12/26/18 13:45	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.7**	0.100		% (Percent)	12/15/18 08:05	B8L0498	MKP	1
Method: SW9045C								
pH	**8.68**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-15 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:53
Matrix: Soil
Lab ID: 18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1,2-Trichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1-Dichloroethane	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1-Dichloroethene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dichloropropane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1-Butanol	< 190	190		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
2-Butanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
2-Hexanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
4-Methyl-2-pentanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Acetone	< 66.5	66.5		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Acrylonitrile	< 0.931	0.931		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Benzene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromodichloromethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromoform	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromomethane	< 19.0	19.0		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Carbon disulfide	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Carbon tetrachloride	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chlorobenzene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloroethane	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloroform	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloromethane	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
cis-1,2-Dichloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Dibromochloromethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Ethylbenzene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
m,p-Xylene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Methyl tert-butyl ether	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Methylene chloride	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
o-Xylene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Styrene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Tetrachloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Toluene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
trans-1,2-Dichloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Trichloroethene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Vinyl acetate	< 19.0	19.0		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Vinyl chloride	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Xylenes, Total	< 11.4	11.4		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 122%* *Limits: 88-136*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 126%* *Limits: 71-136*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 81-114*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 85-116*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-15 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:53
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: 4-Bromofluorobenzene				*Recovery: 107%*	*Limits: 79-119*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 116%*	*Limits: 90-142*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D / SW3550									
1,2,4-Trichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,2-Dichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,3-Dichlorobenzene	< 27.0	27.0		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,4-Dichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dimethylphenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dinitrophenol	< 454	454		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Chloronaphthalene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Chlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Methylphenol	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Nitrophenol	< 369	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 369	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
3 & 4-Methylphenol	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1380	1380		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chloroaniline	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Nitrophenol	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Acenaphthene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Acenaphthylene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Anthracene	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzidine	< 191	191		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(a)anthracene	**177**	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(a)pyrene	**154**	90.0		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(b)fluoranthene	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(b)fluoranthene	**389**	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(g,h,i)perylene	< 369	369		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(g,h,i)perylene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(k)fluoranthene	< 369	369		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 276	276		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Butyl benzyl phthalate	< 276	276		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Carbazole	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Chrysene	**195**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-15 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:53
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Diethyl phthalate	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Dimethyl phthalate	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Di-n-butyl phthalate	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Di-n-octyl phthalate	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Fluoranthene	**349**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Fluorene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorobenzene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorobutadiene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachloroethane	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Isophorone	< 553	553		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Naphthalene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 43.2	43.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Pentachlorophenol	< 248	248		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Phenanthrene	**144**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Phenol	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Pyrene	**374**	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 76%*	*Limits: 8-125*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 85%*	*Limits: 17-131*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 76%*	*Limits: 8-117*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 85%*	*Limits: 15-124*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 82%*	*Limits: 26-120*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 118%*	*Limits: 42-143*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-16 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:58
Matrix: Soil
Lab ID: 18L0509-36

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5720**	67.0		mg/Kg dry	12/18/18 21:34	B8L0552	KJ1	10
Antimony	< 1.34	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Arsenic	**10.1**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Barium	**95.1**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:34	B8L0552	KJ1	10
Cadmium	**0.485**	0.134		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Calcium	**145000**	5520	B	mg/Kg dry	12/19/18 19:05	B8L0552	KJ1	1000
Chromium	**6.13**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Cobalt	**2.65**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Copper	**25.2**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Iron	**14800**	268		mg/Kg dry	12/18/18 19:43	B8L0552	KJ1	100
Lead	**63.1**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Magnesium	**22800**	670		mg/Kg dry	12/18/18 19:43	B8L0552	KJ1	100
Manganese	**549**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Nickel	**8.90**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Potassium	**780**	6.70	B	mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:34	B8L0552	KJ1	10
Sodium	**464**	6.70		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Thallium	**2.04**	0.354		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Vanadium	**10.5**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Zinc	**89.2**	1.34		mg/Kg dry	12/18/18 23:44	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.168**	0.064		mg/Kg dry	12/26/18 13:47	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**89.4**	0.100		% (Percent)	12/15/18 08:07	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 22:33	B8L0744	JL	50
Ethylbenzene	< 191	191		ug/Kg dry	12/18/18 22:33	B8L0744	JL	50
Toluene	< 95.7	95.7		ug/Kg dry	12/18/18 22:33	B8L0744	JL	50
Xylenes, Total	< 574	574		ug/Kg dry	12/18/18 22:33	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 99%* *Limits: 91-106*	*12/18/18 22:33*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 89%* *Limits: 71-112*	*12/18/18 22:33*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 95%* *Limits: 85-119*	*12/18/18 22:33*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-16 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:58
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-36 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 175	175		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
2-Methylnaphthalene	< 175	175		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Acenaphthene	< 87.5	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Acenaphthylene	**486**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Anthracene	**252**	43.8		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Benzo(a)anthracene	**1920**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Benzo(a)pyrene	**3560**	175		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Benzo(b)fluoranthene	**3760**	175		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Benzo(g,h,i)perylene	**1300**	219		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Benzo(k)fluoranthene	**919**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Chrysene	**1700**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Dibenzo(a,h)anthracene	< 438	438		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Fluoranthene	**2110**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Fluorene	< 87.5	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Indeno(1,2,3-cd)pyrene	**3430**	87.5		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Naphthalene	< 219	219		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Phenanthrene	**565**	43.8		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Pyrene	**2350**	175		ug/Kg dry		12/27/18 05:30	B8L0673	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 05:30*	*B8L0673*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 99%*	*Limits: 50-150*	*12/27/18 05:30*	*B8L0673*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-17 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:02
Matrix: Soil
Lab ID: 18L0509-37

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3900**	65.5		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Antimony	< 1.31	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Arsenic	**9.01**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Barium	**38.4**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Cadmium	**0.574**	0.131		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Calcium	**93200**	655	B	mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Chromium	**3.06**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Cobalt	**2.08**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Copper	**77.5**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Iron	**15000**	262		mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Lead	**44.0**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Magnesium	**34800**	655		mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Manganese	**404**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Nickel	**7.19**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Potassium	**568**	6.55	B	mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Sodium	**344**	6.55		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Thallium	**1.71**	0.346		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Vanadium	**7.63**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Zinc	**67.5**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.081**	0.067		mg/Kg dry	12/26/18 13:50	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.3**	0.100		% (Percent)	12/15/18 08:09	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1,2-Trichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1-Dichloroethane	< 4.25	4.25		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1-Dichloroethene	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dichloropropane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1-Butanol	< 213	213		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
2-Butanone	< 29.8	29.8		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
2-Hexanone	< 29.8	29.8		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-17 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:02
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-37 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
4-Methyl-2-pentanone	< 29.8	29.8		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Acetone	< 74.4	74.4		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Acrylonitrile	< 1.04	1.04		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Benzene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromodichloromethane	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromoform	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromomethane	< 21.3	21.3		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Carbon disulfide	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Carbon tetrachloride	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chlorobenzene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloroethane	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloroform	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloromethane	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
cis-1,2-Dichloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Dibromochloromethane	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Ethylbenzene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
m,p-Xylene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Methyl tert-butyl ether	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Methylene chloride	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
o-Xylene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Styrene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Tetrachloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Toluene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
trans-1,2-Dichloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Trichloroethene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Vinyl acetate	< 21.3	21.3		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Vinyl chloride	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Xylenes, Total	< 12.8	12.8		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 124%*	*Limits: 88-136*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 128%*	*Limits: 71-136*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 94%*	*Limits: 81-114*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%*	*Limits: 85-116*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%*	*Limits: 79-119*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 112%*	*Limits: 90-142*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-17 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:02
Matrix: Soil
Lab ID: 18L0509-37 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,2-Dichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,3-Dichlorobenzene	< 20.0	20.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,4-Dichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dimethylphenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dinitrophenol	< 200	200		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dinitrotoluene	< 139	139		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,6-Dinitrotoluene	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Chloronaphthalene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Chlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Methylphenol	< 11.6	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Nitrophenol	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
3 & 4-Methylphenol	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 348	348		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chloroaniline	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Nitrophenol	< 464	464		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Acenaphthene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Acenaphthylene	**64.1**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Anthracene	**37.1**	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzidine	< 48.1	48.1		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(a)anthracene	**146**	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(a)pyrene	**196**	90.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(b)fluoranthene	**402**	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(g,h,i)perylene	**72.2**	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(k)fluoranthene	**133**	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-chloroethyl)ether	< 348	348		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 464	464		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 69.6	69.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Butyl benzyl phthalate	< 69.6	69.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Carbazole	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Chrysene	**180**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Diethyl phthalate	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Dimethyl phthalate	< 11.6	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Di-n-butyl phthalate	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Di-n-octyl phthalate	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Fluoranthene	**286**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Fluorene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Hexachlorobenzene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-17 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:02
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-37 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 46.4	46.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 464	464		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Hexachloroethane	< 46.4	46.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 92.8	92.8		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Isophorone	< 139	139		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Naphthalene	< 46.4	46.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Nitrobenzene	< 46.4	46.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 10.9	10.9		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 23.2	23.2		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Pentachlorophenol	< 62.4	62.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Phenanthrene	**92.8**	23.2		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Phenol	< 46.4	46.4		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Pyrene	**278**	11.6		ug/Kg dry		12/26/18 14:15	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 72%*	*Limits: 8-125*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 80%*	*Limits: 17-131*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 74%*	*Limits: 8-117*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 75%*	*Limits: 15-124*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 89%*	*Limits: 26-120*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 106%*	*Limits: 42-143*	*12/26/18 14:15*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-18 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:05
Matrix: Soil
Lab ID: 18L0509-38

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**10800**	71.6		mg/Kg dry	12/18/18 21:42	B8L0552	KJ1	10
Antimony	< 1.43	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Arsenic	**28.8**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Barium	**140**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Beryllium	< 0.573	0.573		mg/Kg dry	12/18/18 21:42	B8L0552	KJ1	10
Cadmium	**1.45**	0.143		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Calcium	**94400**	716	B	mg/Kg dry	12/18/18 19:51	B8L0552	KJ1	100
Chromium	**8.01**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Cobalt	**4.84**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Copper	**119**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Iron	**25400**	287		mg/Kg dry	12/18/18 19:51	B8L0552	KJ1	100
Lead	**280**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Magnesium	**8830**	71.6		mg/Kg dry	12/18/18 21:42	B8L0552	KJ1	10
Manganese	**823**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Nickel	**15.2**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Potassium	**1170**	7.16	B	mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Silver	**4.79**	4.40		mg/Kg dry	12/18/18 21:42	B8L0552	KJ1	10
Sodium	**1250**	7.16		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Thallium	**3.58**	0.378		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Vanadium	**27.9**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Zinc	**370**	1.43		mg/Kg dry	12/19/18 00:09	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Lead, TCLP	**0.0161**	0.00750		mg/L	01/08/19 18:23	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.164**	0.078		mg/Kg dry	12/26/18 13:52	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**76.6**	0.100		% (Percent)	12/15/18 08:11	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 23:05	B8L0744	JL	50
Ethylbenzene	< 250	250		ug/Kg dry	12/18/18 23:05	B8L0744	JL	50
Toluene	< 125	125		ug/Kg dry	12/18/18 23:05	B8L0744	JL	50
Xylenes, Total	< 751	751		ug/Kg dry	12/18/18 23:05	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/18/18 23:05*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 23:05*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%* *Limits: 85-119*	*12/18/18 23:05*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-18 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:05
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-38 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**349**	20.4		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
2-Methylnaphthalene	**387**	20.4		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Acenaphthene	**16.6**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Acenaphthylene	**317**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Anthracene	**156**	5.11		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Benzo(a)anthracene	**720**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Benzo(a)pyrene	**905**	20.4		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Benzo(b)fluoranthene	**1140**	20.4		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Benzo(g,h,i)perylene	**833**	25.5		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Benzo(k)fluoranthene	**358**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Chrysene	**738**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Dibenzo(a,h)anthracene	**165**	51.1		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Fluoranthene	**1230**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Fluorene	**32.8**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**964**	10.2		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Naphthalene	**202**	25.5		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Phenanthrene	**866**	5.11		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Pyrene	**1140**	20.4		ug/Kg dry		12/22/18 19:47	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 19:47*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 19:47*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-19 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:07
Matrix: Soil
Lab ID: 18L0509-39

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**12000**	73.8		mg/Kg dry	12/18/18 21:47	B8L0552	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Arsenic	**22.0**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Barium	**266**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Beryllium	< 0.590	0.590		mg/Kg dry	12/18/18 21:47	B8L0552	KJ1	10
Cadmium	**2.84**	0.148		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Calcium	**40900**	738	B	mg/Kg dry	12/18/18 20:12	B8L0552	KJ1	100
Chromium	**11.1**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Cobalt	**9.15**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Copper	**504**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Iron	**33800**	295		mg/Kg dry	12/18/18 20:12	B8L0552	KJ1	100
Lead	**5770**	14.8		mg/Kg dry	12/18/18 21:47	B8L0552	KJ1	10
Magnesium	**6500**	73.8		mg/Kg dry	12/18/18 21:47	B8L0552	KJ1	10
Manganese	**467**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Nickel	**26.8**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Potassium	**1170**	7.38	B	mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Silver	**5.84**	4.40		mg/Kg dry	12/18/18 21:47	B8L0552	KJ1	10
Sodium	**1090**	7.38		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Thallium	**3.62**	0.390		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Vanadium	**30.5**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Zinc	**646**	1.48		mg/Kg dry	12/19/18 00:14	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.525**	0.071		mg/Kg dry	12/26/18 13:54	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**84.1**	0.100		% (Percent)	12/15/18 08:13	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,1,2-Trichloroethane	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,1-Dichloroethane	< 4.70	4.70		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,1-Dichloroethene	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,2-Dichloroethane	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1,2-Dichloropropane	< 2.35	2.35		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
1-Butanol	< 235	235		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
2-Butanone	< 32.9	32.9		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1
2-Hexanone	< 32.9	32.9		ug/Kg dry	12/21/18 09:45	B8L0747	JL	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-19 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:07
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-39 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
4-Methyl-2-pentanone	< 32.9	32.9		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Acetone	< 82.2	82.2		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Acrylonitrile	< 1.15	1.15		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Benzene	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Bromodichloromethane	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Bromoform	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Bromomethane	< 23.5	23.5		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Carbon disulfide	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Carbon tetrachloride	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Chlorobenzene	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Chloroethane	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Chloroform	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Chloromethane	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
cis-1,2-Dichloroethene	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Dibromochloromethane	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Ethylbenzene	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
m,p-Xylene	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Methyl tert-butyl ether	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Methylene chloride	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
o-Xylene	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Styrene	< 9.40	9.40		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Tetrachloroethene	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Toluene	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
trans-1,2-Dichloroethene	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Trichloroethene	< 2.35	2.35		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Vinyl acetate	< 23.5	23.5		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Vinyl chloride	< 4.70	4.70		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Xylenes, Total	< 14.1	14.1		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 09:45	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 117%*	*Limits: 88-136*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 129%*	*Limits: 71-136*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 97%*	*Limits: 81-114*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%*	*Limits: 85-116*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 111%*	*Limits: 79-119*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 113%*	*Limits: 90-142*	*12/21/18 09:45*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-19 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:07
Matrix: Soil
Lab ID: 18L0509-39 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 47.6	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
1,2-Dichlorobenzene	< 47.6	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
1,3-Dichlorobenzene	< 20.0	20.0		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
1,4-Dichlorobenzene	< 47.6	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4-Dichlorophenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4-Dimethylphenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4-Dinitrophenol	< 200	200		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,4-Dinitrotoluene	< 143	143		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2,6-Dinitrotoluene	< 95.2	95.2		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2-Chloronaphthalene	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2-Chlorophenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2-Methylphenol	< 11.9	11.9		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
2-Nitrophenol	< 95.2	95.2		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 95.2	95.2		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
3 & 4-Methylphenol	< 47.6	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 357	357		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 35.7	35.7		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4-Chloroaniline	< 35.7	35.7		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 35.7	35.7		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
4-Nitrophenol	< 476	476		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Acenaphthene	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Acenaphthylene	**350**	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Anthracene	**179**	11.9		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzidine	< 49.4	49.4		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzo(a)anthracene	**656**	11.9		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzo(a)pyrene	**944**	90.0		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzo(b)fluoranthene	**1720**	95.2		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzo(g,h,i)perylene	**379**	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Benzo(k)fluoranthene	**577**	47.6		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Bis(2-chloroethyl)ether	< 357	357		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 476	476		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 71.4	71.4		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Butyl benzyl phthalate	< 71.4	71.4		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Carbazole	**97.6**	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Chrysene	**778**	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Dibenzo(a,h)anthracene	**105**	90.0		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Diethyl phthalate	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Dimethyl phthalate	< 11.9	11.9		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Di-n-butyl phthalate	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Di-n-octyl phthalate	< 95.2	95.2		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Fluoranthene	**1340**	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Fluorene	**28.3**	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1
Hexachlorobenzene	< 23.8	23.8		ug/Kg dry	12/26/18 12:11	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-19 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:07
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-39 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 47.6	47.6		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 476	476		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Hexachloroethane	< 47.6	47.6		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	**469**	95.2		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Isophorone	< 143	143		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Naphthalene	**57.1**	47.6		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Nitrobenzene	< 47.6	47.6		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 11.2	11.2		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 23.8	23.8		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Pentachlorophenol	< 64.1	64.1		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Phenanthrene	**601**	23.8		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Phenol	< 47.6	47.6		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Pyrene	**1310**	11.9		ug/Kg dry		12/26/18 12:11	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 69%*	*Limits: 8-125*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 75%*	*Limits: 17-131*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 73%*	*Limits: 8-117*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 74%*	*Limits: 15-124*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 86%*	*Limits: 26-120*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 105%*	*Limits: 42-143*	*12/26/18 12:11*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-20 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:10
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-40

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**10600**	73.9		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Arsenic	**12.7**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Barium	**139**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Beryllium	< 0.591	0.591		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Cadmium	**1.77**	0.148		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Calcium	**21800**	739	B	mg/Kg dry	12/18/18 20:16	B8L0552	KJ1	100
Chromium	**9.33**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Cobalt	**5.49**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Copper	**264**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Iron	**32800**	296		mg/Kg dry	12/18/18 20:16	B8L0552	KJ1	100
Lead	**184**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Magnesium	**4440**	73.9		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Manganese	**349**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Nickel	**13.9**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Potassium	**957**	7.39	B	mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Silver	**4.82**	4.40		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Sodium	**438**	7.39		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Thallium	**3.22**	0.390		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Vanadium	**24.7**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Zinc	**269**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Lead, TCLP	< 0.00750	0.00750		mg/L	01/08/19 18:24	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.477**	0.070		mg/Kg dry	12/26/18 13:57	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**80.7**	0.100		% (Percent)	12/15/18 08:15	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Ethylbenzene	< 257	257		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Toluene	< 128	128		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Xylenes, Total	< 771	771		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 85%* *Limits: 71-112*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 102%* *Limits: 85-119*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-20 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:10
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-40 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**717**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
2-Methylnaphthalene	**787**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Acenaphthene	< 9.79	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Acenaphthylene	**226**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Anthracene	**153**	4.89		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(a)anthracene	**570**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(a)pyrene	**634**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(b)fluoranthene	**784**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(g,h,i)perylene	**402**	24.5		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(k)fluoranthene	**228**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Chrysene	**523**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Dibenzo(a,h)anthracene	**107**	48.9		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Fluoranthene	**653**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Fluorene	**24.8**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**580**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Naphthalene	**360**	24.5		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Phenanthrene	**977**	4.89		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Pyrene	**703**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/22/18 20:25*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/22/18 20:25*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-21 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:16
Matrix: Soil
Lab ID: 18L0509-41

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**9520**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Arsenic	**8.87**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Barium	**81.5**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Beryllium	< 0.141	0.141		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Cadmium	**0.846**	0.141		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Calcium	**7790**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Chromium	**42.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Cobalt	**7.44**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Copper	**51.4**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Iron	**26900**	281	B	mg/Kg dry	12/19/18 21:06	B8L0622	KJ1	100
Lead	**55.3**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Magnesium	**2690**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Manganese	**304**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Nickel	**18.7**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Potassium	**1070**	7.03		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Silver	**44.5**	4.40		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Sodium	**215**	7.03		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Thallium	**2.70**	0.371		mg/Kg dry	12/20/18 23:19	B8L0622	KJ1	1
Vanadium	**24.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Zinc	**79.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:30	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:30	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:30	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:30	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.088**	0.072		mg/Kg dry	12/26/18 14:00	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.2**	0.100		% (Percent)	12/15/18 08:17	B8L0498	MKP	1
Method: SW9045C								
pH	**8.08**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-21 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:16
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-41 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Ethylbenzene	< 221	221		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Toluene	< 111	111		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Xylenes, Total	< 664	664		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%*	*Limits: 91-106*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 97%*	*Limits: 85-119*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**885**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
2-Methylnaphthalene	**1130**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Acenaphthene	< 9.65	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Acenaphthylene	**54.0**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Anthracene	**68.6**	4.82		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(a)anthracene	**208**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(a)pyrene	**198**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(b)fluoranthene	**195**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(g,h,i)perylene	**99.4**	24.1		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(k)fluoranthene	**56.5**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Chrysene	**166**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 48.2	48.2		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Fluoranthene	**216**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Fluorene	**22.1**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**146**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Naphthalene	**557**	24.1		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Phenanthrene	**742**	4.82		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Pyrene	**255**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 21:03*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/22/18 21:03*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-22 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:18
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-42

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3970**	67.7		mg/Kg dry	01/08/19 20:08	B9A0160	KJ1	10
Antimony	< 1.35	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Arsenic	**14.9**	11.3		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Barium	**45.5**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Beryllium	< 0.135	0.135		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Cadmium	**1.08**	0.500		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Calcium	**76500**	677		mg/Kg dry	01/08/19 18:26	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Cobalt	**3.37**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Copper	**67.8**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Iron	**22100**	271		mg/Kg dry	01/08/19 18:26	B9A0160	KJ1	100
Lead	**80.3**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Magnesium	**13400**	677		mg/Kg dry	01/08/19 18:26	B9A0160	KJ1	100
Manganese	**210**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Nickel	**10.3**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Potassium	**585**	6.77		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:08	B9A0160	KJ1	10
Sodium	**236**	6.77		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Thallium	< 2.70	2.70		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Vanadium	**12.0**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Zinc	**82.0**	1.35		mg/Kg dry	01/08/19 21:38	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.113**	0.063		mg/Kg dry	01/08/19 12:50	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**90.5**	0.100	H	% (Percent)	01/08/19 08:34	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**195**	14.8	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
2-Methylnaphthalene	**248**	14.8	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Acenaphthene	**25.1**	7.41	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Acenaphthylene	**819**	7.41	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Anthracene	**371**	3.71	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Benzo(a)anthracene	**1850**	7.41	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Benzo(a)pyrene	**2120**	14.8	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Benzo(b)fluoranthene	**3060**	14.8	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Benzo(g,h,i)perylene	**1370**	18.5	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Benzo(k)fluoranthene	**854**	7.41	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Chrysene	**1600**	7.41	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1
Dibenzo(a,h)anthracene	**386**	37.1	H	ug/Kg dry	01/09/19 14:52	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-22 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:18
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-42 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**2210**	7.41	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Fluorene	**42.8**	7.41	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**2110**	7.41	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Naphthalene	**159**	18.5	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Phenanthrene	**592**	3.71	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Pyrene	**2280**	14.8	H	ug/Kg dry		01/09/19 14:52	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 98%*	*Limits: 50-150*	*01/09/19 14:52*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 96%*	*Limits: 50-150*	*01/09/19 14:52*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-23 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:21
Matrix: Soil
Lab ID: 18L0509-43

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5100**	69.9		mg/Kg dry	12/18/18 22:11	B8L0552	KJ1	10
Antimony	< 1.40	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Arsenic	**20.6**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Barium	**85.4**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:11	B8L0552	KJ1	10
Cadmium	**1.27**	0.140		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Calcium	**65400**	699	B	mg/Kg dry	12/18/18 20:20	B8L0552	KJ1	100
Chromium	**12.2**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Cobalt	**4.66**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Copper	**109**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Iron	**37000**	279		mg/Kg dry	12/18/18 20:20	B8L0552	KJ1	100
Lead	**147**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Magnesium	**6470**	69.9		mg/Kg dry	12/18/18 22:11	B8L0552	KJ1	10
Manganese	**344**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Nickel	**13.4**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Potassium	**701**	6.99	B	mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:11	B8L0552	KJ1	10
Sodium	**186**	6.99		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Thallium	**2.93**	0.369		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Vanadium	**16.3**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Zinc	**126**	1.40		mg/Kg dry	12/19/18 00:24	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.137**	0.074		mg/Kg dry	12/26/18 14:02	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.9**	0.100		% (Percent)	12/15/18 08:19	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 00:42	B8L0744	JL	50
Ethylbenzene	< 261	261		ug/Kg dry	12/19/18 00:42	B8L0744	JL	50
Toluene	< 130	130		ug/Kg dry	12/19/18 00:42	B8L0744	JL	50
Xylenes, Total	< 782	782		ug/Kg dry	12/19/18 00:42	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 99%* *Limits: 91-106*	*12/19/18 00:42*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%* *Limits: 71-112*	*12/19/18 00:42*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 103%* *Limits: 85-119*	*12/19/18 00:42*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-23 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:21
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-43 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**559**	40.8		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
2-Methylnaphthalene	**698**	40.8		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Acenaphthene	**27.9**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Acenaphthylene	**1130**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Anthracene	**585**	10.2		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Benzo(a)anthracene	**2520**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Benzo(a)pyrene	**3570**	40.8		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Benzo(b)fluoranthene	**4690**	40.8		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Benzo(g,h,i)perylene	**2200**	51.0		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Benzo(k)fluoranthene	**1080**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Chrysene	**2200**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Dibenzo(a,h)anthracene	**620**	102		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Fluoranthene	**2560**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Fluorene	**72.5**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Indeno(1,2,3-cd)pyrene	**4170**	20.4		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Naphthalene	**394**	51.0		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Phenanthrene	**1140**	10.2		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Pyrene	**3250**	40.8		ug/Kg dry		12/27/18 01:47	B8L0673	LP	2
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 99%*	*Limits: 50-150*	*12/27/18 01:47*	*B8L0673*	*LP*	*2*
Surrogate: Fluoranthene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 01:47*	*B8L0673*	*LP*	*2*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-24 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:25
Matrix: Soil
Lab ID: 18L0509-44

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7750**	763		mg/Kg dry	01/08/19 18:30	B9A0160	KJ1	100
Antimony	< 1.53	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Arsenic	**22.2**	11.3		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Barium	**123**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Beryllium	< 0.153	0.153		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Cadmium	**1.13**	0.500		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Calcium	**29800**	763		mg/Kg dry	01/08/19 18:30	B9A0160	KJ1	100
Chromium	**15.9**	13.0		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Cobalt	**5.80**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Copper	**55.9**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Iron	**17200**	305		mg/Kg dry	01/08/19 18:30	B9A0160	KJ1	100
Lead	**72.9**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Magnesium	**7280**	763		mg/Kg dry	01/08/19 18:30	B9A0160	KJ1	100
Manganese	**604**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Nickel	**18.2**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Potassium	**980**	7.63		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:12	B9A0160	KJ1	10
Sodium	**107**	7.63		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Thallium	< 4.10	4.10		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Vanadium	**18.7**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Zinc	**86.8**	1.53		mg/Kg dry	01/08/19 21:59	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.073	0.073		mg/Kg dry	01/08/19 12:52	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**79.5**	0.100	H	% (Percent)	01/08/19 08:36	B9A0158	MKP	1
Method: SW9045C								
pH	**8.18**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**115**	17.0	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
2-Methylnaphthalene	**147**	17.0	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Acenaphthene	**19.5**	8.51	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Acenaphthylene	**643**	8.51	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Anthracene	**305**	4.26	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Benzo(a)anthracene	**1310**	8.51	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Benzo(a)pyrene	**1690**	17.0	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Benzo(b)fluoranthene	**2150**	17.0	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1
Benzo(g,h,i)perylene	**1050**	21.3	H	ug/Kg dry	01/09/19 15:30	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-24 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:25
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-44 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(k)fluoranthene	**726**	8.51	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Chrysene	**1120**	8.51	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Dibenzo(a,h)anthracene	**278**	42.6	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Fluoranthene	**1570**	8.51	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Fluorene	**31.1**	8.51	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**1780**	8.51	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Naphthalene	**89.6**	21.3	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Phenanthrene	**391**	4.26	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Pyrene	**1610**	17.0	H	ug/Kg dry		01/09/19 15:30	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 94%*	*Limits: 50-150*	*01/09/19 15:30*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 15:30*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-25 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:27
Matrix: Soil
Lab ID: 18L0509-45

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7350**	701		mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Antimony	< 1.40	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Arsenic	**7.73**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Barium	**51.9**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Beryllium	< 0.561	0.561		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Cadmium	**0.348**	0.140		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Calcium	**46100**	701	B	mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Chromium	**10.1**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Cobalt	**3.65**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Copper	**18.3**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Iron	**11000**	280		mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Lead	**21.8**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Magnesium	**5080**	70.1		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Manganese	**271**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Nickel	**8.17**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Potassium	**751**	7.01	B	mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Sodium	**56.1**	7.01		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Thallium	**1.79**	0.370		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Vanadium	**18.2**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Zinc	**32.7**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 14:19	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.1**	0.100		% (Percent)	12/15/18 08:21	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Ethylbenzene	< 155	155		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Toluene	< 77.4	77.4		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Xylenes, Total	< 464	464		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 91-106*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 88%* *Limits: 71-112*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 97%* *Limits: 85-119*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-25 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:27
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-45 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**37.4**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
2-Methylnaphthalene	**46.7**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Acenaphthene	**38.5**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Acenaphthylene	**418**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Anthracene	**252**	4.63		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(a)anthracene	**839**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(a)pyrene	**1070**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(b)fluoranthene	**1340**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(g,h,i)perylene	**871**	23.2		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(k)fluoranthene	**459**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Chrysene	**737**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Dibenzo(a,h)anthracene	**162**	46.3		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Fluoranthene	**924**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Fluorene	**31.9**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1100**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Naphthalene	**43.6**	23.2		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Phenanthrene	**347**	4.63		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Pyrene	**960**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 21:40*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/22/18 21:40*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-26 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:30
Matrix: Soil
Lab ID: 18L0509-46

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4940**	73.7		mg/Kg dry	01/08/19 20:16	B9A0160	KJ1	10
Antimony	< 1.47	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Arsenic	**17.4**	11.3		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Barium	**65.9**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Beryllium	< 0.147	0.147		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Cadmium	**1.23**	0.500		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Calcium	**27300**	737		mg/Kg dry	01/08/19 18:34	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Cobalt	**3.51**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Copper	**76.1**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Iron	**17400**	295		mg/Kg dry	01/08/19 18:34	B9A0160	KJ1	100
Lead	**111**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Magnesium	**7080**	73.7		mg/Kg dry	01/08/19 20:16	B9A0160	KJ1	10
Manganese	**240**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Nickel	**11.2**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Potassium	**606**	7.37		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:16	B9A0160	KJ1	10
Sodium	**205**	7.37		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Thallium	< 2.80	2.80		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Vanadium	**13.2**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Zinc	**98.1**	1.47		mg/Kg dry	01/08/19 22:04	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.142**	0.069		mg/Kg dry	01/08/19 12:54	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.8**	0.100	H	% (Percent)	01/08/19 08:38	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**207**	17.1	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
2-Methylnaphthalene	**272**	17.1	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Acenaphthene	**30.6**	8.53	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Acenaphthylene	**731**	8.53	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Anthracene	**414**	4.27	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Benzo(a)anthracene	**1800**	8.53	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Benzo(a)pyrene	**2140**	17.1	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Benzo(b)fluoranthene	**3100**	17.1	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Benzo(g,h,i)perylene	**1390**	21.3	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Benzo(k)fluoranthene	**753**	8.53	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Chrysene	**1630**	8.53	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1
Dibenzo(a,h)anthracene	**383**	42.7	H	ug/Kg dry	01/09/19 06:54	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-26 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:30
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-46 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**2220**	8.53	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Fluorene	**39.0**	8.53	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**2170**	8.53	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Naphthalene	**174**	21.3	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Phenanthrene	**913**	4.27	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Pyrene	**2300**	17.1	H	ug/Kg dry		01/09/19 06:54	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 95%*	*Limits: 50-150*	*01/09/19 06:54*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 87%*	*Limits: 50-150*	*01/09/19 06:54*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-27 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:33
Matrix: Soil
Lab ID: 18L0509-47

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**12500**	71.5		mg/Kg dry	12/18/18 22:19	B8L0552	KJ1	10
Antimony	< 1.43	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Arsenic	**13.0**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Barium	**166**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Beryllium	< 0.572	0.572		mg/Kg dry	12/18/18 22:19	B8L0552	KJ1	10
Cadmium	**0.760**	0.143		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Calcium	**52300**	715	B	mg/Kg dry	12/18/18 20:28	B8L0552	KJ1	100
Chromium	**12.4**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Cobalt	**6.00**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Copper	**836**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Iron	**22400**	286		mg/Kg dry	12/18/18 20:28	B8L0552	KJ1	100
Lead	**286**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Magnesium	**16300**	715		mg/Kg dry	12/18/18 20:28	B8L0552	KJ1	100
Manganese	**451**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Nickel	**13.7**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Potassium	**1190**	7.15	B	mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:19	B8L0552	KJ1	10
Sodium	**151**	7.15		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Thallium	**2.73**	0.377		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Vanadium	**17.6**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Zinc	**162**	1.43		mg/Kg dry	12/19/18 00:33	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Lead, TCLP	**0.0182**	0.00750		mg/L	01/08/19 18:32	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.067	0.067		mg/Kg dry	12/26/18 14:21	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.9**	0.100		% (Percent)	12/15/18 08:23	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 01:47	B8L0744	JL	50
Ethylbenzene	< 221	221		ug/Kg dry	12/19/18 01:47	B8L0744	JL	50
Toluene	< 111	111		ug/Kg dry	12/19/18 01:47	B8L0744	JL	50
Xylenes, Total	< 664	664		ug/Kg dry	12/19/18 01:47	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 97%* *Limits: 91-106*	*12/19/18 01:47*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/19/18 01:47*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 101%* *Limits: 85-119*	*12/19/18 01:47*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-27 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:33
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-47 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**83.9**	18.5		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
2-Methylnaphthalene	**108**	18.5		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Acenaphthene	**21.2**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Acenaphthylene	**452**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Anthracene	**241**	4.61		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Benzo(a)anthracene	**1030**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Benzo(a)pyrene	**1230**	18.5		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Benzo(b)fluoranthene	**1470**	18.5		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Benzo(g,h,i)perylene	**690**	23.1		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Benzo(k)fluoranthene	**500**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Chrysene	**936**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Dibenzo(a,h)anthracene	**175**	46.1		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Fluoranthene	**1260**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Fluorene	**28.7**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1010**	9.23		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Naphthalene	**69.7**	23.1		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Phenanthrene	**422**	4.61		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Pyrene	**1320**	18.5		ug/Kg dry		12/22/18 22:18	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 105%*	*Limits: 50-150*	*12/22/18 22:18*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 105%*	*Limits: 50-150*	*12/22/18 22:18*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-28 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:37
Matrix: Soil
Lab ID: 18L0509-48

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**10200**	73.0		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Antimony	< 1.46	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Barium	**72.1**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Beryllium	< 0.146	0.146		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Cadmium	**1.04**	0.500		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Calcium	**14300**	730		mg/Kg dry	01/08/19 18:38	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Cobalt	**6.58**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Copper	**57.9**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Iron	**24300**	292		mg/Kg dry	01/08/19 18:38	B9A0160	KJ1	100
Lead	**69.3**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Magnesium	**8270**	73.0		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Manganese	**409**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Nickel	**16.5**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Potassium	**813**	7.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Sodium	**193**	7.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Thallium	< 3.90	3.90		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Vanadium	**18.4**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Zinc	**74.3**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:11	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.071	0.071		mg/Kg dry	01/08/19 12:57	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.5**	0.100	H	% (Percent)	01/08/19 08:40	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**198**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
2-Methylnaphthalene	**226**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Acenaphthene	< 8.55	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Acenaphthylene	**34.8**	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Anthracene	**26.1**	4.27	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(a)anthracene	**115**	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(a)pyrene	**154**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(b)fluoranthene	**161**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-28 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:37
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-48 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**72.8**	21.4	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Benzo(k)fluoranthene	**45.9**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Chrysene	**91.6**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 42.7	42.7	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Fluoranthene	**132**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Fluorene	< 8.55	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**184**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Naphthalene	**89.7**	21.4	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Phenanthrene	**193**	4.27	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Pyrene	**141**	17.1	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 16:09*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 84%*	*Limits: 50-150*	*01/09/19 16:09*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-29 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:39
Matrix: Soil
Lab ID: 18L0509-49

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6730**	74.8		mg/Kg dry	12/19/18 22:23	B8L0622	KJ1	10
Antimony	< 1.50	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Arsenic	**49.8**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Barium	**93.6**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Beryllium	< 0.150	0.150		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Cadmium	**1.64**	0.150		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Calcium	**9150**	74.8		mg/Kg dry	12/19/18 22:23	B8L0622	KJ1	10
Chromium	**67.0**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Cobalt	**6.03**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Copper	**97.7**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Iron	**34500**	299	B	mg/Kg dry	12/19/18 21:10	B8L0622	KJ1	100
Lead	**134**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Magnesium	**2220**	74.8		mg/Kg dry	12/19/18 22:23	B8L0622	KJ1	10
Manganese	**289**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Nickel	**18.3**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Potassium	**709**	7.48		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Silver	**79.8**	4.40		mg/Kg dry	12/19/18 22:23	B8L0622	KJ1	10
Sodium	**376**	7.48		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Thallium	**3.45**	0.395		mg/Kg dry	12/20/18 23:23	B8L0622	KJ1	1
Vanadium	**24.7**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Zinc	**133**	1.50		mg/Kg dry	12/20/18 00:10	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.071	0.071		mg/Kg dry	12/26/18 14:23	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**81.0**	0.100		% (Percent)	12/15/18 08:25	B8L0498	MKP	1
Method: SW9045C								
pH	**7.78**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 02:19	B8L0744	JL	50
Ethylbenzene	< 184	184		ug/Kg dry	12/19/18 02:19	B8L0744	JL	50
Toluene	< 92.2	92.2		ug/Kg dry	12/19/18 02:19	B8L0744	JL	50
Xylenes, Total	< 553	553		ug/Kg dry	12/19/18 02:19	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 91-106*	*12/19/18 02:19*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 90%* *Limits: 71-112*	*12/19/18 02:19*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 107%* *Limits: 85-119*	*12/19/18 02:19*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-29 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:39
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-49 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**1190**	19.4		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
2-Methylnaphthalene	**1510**	19.4		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Acenaphthene	**16.7**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Acenaphthylene	**262**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Anthracene	**181**	4.85		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Benzo(a)anthracene	**947**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Benzo(a)pyrene	**1160**	19.4		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Benzo(b)fluoranthene	**1610**	19.4		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Benzo(g,h,i)perylene	**508**	24.3		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Benzo(k)fluoranthene	**336**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Chrysene	**923**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Dibenzo(a,h)anthracene	**206**	48.5		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Fluoranthene	**1280**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Fluorene	**44.4**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1220**	9.70		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Naphthalene	**763**	24.3		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Phenanthrene	**1780**	4.85		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Pyrene	**1340**	19.4		ug/Kg dry		12/26/18 22:42	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 102%*	*Limits: 50-150*	*12/26/18 22:42*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 89%*	*Limits: 50-150*	*12/26/18 22:42*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-29 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:40
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-50

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11700**	79.3		mg/Kg dry	01/08/19 20:24	B9A0160	KJ1	10
Antimony	< 1.59	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Arsenic	**13.9**	11.3		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Barium	**95.3**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Beryllium	< 0.159	0.159		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Cadmium	**1.11**	0.500		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Calcium	**3830**	79.3		mg/Kg dry	01/08/19 20:24	B9A0160	KJ1	10
Chromium	**15.6**	13.0		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Cobalt	**8.66**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Copper	**59.2**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Iron	**29100**	317		mg/Kg dry	01/08/19 18:42	B9A0160	KJ1	100
Lead	**57.8**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Magnesium	**2230**	79.3		mg/Kg dry	01/08/19 20:24	B9A0160	KJ1	10
Manganese	**462**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Nickel	**21.0**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Potassium	**971**	7.93		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:24	B9A0160	KJ1	10
Sodium	**216**	7.93		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Thallium	< 3.90	3.90		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Vanadium	**27.7**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Zinc	**94.0**	1.59		mg/Kg dry	01/08/19 22:13	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.077	0.077		mg/Kg dry	01/08/19 12:59	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**77.7**	0.100	H	% (Percent)	01/08/19 08:42	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**188**	17.6	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
2-Methylnaphthalene	**257**	17.6	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Acenaphthene	< 8.81	8.81	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Acenaphthylene	< 8.81	8.81	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Anthracene	**8.11**	4.40	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Benzo(a)anthracene	**50.4**	8.81	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Benzo(a)pyrene	**57.5**	17.6	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Benzo(b)fluoranthene	**55.5**	17.6	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Benzo(g,h,i)perylene	**34.0**	22.0	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Benzo(k)fluoranthene	**18.7**	8.81	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Chrysene	**38.9**	8.81	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 44.0	44.0	H	ug/Kg dry	01/09/19 16:45	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-29 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:40
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-50 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**45.1**	8.81	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Fluorene	< 8.81	8.81	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**77.0**	8.81	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Naphthalene	**116**	22.0	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Phenanthrene	**143**	4.40	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Pyrene	**48.1**	17.6	H	ug/Kg dry		01/09/19 16:45	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 16:45*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 83%*	*Limits: 50-150*	*01/09/19 16:45*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-30 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:42
Matrix: Soil
Lab ID: 18L0509-51

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5680**	81.4		mg/Kg dry	12/18/18 22:23	B8L0552	KJ1	10
Antimony	< 1.63	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Arsenic	**370**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Barium	**111**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Beryllium	< 0.651	0.651		mg/Kg dry	12/18/18 22:23	B8L0552	KJ1	10
Cadmium	**2.06**	0.163		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Calcium	**25100**	814	B	mg/Kg dry	12/18/18 20:32	B8L0552	KJ1	100
Chromium	**10.4**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Cobalt	**6.65**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Copper	**149**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Iron	**43400**	325		mg/Kg dry	12/18/18 20:32	B8L0552	KJ1	100
Lead	**209**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Magnesium	**6640**	81.4		mg/Kg dry	12/18/18 22:23	B8L0552	KJ1	10
Manganese	**485**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Nickel	**18.4**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Potassium	**754**	8.14	B	mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Silver	**4.91**	4.40		mg/Kg dry	12/18/18 22:23	B8L0552	KJ1	10
Sodium	**337**	8.14		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Thallium	**4.03**	0.430		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Vanadium	**21.9**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Zinc	**181**	1.63		mg/Kg dry	12/19/18 00:38	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.123**	0.076		mg/Kg dry	12/26/18 14:26	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.3**	0.100		% (Percent)	12/15/18 08:27	B8L0498	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**1700**	41.3		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
2-Methylnaphthalene	**1990**	41.3		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Acenaphthene	**28.5**	20.7		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Acenaphthylene	**630**	20.7		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Anthracene	**381**	10.3		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Benzo(a)anthracene	**2070**	20.7		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Benzo(a)pyrene	**2610**	41.3		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Benzo(b)fluoranthene	**3480**	41.3		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Benzo(g,h,i)perylene	**983**	51.6		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Benzo(k)fluoranthene	**758**	20.7		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Chrysene	**1940**	20.7		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2
Dibenzo(a,h)anthracene	**428**	103		ug/Kg dry	12/27/18 02:23	B8L0673	LP	2

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-30 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:42
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-51 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**2830**	20.7		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Fluorene	**127**	20.7		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Indeno(1,2,3-cd)pyrene	**2530**	20.7		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Naphthalene	**1150**	51.6		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Phenanthrene	**3310**	10.3		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Pyrene	**2800**	41.3		ug/Kg dry		12/27/18 02:23	B8L0673	LP	2
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 99%*	*Limits: 50-150*	*12/27/18 02:23*	*B8L0673*	*LP*	*2*
Surrogate: Fluoranthene-d10				*Recovery: 90%*	*Limits: 50-150*	*12/27/18 02:23*	*B8L0673*	*LP*	*2*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-30 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:43
Matrix: Soil
Lab ID: 18L0509-52

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**16500**	781		mg/Kg dry	01/08/19 18:46	B9A0160	KJ1	100
Antimony	< 1.56	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Barium	**163**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Beryllium	< 0.156	0.156		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Cadmium	**1.06**	0.500		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Calcium	**4180**	78.1		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Chromium	**18.1**	13.0		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Cobalt	**10.7**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Copper	**42.3**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Iron	**29700**	312		mg/Kg dry	01/08/19 18:46	B9A0160	KJ1	100
Lead	**21.4**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Magnesium	**3610**	78.1		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Manganese	**590**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Nickel	**31.7**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Potassium	**1220**	7.81		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Sodium	**97.6**	7.81		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Thallium	< 4.20	4.20		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Vanadium	**25.4**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Zinc	**77.8**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:12	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.072	0.072		mg/Kg dry	01/08/19 13:02	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.9**	0.100	H	% (Percent)	01/08/19 08:44	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**27.8**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
2-Methylnaphthalene	**26.3**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Acenaphthene	< 9.78	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Acenaphthylene	< 9.78	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Anthracene	**17.3**	4.89	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(a)anthracene	**51.3**	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(a)pyrene	**57.5**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(b)fluoranthene	**81.9**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-30 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:43
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-52 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**90.1**	24.5	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Benzo(k)fluoranthene	**25.8**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Chrysene	**44.1**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 48.9	48.9	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Fluoranthene	**74.6**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Fluorene	< 9.78	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**165**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Naphthalene	< 24.5	24.5	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Phenanthrene	**115**	4.89	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Pyrene	**66.4**	19.6	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 96%*	*Limits: 50-150*	*01/09/19 17:23*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 79%*	*Limits: 50-150*	*01/09/19 17:23*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-31 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:44
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-53

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7500**	69.5		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Arsenic	**10.4**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Barium	**80.5**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Cadmium	**1.54**	0.139		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Calcium	**22800**	695	B	mg/Kg dry	12/18/18 20:36	B8L0552	KJ1	100
Chromium	**8.30**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Cobalt	**6.06**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Copper	**83.0**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Iron	**34300**	278		mg/Kg dry	12/18/18 20:36	B8L0552	KJ1	100
Lead	**118**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Magnesium	**9120**	69.5		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Manganese	**258**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Nickel	**19.4**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Potassium	**738**	6.95	B	mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Silver	**6.54**	4.40		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Sodium	**378**	6.95		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Thallium	**3.15**	0.367		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Vanadium	**20.2**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Zinc	**148**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/29/19 11:30	B9A0875	AG	5
Lead, TCLP	< 0.00750	0.00750		mg/L	01/29/19 11:30	B9A0875	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/29/19 11:30	B9A0875	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/29/19 11:30	B9A0875	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.094**	0.068		mg/Kg dry	12/26/18 14:48	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.8**	0.100		% (Percent)	12/15/18 08:29	B8L0498	MKP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-31 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:44
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-53 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Ethylbenzene	< 188	188		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Toluene	< 94.1	94.1		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Xylenes, Total	< 565	565		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%*	*Limits: 91-106*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 89%*	*Limits: 85-119*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**333**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
2-Methylnaphthalene	**383**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Acenaphthene	**18.8**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Acenaphthylene	**271**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Anthracene	**159**	4.78		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(a)anthracene	**936**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(a)pyrene	**1240**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(b)fluoranthene	**1460**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(g,h,i)perylene	**671**	23.9		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(k)fluoranthene	**299**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Chrysene	**899**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Dibenzo(a,h)anthracene	**269**	47.8		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Fluoranthene	**860**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Fluorene	**37.0**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1320**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Naphthalene	**185**	23.9		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Phenanthrene	**873**	4.78		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Pyrene	**1120**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 101%*	*Limits: 50-150*	*12/26/18 23:20*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 88%*	*Limits: 50-150*	*12/26/18 23:20*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-31 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:45
Matrix: Soil
Lab ID: 18L0509-54

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4360**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Antimony	< 1.55	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Barium	**65.3**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Beryllium	< 0.155	0.155		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Cadmium	**1.28**	0.500		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Calcium	**10400**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Cobalt	**5.93**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Copper	**84.2**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Iron	**28100**	310		mg/Kg dry	01/08/19 19:07	B9A0160	KJ1	100
Lead	**81.7**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Magnesium	**4220**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Manganese	**156**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Nickel	**14.6**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Potassium	**441**	7.74		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Sodium	**168**	7.74		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Thallium	< 3.20	3.20		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Vanadium	**19.3**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Zinc	**80.8**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:14	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.083**	0.072		mg/Kg dry	01/08/19 13:05	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**79.3**	0.100	H	% (Percent)	01/08/19 08:46	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**192**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
2-Methylnaphthalene	**279**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Acenaphthene	< 9.19	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Acenaphthylene	**13.4**	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Anthracene	**16.5**	4.60	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(a)anthracene	**70.8**	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(a)pyrene	**72.7**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(b)fluoranthene	**90.2**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-31 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:45
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-54 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**56.8**	23.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Benzo(k)fluoranthene	**24.0**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Chrysene	**58.8**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 46.0	46.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Fluoranthene	**70.6**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Fluorene	< 9.19	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**129**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Naphthalene	**128**	23.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Phenanthrene	**261**	4.60	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Pyrene	**86.6**	18.4	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 89%*	*Limits: 50-150*	*01/09/19 18:00*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 77%*	*Limits: 50-150*	*01/09/19 18:00*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-32 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:47
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-55

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4450**	61.1		mg/Kg dry	12/18/18 22:31	B8L0552	KJ1	10
Antimony	< 1.22	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Arsenic	**11.9**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Barium	**62.2**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:31	B8L0552	KJ1	10
Cadmium	**1.28**	0.122		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Calcium	**42900**	611	B	mg/Kg dry	12/18/18 20:40	B8L0552	KJ1	100
Chromium	**7.69**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Cobalt	**4.14**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Copper	**91.9**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Iron	**31600**	244		mg/Kg dry	12/18/18 20:40	B8L0552	KJ1	100
Lead	**161**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Magnesium	**8350**	611		mg/Kg dry	12/18/18 20:40	B8L0552	KJ1	100
Manganese	**317**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Nickel	**11.5**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Potassium	**395**	6.11	B	mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Silver	**4.79**	4.40		mg/Kg dry	12/18/18 22:31	B8L0552	KJ1	10
Sodium	**145**	6.11		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Thallium	**2.31**	0.323		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Vanadium	**11.8**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Zinc	**167**	1.22		mg/Kg dry	12/19/18 00:47	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.098**	0.064		mg/Kg dry	12/26/18 14:51	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**92.0**	0.100		% (Percent)	12/15/18 08:31	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 07:10	B8L0745	JL	50
Ethylbenzene	< 199	199		ug/Kg dry	12/19/18 07:10	B8L0745	JL	50
Toluene	< 99.3	99.3		ug/Kg dry	12/19/18 07:10	B8L0745	JL	50
Xylenes, Total	< 596	596		ug/Kg dry	12/19/18 07:10	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 99%* *Limits: 91-106*	*12/19/18 07:10*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%* *Limits: 71-112*	*12/19/18 07:10*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 100%* *Limits: 85-119*	*12/19/18 07:10*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-32 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:47
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-55 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 177	177		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
2-Methylnaphthalene	**238**	177		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Acenaphthene	< 88.6	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Acenaphthylene	**1110**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Anthracene	**572**	44.3		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Benzo(a)anthracene	**2620**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Benzo(a)pyrene	**5820**	177		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Benzo(b)fluoranthene	**6840**	177		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Benzo(g,h,i)perylene	**2210**	221		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Benzo(k)fluoranthene	**1600**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Chrysene	**2380**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Dibenzo(a,h)anthracene	**647**	443		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Fluoranthene	**3060**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Fluorene	**191**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Indeno(1,2,3-cd)pyrene	**5830**	88.6		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Naphthalene	**233**	221		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Phenanthrene	**1590**	44.3		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Pyrene	**3510**	177		ug/Kg dry		12/27/18 06:09	B8L0673	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 94%*	*Limits: 50-150*	*12/27/18 06:09*	*B8L0673*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/27/18 06:09*	*B8L0673*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-33 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:51
Matrix: Soil
Lab ID: 18L0509-56

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3550**	65.3		mg/Kg dry	12/18/18 22:36	B8L0552	KJ1	10
Antimony	< 1.31	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Arsenic	**26.2**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Barium	**41.0**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:36	B8L0552	KJ1	10
Cadmium	**1.26**	0.131		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Calcium	**46300**	653	B	mg/Kg dry	12/18/18 20:44	B8L0552	KJ1	100
Chromium	**11.8**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Cobalt	**4.27**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Copper	**52.9**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Iron	**39000**	261		mg/Kg dry	12/18/18 20:44	B8L0552	KJ1	100
Lead	**111**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Magnesium	**8060**	65.3		mg/Kg dry	12/18/18 22:36	B8L0552	KJ1	10
Manganese	**317**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Nickel	**13.9**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Potassium	**392**	6.53	B	mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:36	B8L0552	KJ1	10
Sodium	**106**	6.53		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Thallium	**2.45**	0.345		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Vanadium	**10.1**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Zinc	**157**	1.31		mg/Kg dry	12/19/18 01:08	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.094**	0.067		mg/Kg dry	12/26/18 14:58	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.8**	0.100		% (Percent)	12/15/18 08:33	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 07:43	B8L0745	JL	50
Ethylbenzene	< 212	212		ug/Kg dry	12/19/18 07:43	B8L0745	JL	50
Toluene	< 106	106		ug/Kg dry	12/19/18 07:43	B8L0745	JL	50
Xylenes, Total	< 637	637		ug/Kg dry	12/19/18 07:43	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/19/18 07:43*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/19/18 07:43*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 99%* *Limits: 85-119*	*12/19/18 07:43*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-33 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:51
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-56 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**823**	35.7		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
2-Methylnaphthalene	**1040**	35.7		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Acenaphthene	**52.1**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Acenaphthylene	**1640**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Anthracene	**570**	8.93		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Benzo(a)anthracene	**3730**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Benzo(a)pyrene	**4360**	35.7		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Benzo(b)fluoranthene	**5600**	35.7		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Benzo(g,h,i)perylene	**2410**	44.6		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Benzo(k)fluoranthene	**1310**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Chrysene	**3950**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Dibenzo(a,h)anthracene	**907**	89.3		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Fluoranthene	**4000**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Fluorene	**157**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Indeno(1,2,3-cd)pyrene	**4800**	17.9		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Naphthalene	**584**	44.6		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Phenanthrene	**2660**	8.93		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Pyrene	**5400**	35.7		ug/Kg dry		12/26/18 20:52	B8L0673	LP	2
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 94%*	*Limits: 50-150*	*12/26/18 20:52*	*B8L0673*	*LP*	*2*
Surrogate: Fluoranthene-d10				*Recovery: 89%*	*Limits: 50-150*	*12/26/18 20:52*	*B8L0673*	*LP*	*2*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2860**	63.2		mg/Kg dry	12/19/18 22:27	B8L0622	KJ1	10
Antimony	< 1.26	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Arsenic	**4.72**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Barium	**46.4**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Beryllium	< 0.126	0.126		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Cadmium	**0.389**	0.126		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Calcium	**137000**	6320		mg/Kg dry	12/20/18 23:02	B8L0622	KJ1	1000
Chromium	**18.5**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Cobalt	**1.77**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Copper	**12.4**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Iron	**12900**	253	B	mg/Kg dry	12/19/18 21:14	B8L0622	KJ1	100
Lead	**15.9**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Magnesium	**14900**	632		mg/Kg dry	12/19/18 21:14	B8L0622	KJ1	100
Manganese	**760**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Nickel	**7.44**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Potassium	**536**	6.32		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Silver	**30.0**	4.40		mg/Kg dry	12/19/18 22:27	B8L0622	KJ1	10
Sodium	**91.2**	6.32		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Thallium	**2.22**	0.334		mg/Kg dry	12/20/18 23:27	B8L0622	KJ1	1
Vanadium	**9.11**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Zinc	**30.6**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.062	0.062		mg/Kg dry	12/26/18 15:00	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**96.3**	0.100		% (Percent)	12/15/18 08:35	B8L0498	MKP	1
Method: SW9045C								
pH	**8.41**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1,2-Trichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1-Dichloroethane	< 4.08	4.08		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1-Dichloroethene	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dichloropropane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
1-Butanol	< 204	204		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
2-Butanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
2-Hexanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
4-Methyl-2-pentanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Acetone	< 71.4	71.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Acrylonitrile	< 1.00	1.00		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Benzene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromodichloromethane	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromoform	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromomethane	< 20.4	20.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Carbon disulfide	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Carbon tetrachloride	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chlorobenzene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloroethane	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloroform	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloromethane	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
cis-1,2-Dichloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Dibromochloromethane	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Ethylbenzene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
m,p-Xylene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Methyl tert-butyl ether	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Methylene chloride	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
o-Xylene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Styrene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Tetrachloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Toluene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
trans-1,2-Dichloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Trichloroethene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Vinyl acetate	< 20.4	20.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Vinyl chloride	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Xylenes, Total	< 12.2	12.2		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 123%*	*Limits: 88-136*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 118%*	*Limits: 71-136*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 97%*	*Limits: 81-114*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 88%*	*Limits: 85-116*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 96%*	*Limits: 79-119*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 110%*	*Limits: 90-142*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,2-Dichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,3-Dichlorobenzene	< 24.3	24.3		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,4-Dichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dimethylphenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dinitrophenol	< 409	409		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Chloronaphthalene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Chlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Methylphenol	< 41.5	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Nitrophenol	< 332	332		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 332	332		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
3 & 4-Methylphenol	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1240	1240		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chloroaniline	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Nitrophenol	< 1660	1660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Acenaphthene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Acenaphthylene	**95.4**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Anthracene	**91.2**	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzidine	< 172	172		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzo(a)anthracene	**487**	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzo(a)pyrene	**597**	102		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(b)fluoranthene	**1170**	900		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(g,h,i)perylene	< 664	664		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(k)fluoranthene	< 664	664		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1660	1660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 249	249		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Butyl benzyl phthalate	< 249	249		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Carbazole	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Chrysene	**600**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Diethyl phthalate	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Dimethyl phthalate	< 41.5	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Di-n-butyl phthalate	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Di-n-octyl phthalate	< 1330	1330		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Fluoranthene	**1210**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Fluorene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Hexachlorobenzene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-34 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:54
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1660	1660		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Hexachloroethane	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 900	900		ug/Kg dry		12/26/18 21:29	B8L0714	CP1	4
Isophorone	< 498	498		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Naphthalene	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 38.9	38.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 82.9	82.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Pentachlorophenol	< 223	223		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Phenanthrene	**401**	82.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Phenol	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Pyrene	**1360**	41.5		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 89%*	*Limits: 8-125*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 94%*	*Limits: 17-131*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 86%*	*Limits: 8-117*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 95%*	*Limits: 15-124*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 95%*	*Limits: 26-120*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 132%*	*Limits: 42-143*	*12/26/18 21:29*	*B8L0714*	*CP1*	*4*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-35 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:02
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-58

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2220**	65.3		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Antimony	< 1.31	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Arsenic	**2.91**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Barium	**43.1**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Beryllium	< 0.131	0.131		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Cadmium	**0.314**	0.131		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Calcium	**206000**	6530		mg/Kg dry	12/20/18 23:06	B8L0622	KJ1	1000
Chromium	**12.5**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Cobalt	**1.32**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Copper	**7.78**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Iron	**9740**	26.1	B	mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Lead	**13.4**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Magnesium	**10300**	65.3		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Manganese	**719**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Nickel	**5.72**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Potassium	**510**	6.53		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Silver	**18.0**	4.40		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Sodium	**224**	6.53		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Thallium	**2.37**	0.345		mg/Kg dry	12/20/18 23:48	B8L0622	KJ1	1
Vanadium	**4.22**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Zinc	**15.9**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:33	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	**0.0378**	0.0250		mg/L	01/10/19 12:03	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 15:02	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**92.6**	0.100		% (Percent)	12/15/18 08:37	B8L0498	MKP	1
Method: SW9045C								
pH	**8.91**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 17.0	17.0		ug/Kg dry	12/26/18 23:56	B8L0673	LP	1
2-Methylnaphthalene	< 17.0	17.0		ug/Kg dry	12/26/18 23:56	B8L0673	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-35 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:02
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-58 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Acenaphthene	< 8.50	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Acenaphthylene	**18.4**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Anthracene	**15.0**	4.25		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(a)anthracene	**74.9**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(a)pyrene	**195**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(b)fluoranthene	**192**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(g,h,i)perylene	**132**	21.3		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(k)fluoranthene	**37.3**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Chrysene	**75.6**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 42.5	42.5		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Fluoranthene	**89.2**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Fluorene	< 8.50	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**206**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Naphthalene	< 21.3	21.3		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Phenanthrene	**24.4**	4.25		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Pyrene	**89.8**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 101%*	*Limits: 50-150*	*12/26/18 23:56*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/26/18 23:56*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-36 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:08
Matrix: Soil
Lab ID: 18L0509-59

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11400**	70.5		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Arsenic	**9.63**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Barium	**138**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Beryllium	< 0.564	0.564		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Cadmium	**0.443**	0.141		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Calcium	**32300**	705	B	mg/Kg dry	12/18/18 20:49	B8L0552	KJ1	100
Chromium	**12.8**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Cobalt	**8.22**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Copper	**21.1**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Iron	**23200**	282		mg/Kg dry	12/18/18 20:49	B8L0552	KJ1	100
Lead	**22.6**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Magnesium	**2960**	70.5		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Manganese	**706**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Nickel	**14.3**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Potassium	**1020**	70.5	B	mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Sodium	**81.7**	7.05		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Thallium	**3.55**	0.372		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Vanadium	**28.3**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Zinc	**45.9**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:35	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:35	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	**0.0291**	0.0250		mg/L	01/10/19 12:11	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.067	0.067		mg/Kg dry	12/27/18 12:42	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.5**	0.100		% (Percent)	12/15/18 08:39	B8L0498	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 19.0	19.0		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
2-Methylnaphthalene	< 19.0	19.0		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
Acenaphthene	< 9.52	9.52		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
Acenaphthylene	**20.8**	9.52		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-36 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:08
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-59 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Anthracene	**12.6**	4.76		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(a)anthracene	**43.1**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(a)pyrene	**106**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(b)fluoranthene	**100**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(g,h,i)perylene	**75.4**	23.8		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(k)fluoranthene	**23.9**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Chrysene	**39.0**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 47.6	47.6		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Fluoranthene	**47.5**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Fluorene	< 9.52	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**115**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Naphthalene	< 23.8	23.8		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Phenanthrene	**18.1**	4.76		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Pyrene	**52.2**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/27/18 00:33*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 00:33*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-37 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:17
Matrix: Soil
Lab ID: 18L0509-60

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11200**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Arsenic	**7.53**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Barium	**94.3**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Beryllium	< 0.148	0.148		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Cadmium	**0.497**	0.148		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Calcium	**25900**	739		mg/Kg dry	12/19/18 21:22	B8L0622	KJ1	100
Chromium	**33.9**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Cobalt	**4.95**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Copper	**24.8**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Iron	**16500**	296	B	mg/Kg dry	12/19/18 21:22	B8L0622	KJ1	100
Lead	**19.3**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Magnesium	**3250**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Manganese	**282**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Nickel	**11.7**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Potassium	**1550**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Silver	**31.9**	4.40		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Sodium	**108**	7.39		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Thallium	**2.27**	0.390		mg/Kg dry	12/20/18 23:53	B8L0622	KJ1	1
Vanadium	**23.2**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Zinc	**51.6**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:37	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:37	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:37	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.070	0.070		mg/Kg dry	12/27/18 12:51	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.6**	0.100		% (Percent)	12/15/18 08:41	B8L0498	MKP	1
Method: SW9045C								
pH	**7.89**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-37 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:17
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-60 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**92.7**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
2-Methylnaphthalene	**113**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Acenaphthene	< 9.72	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Acenaphthylene	**41.2**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Anthracene	**28.3**	4.86		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(a)anthracene	**120**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(a)pyrene	**246**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(b)fluoranthene	**262**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(g,h,i)perylene	**106**	24.3		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(k)fluoranthene	**49.6**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Chrysene	**112**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 48.6	48.6		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Fluoranthene	**145**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Fluorene	< 9.72	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**243**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Naphthalene	**59.6**	24.3		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Phenanthrene	**140**	4.86		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Pyrene	**173**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/27/18 01:10*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 01:10*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-38 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:20
Matrix: Soil
Lab ID: 18L0509-61

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3670**	63.2		mg/Kg dry	12/18/18 22:44	B8L0552	KJ1	10
Antimony	< 1.26	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Arsenic	**13.8**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Barium	**31.1**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:44	B8L0552	KJ1	10
Cadmium	**0.394**	0.126		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Calcium	**171000**	5520	B	mg/Kg dry	12/19/18 19:10	B8L0552	KJ1	1000
Chromium	**2.93**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Cobalt	**2.01**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Copper	**14.3**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Iron	**13600**	253		mg/Kg dry	12/18/18 21:09	B8L0552	KJ1	100
Lead	**9.97**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Magnesium	**13200**	632		mg/Kg dry	12/18/18 21:09	B8L0552	KJ1	100
Manganese	**767**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Nickel	**7.07**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Potassium	**473**	6.32	B	mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:44	B8L0552	KJ1	10
Sodium	**104**	6.32		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Thallium	**2.20**	0.334		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Vanadium	**7.16**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Zinc	**28.6**	1.26		mg/Kg dry	12/19/18 01:17	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.063	0.063		mg/Kg dry	12/27/18 12:54	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**92.2**	0.100		% (Percent)	12/15/18 08:43	B8L0498	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 175	175		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
2-Methylnaphthalene	< 175	175		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Acenaphthene	< 87.3	87.3		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Acenaphthylene	**104**	87.3		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Anthracene	**98.6**	43.6		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Benzo(a)anthracene	**486**	87.3		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Benzo(a)pyrene	**978**	175		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Benzo(b)fluoranthene	**992**	175		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Benzo(g,h,i)perylene	**442**	218		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Benzo(k)fluoranthene	**299**	87.3		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Chrysene	**470**	87.3		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10
Dibenzo(a,h)anthracene	< 436	436		ug/Kg dry	12/27/18 06:46	B8L0635	LP	10

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-38 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:20
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-61 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**643**	87.3		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Fluorene	< 87.3	87.3		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**931**	87.3		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Naphthalene	< 218	218		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Phenanthrene	**382**	43.6		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Pyrene	**657**	175		ug/Kg dry		12/27/18 06:46	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 06:46*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 06:46*	*B8L0635*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-39 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:38
Matrix: Soil
Lab ID: 18L0509-62

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**8980**	749		mg/Kg dry	12/19/18 21:26	B8L0622	KJ1	100
Antimony	< 1.50	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Arsenic	**8.36**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Barium	**155**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Beryllium	< 0.150	0.150		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Cadmium	**0.515**	0.150		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Calcium	**10500**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Chromium	**35.3**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Cobalt	**6.22**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Copper	**22.1**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Iron	**11500**	300	B	mg/Kg dry	12/19/18 21:26	B8L0622	KJ1	100
Lead	**18.1**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Magnesium	**2670**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Manganese	**678**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Nickel	**12.4**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Potassium	**1970**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Silver	**37.3**	4.40		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Sodium	**89.8**	7.49		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Thallium	**3.40**	0.396		mg/Kg dry	12/20/18 23:58	B8L0622	KJ1	1
Vanadium	**27.4**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Zinc	**58.3**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/11/19 12:08	B9A0271	AG	5
Manganese, TCLP	< 0.0250	0.0250		mg/L	01/11/19 12:08	B9A0271	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/11/19 12:08	B9A0271	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/11/19 12:08	B9A0271	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.109**	0.073		mg/Kg dry	12/27/18 12:57	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**79.6**	0.100		% (Percent)	12/17/18 06:55	B8L0510	MKP	1
Method: SW9045C								
pH	**7.59**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-39 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:38
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-62 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Ethylbenzene	< 208	208		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Toluene	< 104	104		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Xylenes, Total	< 625	625		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%*	*Limits: 91-106*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 88%*	*Limits: 71-112*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 93%*	*Limits: 85-119*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**136**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
2-Methylnaphthalene	**144**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Acenaphthene	**14.5**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Acenaphthylene	**255**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Anthracene	**157**	4.84		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(a)anthracene	**551**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(a)pyrene	**704**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(b)fluoranthene	**835**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(g,h,i)perylene	**423**	24.2		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(k)fluoranthene	**279**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Chrysene	**550**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Dibenzo(a,h)anthracene	**99.9**	48.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Fluoranthene	**672**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Fluorene	**20.8**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**597**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Naphthalene	**88.7**	24.2		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Phenanthrene	**474**	4.84		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Pyrene	**712**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 79%*	*Limits: 50-150*	*12/22/18 06:15*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 84%*	*Limits: 50-150*	*12/22/18 06:15*	*B8L0635*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-40 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:35
Matrix: Soil
Lab ID: 18L0509-63

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3010**	61.9		mg/Kg dry	12/18/18 23:04	B8L0552	KJ1	10
Antimony	< 1.24	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Arsenic	**16.8**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Barium	**49.8**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 23:04	B8L0552	KJ1	10
Cadmium	**2.29**	0.124		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Calcium	**184000**	5520	B	mg/Kg dry	12/19/18 19:14	B8L0552	KJ1	1000
Chromium	**2.71**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Cobalt	**2.50**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Copper	**16.8**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Iron	**10300**	247		mg/Kg dry	12/18/18 21:13	B8L0552	KJ1	100
Lead	**42.4**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Magnesium	**16400**	619		mg/Kg dry	12/18/18 21:13	B8L0552	KJ1	100
Manganese	**539**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Nickel	**7.85**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Potassium	**391**	6.19	B	mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 23:04	B8L0552	KJ1	10
Sodium	**168**	6.19		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Thallium	**1.44**	0.327		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Vanadium	**11.2**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Zinc	**53.3**	1.24		mg/Kg dry	12/19/18 01:22	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.060	0.060		mg/Kg dry	12/27/18 12:59	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**91.8**	0.100		% (Percent)	12/17/18 06:57	B8L0510	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 08:48	B8L0745	JL	50
Ethylbenzene	< 196	196		ug/Kg dry	12/19/18 08:48	B8L0745	JL	50
Toluene	< 97.9	97.9		ug/Kg dry	12/19/18 08:48	B8L0745	JL	50
Xylenes, Total	< 587	587		ug/Kg dry	12/19/18 08:48	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 91-106*	*12/19/18 08:48*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 85%* *Limits: 71-112*	*12/19/18 08:48*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 102%* *Limits: 85-119*	*12/19/18 08:48*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-40 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:35
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-63 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**348**	171		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
2-Methylnaphthalene	**433**	171		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Acenaphthene	< 85.3	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Acenaphthylene	**632**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Anthracene	**247**	42.6		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Benzo(a)anthracene	**1380**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Benzo(a)pyrene	**2760**	171		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Benzo(b)fluoranthene	**2770**	171		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Benzo(g,h,i)perylene	**1100**	213		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Benzo(k)fluoranthene	**682**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Chrysene	**1260**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Dibenzo(a,h)anthracene	< 426	426		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Fluoranthene	**1550**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Fluorene	< 85.3	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**2610**	85.3		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Naphthalene	**282**	213		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Phenanthrene	**789**	42.6		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Pyrene	**1760**	171		ug/Kg dry		12/27/18 07:26	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 07:26*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/27/18 07:26*	*B8L0635*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-41 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:49
Matrix: Soil
Lab ID: 18L0509-64

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**8500**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Antimony	< 1.35	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Arsenic	**7.42**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Barium	**90.2**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Beryllium	< 0.135	0.135		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Cadmium	**0.630**	0.135		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Calcium	**53400**	676		mg/Kg dry	12/19/18 21:30	B8L0622	KJ1	100
Chromium	**34.9**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Cobalt	**6.02**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Copper	**21.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Iron	**18700**	270	B	mg/Kg dry	12/19/18 21:30	B8L0622	KJ1	100
Lead	**81.4**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Magnesium	**9190**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Manganese	**623**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Nickel	**13.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Potassium	**1150**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Silver	**31.5**	4.40		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Sodium	**69.6**	6.76		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Thallium	**2.66**	0.357		mg/Kg dry	12/21/18 00:02	B8L0622	KJ1	1
Vanadium	**18.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Zinc	**88.7**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:39	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:39	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:39	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:39	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.070	0.070		mg/Kg dry	12/27/18 13:01	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**84.7**	0.100		% (Percent)	12/17/18 06:59	B8L0510	MKP	1
Method: SW9045C								
pH	**7.92**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-41 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:49
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-64 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 18.2	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
2-Methylnaphthalene	< 18.2	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Acenaphthene	**9.63**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Acenaphthylene	**9.71**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Anthracene	**29.0**	4.55		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(a)anthracene	**165**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(a)pyrene	**199**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(b)fluoranthene	**202**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(g,h,i)perylene	**106**	22.7		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(k)fluoranthene	**74.5**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Chrysene	**154**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Dibenzo(a,h)anthracene	< 45.5	45.5		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Fluoranthene	**298**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Fluorene	< 9.10	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**148**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Naphthalene	< 22.7	22.7		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Phenanthrene	**111**	4.55		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Pyrene	**241**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 79%*	*Limits: 50-150*	*12/22/18 06:53*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 85%*	*Limits: 50-150*	*12/22/18 06:53*	*B8L0635*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-42 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:51
Matrix: Soil
Lab ID: 18L0509-65

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5480**	73.7		mg/Kg dry	12/19/18 23:20	B8L0622	KJ1	10
Antimony	< 1.47	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Arsenic	**8.73**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Barium	**61.2**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Beryllium	< 0.147	0.147		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Cadmium	**0.581**	0.147		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Calcium	**101000**	737		mg/Kg dry	12/19/18 21:51	B8L0622	KJ1	100
Chromium	**25.7**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Cobalt	**3.64**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Copper	**21.4**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Iron	**16800**	295	B	mg/Kg dry	12/19/18 21:51	B8L0622	KJ1	100
Lead	**18.6**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Magnesium	**10500**	73.7		mg/Kg dry	12/19/18 23:20	B8L0622	KJ1	10
Manganese	**486**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Nickel	**10.8**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Potassium	**1080**	7.37		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Silver	**29.7**	4.40		mg/Kg dry	12/19/18 23:20	B8L0622	KJ1	10
Sodium	**137**	7.37		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Thallium	**2.40**	0.389		mg/Kg dry	12/21/18 00:07	B8L0622	KJ1	1
Vanadium	**14.4**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Zinc	**63.8**	1.47		mg/Kg dry	12/20/18 01:13	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.077	0.077		mg/Kg dry	12/27/18 13:04	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**77.2**	0.100		% (Percent)	12/17/18 07:01	B8L0510	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**246**	204		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
2-Methylnaphthalene	**305**	204		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Acenaphthene	**130**	102		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Acenaphthylene	**1050**	102		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Anthracene	**519**	51.0		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Benzo(a)anthracene	**1850**	102		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Benzo(a)pyrene	**3640**	204		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Benzo(b)fluoranthene	**3800**	204		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Benzo(g,h,i)perylene	**2030**	255		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Benzo(k)fluoranthene	**1090**	102		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Chrysene	**1930**	102		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10
Dibenzo(a,h)anthracene	< 510	510		ug/Kg dry	12/27/18 13:47	B8L0635	LP	10

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-42 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:51
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-65 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**2130**	102		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Fluorene	**163**	102		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**3900**	102		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Naphthalene	**267**	255		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Phenanthrene	**829**	51.0		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Pyrene	**2460**	204		ug/Kg dry		12/27/18 13:47	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 105%*	*Limits: 50-150*	*12/27/18 13:47*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 110%*	*Limits: 50-150*	*12/27/18 13:47*	*B8L0635*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-43 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:02
Matrix: Soil
Lab ID: 18L0509-66

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6810**	66.6		mg/Kg dry	12/19/18 23:24	B8L0622	KJ1	10
Antimony	< 1.33	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Arsenic	**14.2**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Barium	**57.3**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Beryllium	< 0.133	0.133		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Cadmium	**1.07**	0.133		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Calcium	**44900**	666		mg/Kg dry	12/19/18 21:55	B8L0622	KJ1	100
Chromium	**51.9**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Cobalt	**4.88**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Copper	**32.8**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Iron	**32300**	266	B	mg/Kg dry	12/19/18 21:55	B8L0622	KJ1	100
Lead	**27.3**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Magnesium	**11200**	666		mg/Kg dry	12/19/18 21:55	B8L0622	KJ1	100
Manganese	**337**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Nickel	**12.2**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Potassium	**782**	6.66		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Silver	**64.1**	4.40		mg/Kg dry	12/19/18 23:24	B8L0622	KJ1	10
Sodium	**731**	6.66		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Thallium	**2.40**	0.351		mg/Kg dry	12/21/18 00:11	B8L0622	KJ1	1
Vanadium	**44.7**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Zinc	**76.5**	1.33		mg/Kg dry	12/20/18 01:17	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.063	0.063		mg/Kg dry	12/27/18 13:07	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.8**	0.100		% (Percent)	12/17/18 07:03	B8L0510	MKP	1
Method: SW9045C								
pH	**7.96**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,1,2,2-Tetrachloroethane	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,1,2-Trichloroethane	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,1-Dichloroethane	< 4.10	4.10		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,1-Dichloroethene	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,2-Dichloroethane	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1
1,2-Dichloropropane	< 2.05	2.05		ug/Kg dry	12/17/18 23:14	B8L0608	JL	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-43 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:02
Matrix: Soil
Lab ID: 18L0509-66 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
1-Butanol	< 205	205		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
2-Butanone	< 28.7	28.7		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
2-Hexanone	< 28.7	28.7		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
4-Methyl-2-pentanone	< 28.7	28.7		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Acetone	< 71.7	71.7		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Acrylonitrile	< 1.00	1.00		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Benzene	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Bromodichloromethane	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Bromoform	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Bromomethane	< 20.5	20.5		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Carbon disulfide	**7.41**	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Carbon tetrachloride	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Chlorobenzene	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Chloroethane	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Chloroform	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Chloromethane	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
cis-1,2-Dichloroethene	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Dibromochloromethane	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Ethylbenzene	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
m,p-Xylene	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Methyl tert-butyl ether	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Methylene chloride	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
o-Xylene	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Styrene	< 8.19	8.19		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Tetrachloroethene	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Toluene	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
trans-1,2-Dichloroethene	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Trichloroethene	< 2.05	2.05		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Vinyl acetate	< 20.5	20.5		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Vinyl chloride	< 4.10	4.10		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Xylenes, Total	< 12.3	12.3		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/17/18 23:14	B8L0608	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 126%*	*Limits: 88-136*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4			*S*	*Recovery: 146%*	*Limits: 71-136*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 98%*	*Limits: 81-114*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 96%*	*Limits: 85-116*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 99%*	*Limits: 79-119*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 106%*	*Limits: 90-142*	*12/17/18 23:14*	*B8L0608*	*JL*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-43 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 14:02
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-66 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**498**	180		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
2-Methylnaphthalene	**631**	180		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Acenaphthene	< 89.8	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Acenaphthylene	**1060**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Anthracene	**426**	44.9		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Benzo(a)anthracene	**2090**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Benzo(a)pyrene	**3750**	180		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Benzo(b)fluoranthene	**3770**	180		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Benzo(g,h,i)perylene	**1510**	225		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Benzo(k)fluoranthene	**890**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Chrysene	**1950**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Dibenzo(a,h)anthracene	< 449	449		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Fluoranthene	**2720**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Fluorene	**136**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**3280**	89.8		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Naphthalene	**523**	225		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Phenanthrene	**1450**	44.9		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Pyrene	**3260**	180		ug/Kg dry		12/27/18 14:26	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 14:26*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/27/18 14:26*	*B8L0635*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-44 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:05
Matrix: Soil
Lab ID: 18L0509-67

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11000**	694		mg/Kg dry	12/19/18 21:59	B8L0622	KJ1	100
Antimony	< 1.39	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Arsenic	**15.5**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Barium	**100**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Beryllium	< 0.139	0.139		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Cadmium	**0.650**	0.139		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Calcium	**25000**	694		mg/Kg dry	12/19/18 21:59	B8L0622	KJ1	100
Chromium	**40.3**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Cobalt	**6.75**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Copper	**33.9**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Iron	**19500**	278	B	mg/Kg dry	12/19/18 21:59	B8L0622	KJ1	100
Lead	**38.2**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Magnesium	**7390**	69.4		mg/Kg dry	12/19/18 23:45	B8L0622	KJ1	10
Manganese	**466**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Nickel	**14.5**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Potassium	**1040**	6.94		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Silver	**41.3**	4.40		mg/Kg dry	12/19/18 23:45	B8L0622	KJ1	10
Sodium	**149**	6.94		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Thallium	**2.60**	0.367		mg/Kg dry	12/21/18 00:16	B8L0622	KJ1	1
Vanadium	**26.8**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Zinc	**82.6**	1.39		mg/Kg dry	12/20/18 01:22	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.066	0.066		mg/Kg dry	12/27/18 13:09	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**84.4**	0.100		% (Percent)	12/17/18 07:05	B8L0510	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,1,2,2-Tetrachloroethane	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,1,2-Trichloroethane	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,1-Dichloroethane	< 4.71	4.71		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,1-Dichloroethene	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,2-Dichloroethane	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1,2-Dichloropropane	< 2.36	2.36		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
1-Butanol	< 236	236		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
2-Butanone	< 33.0	33.0		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1
2-Hexanone	< 33.0	33.0		ug/Kg dry	12/17/18 22:42	B8L0608	JL	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-44 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 14:05
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-67 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
4-Methyl-2-pentanone	< 33.0	33.0		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Acetone	< 82.5	82.5		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Acrylonitrile	< 1.15	1.15		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Benzene	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Bromodichloromethane	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Bromoform	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Bromomethane	< 23.6	23.6		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Carbon disulfide	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Carbon tetrachloride	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Chlorobenzene	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Chloroethane	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Chloroform	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Chloromethane	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
cis-1,2-Dichloroethene	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Dibromochloromethane	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Ethylbenzene	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
m,p-Xylene	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Methyl tert-butyl ether	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Methylene chloride	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
o-Xylene	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Styrene	< 9.43	9.43		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Tetrachloroethene	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Toluene	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
trans-1,2-Dichloroethene	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Trichloroethene	< 2.36	2.36		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Vinyl acetate	< 23.6	23.6		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Vinyl chloride	< 4.71	4.71		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Xylenes, Total	< 14.1	14.1		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/17/18 22:42	B8L0608	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 126%*	*Limits: 88-136*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 132%*	*Limits: 71-136*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 99%*	*Limits: 81-114*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 85%*	*Limits: 85-116*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 106%*	*Limits: 79-119*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 112%*	*Limits: 90-142*	*12/17/18 22:42*	*B8L0608*	*JL*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-44 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 14:05
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-67 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**126**	18.5		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
2-Methylnaphthalene	**150**	18.5		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Acenaphthene	**9.86**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Acenaphthylene	**396**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Anthracene	**181**	4.62		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Benzo(a)anthracene	**618**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Benzo(a)pyrene	**783**	18.5		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Benzo(b)fluoranthene	**949**	18.5		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Benzo(g,h,i)perylene	**422**	23.1		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Benzo(k)fluoranthene	**330**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Chrysene	**583**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Dibenzo(a,h)anthracene	**122**	46.2		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Fluoranthene	**862**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Fluorene	**20.4**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**665**	9.25		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Naphthalene	**94.4**	23.1		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Phenanthrene	**326**	4.62		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Pyrene	**824**	18.5		ug/Kg dry		12/22/18 07:30	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 79%*	*Limits: 50-150*	*12/22/18 07:30*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 84%*	*Limits: 50-150*	*12/22/18 07:30*	*B8L0635*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-45 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:11
Matrix: Soil
Lab ID: 18L0509-68

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7970**	75.8		mg/Kg dry	12/19/18 23:49	B8L0622	KJ1	10
Antimony	< 1.52	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Arsenic	**9.33**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Barium	**78.3**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Beryllium	< 0.152	0.152		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Cadmium	**0.706**	0.152		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Calcium	**86600**	758		mg/Kg dry	12/19/18 22:03	B8L0622	KJ1	100
Chromium	**35.2**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Cobalt	**5.16**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Copper	**30.7**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Iron	**20500**	303	B	mg/Kg dry	12/19/18 22:03	B8L0622	KJ1	100
Lead	**42.2**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Magnesium	**15600**	758		mg/Kg dry	12/19/18 22:03	B8L0622	KJ1	100
Manganese	**499**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Nickel	**12.9**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Potassium	**1160**	7.58		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Silver	**36.3**	4.40		mg/Kg dry	12/19/18 23:49	B8L0622	KJ1	10
Sodium	**130**	7.58		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Thallium	**2.42**	0.400		mg/Kg dry	12/21/18 00:20	B8L0622	KJ1	1
Vanadium	**20.5**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Zinc	**83.6**	1.52		mg/Kg dry	12/20/18 01:26	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.080	0.080		mg/Kg dry	12/27/18 13:11	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.0**	0.100		% (Percent)	12/17/18 07:07	B8L0510	MKP	1
Method: SW9045C								
pH	**7.70**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 09:20	B8L0745	JL	50
Ethylbenzene	< 266	266		ug/Kg dry	12/19/18 09:20	B8L0745	JL	50
Toluene	< 133	133		ug/Kg dry	12/19/18 09:20	B8L0745	JL	50
Xylenes, Total	< 797	797		ug/Kg dry	12/19/18 09:20	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 100%*	*Limits: 91-106*	*12/19/18 09:20*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 85%*	*Limits: 71-112*	*12/19/18 09:20*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 102%*	*Limits: 85-119*	*12/19/18 09:20*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-45 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 14:11
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-68 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**72.7**	20.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
2-Methylnaphthalene	**96.3**	20.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Acenaphthene	**28.8**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Acenaphthylene	**925**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Anthracene	**508**	5.17		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Benzo(a)anthracene	**1620**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Benzo(a)pyrene	**1880**	20.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Benzo(b)fluoranthene	**2470**	20.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Benzo(g,h,i)perylene	**1210**	25.9		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Benzo(k)fluoranthene	**868**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Chrysene	**1650**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Dibenzo(a,h)anthracene	**297**	51.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Fluoranthene	**2250**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Fluorene	**44.8**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**1700**	10.3		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Naphthalene	**115**	25.9		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Phenanthrene	**656**	5.17		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Pyrene	**2470**	20.7		ug/Kg dry		12/22/18 08:08	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 78%*	*Limits: 50-150*	*12/22/18 08:08*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 84%*	*Limits: 50-150*	*12/22/18 08:08*	*B8L0635*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-46 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:15
Matrix: Soil
Lab ID: 18L0509-69

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5160**	69.8		mg/Kg dry	12/19/18 23:53	B8L0622	KJ1	10
Antimony	< 1.40	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Arsenic	**9.49**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Barium	**69.4**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Beryllium	< 0.140	0.140		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Cadmium	**1.32**	0.140		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Calcium	**82200**	698		mg/Kg dry	12/19/18 22:07	B8L0622	KJ1	100
Chromium	**30.6**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Cobalt	**3.24**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Copper	**41.9**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Iron	**14200**	279	B	mg/Kg dry	12/19/18 22:07	B8L0622	KJ1	100
Lead	**196**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Magnesium	**15000**	698		mg/Kg dry	12/19/18 22:07	B8L0622	KJ1	100
Manganese	**386**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Nickel	**11.5**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Potassium	**739**	6.98		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Silver	**43.6**	4.40		mg/Kg dry	12/19/18 23:53	B8L0622	KJ1	10
Sodium	**203**	6.98		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Thallium	**2.20**	0.369		mg/Kg dry	12/21/18 00:25	B8L0622	KJ1	1
Vanadium	**14.1**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Zinc	**104**	1.40		mg/Kg dry	12/20/18 01:47	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.115**	0.065		mg/Kg dry	12/27/18 13:13	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.7**	0.100		% (Percent)	12/17/18 07:09	B8L0510	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 09:52	B8L0745	JL	50
Ethylbenzene	< 199	199		ug/Kg dry	12/19/18 09:52	B8L0745	JL	50
Toluene	< 99.3	99.3		ug/Kg dry	12/19/18 09:52	B8L0745	JL	50
Xylenes, Total	< 596	596		ug/Kg dry	12/19/18 09:52	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%* *Limits: 91-106*	*12/19/18 09:52*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%* *Limits: 71-112*	*12/19/18 09:52*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%* *Limits: 85-119*	*12/19/18 09:52*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-46 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 14:15
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-69 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**878**	177		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
2-Methylnaphthalene	**1120**	177		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Acenaphthene	< 88.3	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Acenaphthylene	**477**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Anthracene	**333**	44.2		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Benzo(a)anthracene	**1470**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Benzo(a)pyrene	**2560**	177		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Benzo(b)fluoranthene	**2820**	177		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Benzo(g,h,i)perylene	**1120**	221		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Benzo(k)fluoranthene	**664**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Chrysene	**1580**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Dibenzo(a,h)anthracene	< 442	442		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Fluoranthene	**1990**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Fluorene	< 88.3	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**2280**	88.3		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Naphthalene	**619**	221		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Phenanthrene	**1740**	44.2		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Pyrene	**2060**	177		ug/Kg dry		12/27/18 15:42	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 93%*	*Limits: 50-150*	*12/27/18 15:42*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/27/18 15:42*	*B8L0635*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-47 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:18
Matrix: Soil
Lab ID: 18L0509-70

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4620**	74.2		mg/Kg dry	12/19/18 23:57	B8L0622	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Arsenic	**8.27**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Barium	**66.5**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Beryllium	< 0.148	0.148		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Cadmium	**0.748**	0.148		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Calcium	**218000**	7420		mg/Kg dry	12/20/18 23:10	B8L0622	KJ1	1000
Chromium	**25.2**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Cobalt	**2.81**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Copper	**24.3**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Iron	**18200**	297	B	mg/Kg dry	12/19/18 22:11	B8L0622	KJ1	100
Lead	**53.4**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Magnesium	**10800**	74.2		mg/Kg dry	12/19/18 23:57	B8L0622	KJ1	10
Manganese	**567**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Nickel	**11.0**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Potassium	**839**	7.42		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Silver	**26.6**	4.40		mg/Kg dry	12/19/18 23:57	B8L0622	KJ1	10
Sodium	**156**	7.42		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Thallium	**2.00**	0.392		mg/Kg dry	12/21/18 00:29	B8L0622	KJ1	1
Vanadium	**11.3**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Zinc	**83.8**	1.48		mg/Kg dry	12/20/18 01:52	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.067	0.067		mg/Kg dry	12/27/18 13:21	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.8**	0.100		% (Percent)	12/17/18 07:11	B8L0510	MKP	1
Method: SW9045C								
pH	**8.10**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 10:25	B8L0745	JL	50
Ethylbenzene	< 234	234		ug/Kg dry	12/19/18 10:25	B8L0745	JL	50
Toluene	< 117	117		ug/Kg dry	12/19/18 10:25	B8L0745	JL	50
Xylenes, Total	< 702	702		ug/Kg dry	12/19/18 10:25	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%* *Limits: 91-106*	*12/19/18 10:25*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/19/18 10:25*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%* *Limits: 85-119*	*12/19/18 10:25*	*B8L0745*	*JL*	*50*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-47 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 14:18
Matrix: Soil
Lab ID: 18L0509-70 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 192	192		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
2-Methylnaphthalene	< 192	192		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Acenaphthene	< 95.9	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Acenaphthylene	**1100**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Anthracene	**434**	47.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Benzo(a)anthracene	**1820**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Benzo(a)pyrene	**4240**	192		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Benzo(b)fluoranthene	**4580**	192		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Benzo(g,h,i)perylene	**2600**	240		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Benzo(k)fluoranthene	**1020**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Chrysene	**1870**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Dibenzo(a,h)anthracene	**546**	479		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Fluoranthene	**2120**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Fluorene	< 95.9	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Indeno(1,2,3-cd)pyrene	**4780**	95.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Naphthalene	< 240	240		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Phenanthrene	**537**	47.9		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Pyrene	**2430**	192		ug/Kg dry		12/27/18 15:04	B8L0635	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 91%*	*Limits: 50-150*	*12/27/18 15:04*	*B8L0635*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 92%*	*Limits: 50-150*	*12/27/18 15:04*	*B8L0635*	*LP*	*10*

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Dates Report

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-02	SB-1 1-3'	12/12/18	Soil	Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 06:50	B8L0496	
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29	B8L0514	S8L0264
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 14:59		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 14:59		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 15:44		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 15:44		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 15:44		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 14:59		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:29		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 01:21	B8L0562	S8L0329
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 10:57	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 05:07	B8L0740	S8L0351
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:16	B9A0188	S9A0096
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:16		
18L0509-05	SB-2 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 06:52	B8L0496	
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33	B8L0514	S8L0264
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 15:03		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		

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Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-05	SB-2 1-3'	12/12/18	Soil	Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:33	B8L0514	S8L0264
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 15:03		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 15:48		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 15:48		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:33		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 15:48		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:03		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 01:57	B8L0562	S8L0329
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 11:00	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 05:39	B8L0740	S8L0351
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:17	B9A0188	S9A0096
18L0509-08	SB-3 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 06:54	B8L0496	
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:24	B8L0514	S8L0264
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 15:24		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 15:52		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 15:52		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 15:52		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 15:52		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:38		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 02:34	B8L0562	S8L0329
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 11:02	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 06:11	B8L0740	S8L0351
				Lead, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:19	B9A0188	S9A0096

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-08	SB-3 1-3'	12/12/18	Soil	Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:19	B9A0188	S9A0096
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:19		
18L0509-11	SB-4 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 06:56	B8L0496	
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42	B8L0514	S8L0264
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 15:56		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 15:56		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:28		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 15:28		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 15:56		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 15:56		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:42		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 03:10	B8L0562	S8L0329
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 11:05	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 06:44	B8L0740	S8L0351
18L0509-12	SB-4 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:20	B9A0158	
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:09	B9A0160	S9A0094
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 19:24		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 19:24		

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-12	SB-4 3-5'	12/12/18	Soil	Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09	B9A0160	S9A0094
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 19:24		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:09		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 17:41		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:24		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 17:41		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:26	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 07:33	B9A0180	S9A0120
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:05	B9A0599	S9A0294
18L0509-14	SB-5 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 06:58	B8L0496	
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47	B8L0514	S8L0264
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 16:00		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 15:32		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 16:00		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 16:00		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 16:00		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:47		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:32		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 03:47	B8L0562	S8L0329
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 11:07	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 07:16	B8L0740	S8L0351
18L0509-15	SB-5 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:22	B9A0158	
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:13	B9A0160	S9A0094

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-15	SB-5 3-5'	12/12/18	Soil	Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13	B9A0160	S9A0094
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 17:45		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 17:45		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 17:45		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:28		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:13		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 17:45		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:28	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 08:10	B9A0180	S9A0120
18L0509-17	SB-6 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:00	B8L0496	
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 17:33	B8L0514	S8L0264
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 17:33		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 17:20		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 17:20		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 17:33		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-17	SB-6 1-3'	12/12/18	Soil	Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 18:17	B8L0514	S8L0264
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 17:33		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 18:17		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 04:24	B8L0562	S8L0329
				Mercury, Total CVAA		12/19/18 07:45	12/19/18 11:10	B8L0599	S8L0281
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 07:48	B8L0740	S8L0351
18L0509-18	SB-6 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:24	B9A0158	
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18	B9A0160	S9A0094
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 17:49		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:32		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 19:32		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:18		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 19:32		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 19:32		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:30	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 08:48	B9A0180	S9A0120
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:07	B9A0599	S9A0294
18L0509-20	SB-7 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:02	B8L0496	
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22	B8L0514	S8L0264
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-20	SB-7 1-3'	12/12/18	Soil	Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 18:22	B8L0514	S8L0264
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 17:24		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 17:37		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 17:37		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 17:37		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 18:22		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 05:01	B8L0562	S8L0329
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:17	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 08:20	B8L0740	S8L0351
18L0509-21	SB-7 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:26	B9A0158	
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22	B9A0160	S9A0094
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 19:36		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 19:36		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:36		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 21:22		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:32	B9A0170	S9A0086

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-21	SB-7 3-5'	12/12/18	Soil	Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 09:27	B9A0180	S9A0120
18L0509-23	SB-8 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:04	B8L0496	
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:51	B8L0514	S8L0264
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:51		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 16:21		
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:36		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/18/18 11:22	12/22/18 05:39	B8L0562	S8L0329
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:20	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/17/18 11:48	12/18/18 08:53	B8L0740	S8L0351
18L0509-24	SB-8 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:28	B9A0158	
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26	B9A0160	S9A0094
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-24	SB-8 3-5'	12/12/18	Soil	Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26	B9A0160	S9A0094
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 19:40		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:40		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:26		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:14		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:35	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 10:04	B9A0180	S9A0120
18L0509-26	SB-9 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:06	B8L0496	
				Iron, Total ICP-AES		12/17/18 08:42	12/18/18 15:40	B8L0514	S8L0264
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 16:25		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 16:25		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 16:25		
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 16:25		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 16:56		
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 15:22	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:22	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 19:51	B8L0744	S8L0352
18L0509-27	SB-9 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:30	B9A0158	
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30	B9A0160	S9A0094
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-27	SB-9 3-5'	12/12/18	Soil	Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:30	B9A0160	S9A0094
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 19:44		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 19:44		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 19:44		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:30		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:37	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 13:35	B9A0180	S9A0123
18L0509-29	SB-10 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:08	B8L0496	
				Magnesium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26	B8L0514	S8L0264
				Potassium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Zinc, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Vanadium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Thallium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Selenium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Antimony, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Lead, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Nickel, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Sodium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Silver, Total ICP-AES		12/17/18 08:42	12/18/18 17:41		
				Copper, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Manganese, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Chromium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Cobalt, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Cadmium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Calcium, Total ICP-AES		12/17/18 08:42	12/18/18 17:41		
				Beryllium, Total ICP-AES		12/17/18 08:42	12/18/18 17:41		
				Barium, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Arsenic, Total ICP-AES		12/17/18 08:42	12/18/18 18:26		
				Aluminum, Total ICP-AES		12/17/18 08:42	12/18/18 17:41		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-29	SB-10 1-3'	12/12/18	Soil	Iron, Total ICP-AES		12/17/18 08:42	12/18/18 17:29	B8L0514	S8L0264
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 17:53	B8L0673	S8L0349
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 03:37		S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:25	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 20:23	B8L0744	S8L0352
18L0509-30	SB-10 3-5'			Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:32	B9A0158	
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:04	B9A0160	S9A0094
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:22		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:04		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 20:04		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:04		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:34		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:47	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 14:14	B9A0180	S9A0123
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:09	B9A0599	S9A0294
18L0509-31	SB-11 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:10	B8L0496	
				Barium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25	B8L0552	S8L0264
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 19:27		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Thallium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Selenium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Antimony, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Zinc, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-31	SB-11 0-1'	12/12/18	Soil	Nickel, Total ICP-AES		12/18/18 08:39	12/18/18 23:25	B8L0552	S8L0264
				Sodium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Manganese, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:27		
				Copper, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Chromium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:17		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/18/18 23:25		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:17		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:17		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:27		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 18:31	B8L0673	S8L0349
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 03:01		S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:28	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 20:56	B8L0744	S8L0352
18L0509-32	SB-12 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:12	B8L0496	
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 23:30	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Thallium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Antimony, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Nickel, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Sodium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Manganese, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 21:21		
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Copper, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Chromium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:31		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:21		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:21		
				Barium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:21		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:31		
				Selenium, Total ICP-AES		12/18/18 08:39	12/18/18 23:30		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-32	SB-12 0-1'	12/12/18	Soil	Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 19:09	B8L0673	S8L0349
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 04:14		S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:31	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 21:28	B8L0744	S8L0352
18L0509-33	SB-13 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:14	B8L0496	
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 21:26	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Thallium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Selenium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Nickel, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Sodium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Manganese, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 19:35		
				Copper, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Chromium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:35		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:35		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:26		
				Barium, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 19:35		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:26		
				Antimony, Total ICP-AES		12/18/18 08:39	12/18/18 23:34		
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 11:29	B8L0714	S8L0360
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:39	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/20/18 13:16	12/21/18 08:08	B8L0747	S8L0357
18L0509-34	SB-14 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 06:30	12/15/18 07:16	B8L0496	
				Copper, Total ICP-AES		12/18/18 08:39	12/18/18 23:39	B8L0552	S8L0264
				Vanadium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Thallium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Selenium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Antimony, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Nickel, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Sodium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Manganese, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 19:39		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-34	SB-14 0-1'	12/12/18	Soil	Zinc, Total ICP-AES		12/18/18 08:39	12/18/18 23:39	B8L0552	S8L0264
				Chromium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:39		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:30		
				Barium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:30		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:30		
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 23:39		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:39		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 04:51	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:42	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 22:00	B8L0744	S8L0352
18L0509-35	SB-15 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:05	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:02	B8L0622	S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:14		S8L0317
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 21:02		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Calcium, Total ICP-AES		12/19/18 12:45	12/20/18 22:58		S8L0317
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		S8L0288
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:02		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:15		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:02		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:15		
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 14:57	B8L0714	S8L0360
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 20:52		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-35	SB-15 0-1'	12/12/18	Soil	Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:45	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/20/18 13:16	12/21/18 08:40	B8L0747	S8L0357
				Chromium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:21	B9A0188	S9A0096
				Silver, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:21		
				Manganese, SPLP ICP-MS	01/08/19 17:14	01/09/19 14:19	01/10/19 11:55	B9A0224	S9A0121
18L0509-36	SB-16 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:07	B8L0498	
				Vanadium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44	B8L0552	S8L0264
				Manganese, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Sodium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Nickel, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Antimony, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Thallium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Zinc, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 19:43		
				Selenium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:43		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:34		
				Chromium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Copper, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Calcium, Total ICP-AES		12/18/18 08:39	12/19/18 19:05		S8L0288
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:34		S8L0264
				Barium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:34		
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 23:44		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 05:30	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:47	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 22:33	B8L0744	S8L0352
18L0509-37	SB-17 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:09	B8L0498	
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:05	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 19:47		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-37	SB-17 0-1'	12/12/18	Soil	Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:05	B8L0552	S8L0264
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:47		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:47		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:38		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:38		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:38		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:05		
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 14:15	B8L0714	S8L0360
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:50	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/20/18 13:16	12/21/18 09:12	B8L0747	S8L0357
18L0509-38	SB-18 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:11	B8L0498	
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 21:42	B8L0552	S8L0264
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:42		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 19:51		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 19:51		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:42		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:42		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:09		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 19:47	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:52	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 23:05	B8L0744	S8L0352
				Lead, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:23	B9A0188	S9A0096

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-39	SB-19 0-1'	12/12/18	Soil	Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:13	B8L0498	
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:12	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Lead, Total ICP-AES		12/18/18 08:39	12/18/18 21:47		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 21:47		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:12		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 21:47		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:14		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 21:47		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 21:47		
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 12:11	B8L0714	S8L0360
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:54	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/20/18 13:16	12/21/18 09:45	B8L0747	S8L0357
18L0509-40	SB-20 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:15	B8L0498	
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:19	B8L0552	S8L0264
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:07		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:16		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:16		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:07		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-40	SB-20 0-1'	12/12/18	Soil	Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19	B8L0552	S8L0264
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:07		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:07		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:19		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 20:25	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 13:57	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/18/18 23:38	B8L0744	S8L0352
				Lead, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:24	B9A0188	S9A0096
18L0509-41	SB-21 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:17	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:19	B8L0622	S8L0317
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		S8L0288
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:19		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 22:19		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:19		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:19		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:06		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:06		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 21:03	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:00	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/19/18 00:10	B8L0744	S8L0352
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:30	B9A0188	S9A0096
				Chromium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:30		
				Silver, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:30		
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:30		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-42	SB-22 0-1'	12/12/18	Soil	Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:34	B9A0158	
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:38	B9A0160	S9A0094
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:26		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 18:26		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:08		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:08		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 18:26		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:38		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:50	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 14:52	B9A0180	S9A0123
18L0509-43	SB-23 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:19	B8L0498	
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24	B8L0552	S8L0264
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:11		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:11		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:20		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-43	SB-23 0-1'	12/12/18	Soil	Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:11	B8L0552	S8L0264
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:24		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:11		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:20		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 01:47	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:02	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/19/18 00:42	B8L0744	S8L0352
18L0509-44	SB-24 0-1'	12/12/18		pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:36	B9A0158	
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 18:30	B9A0160	S9A0094
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 18:30		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:30		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:12		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 18:30		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 21:59		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:52	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 15:30	B9A0180	S9A0123
18L0509-45	SB-25 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:21	B8L0498	
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:28	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-45	SB-25 0-1'	12/12/18	Soil	Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:28	B8L0552	S8L0264
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:15		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:24		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:15		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:28		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 20:24		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:15		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:24		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 21:40	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:19	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/19/18 01:15	B8L0744	S8L0352
18L0509-46	SB-26 0-1'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:38	B9A0158	
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:16	B9A0160	S9A0094
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:16		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 18:34		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 22:04		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:16		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:34		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-46	SB-26 0-1'	12/12/18	Soil	Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:54	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 06:54	B9A0180	S9A0120
18L0509-47	SB-27 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:23	B8L0498	
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:28		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:28		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:19		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:33		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:19		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:19		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 20:28		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/22/18 22:18	B8L0673	S8L0349
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:21	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/19/18 01:47	B8L0744	S8L0352
				Lead, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:32	B9A0188	S9A0096
18L0509-48	SB-28 0-1'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:40	B9A0158	
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:38	B9A0160	S9A0094
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-48	SB-28 0-1'	12/12/18	Soil	Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08	B9A0160	S9A0094
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 18:38		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:20		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:20		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:20		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 22:08		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:57	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 16:09	B9A0180	S9A0123
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:11	B9A0599	S9A0294
18L0509-49	SB-29 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:25	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:10	B8L0622	S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:23		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 22:23		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:23		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:23		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 00:10		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:23		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/26/18 22:42	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:23	B8L0730	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:51	12/19/18 02:19	B8L0744	S8L0352

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-50	SB-29 3-5'	12/12/18	Soil	Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:42	B9A0158	
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 22:13	B9A0160	S9A0094
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:24		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 20:24		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 22:13		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:24		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:24		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:42		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 12:59	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 16:45	B9A0180	S9A0123
18L0509-51	SB-30 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:27	B8L0498	
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38	B8L0552	S8L0264
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:32		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:23		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:32		

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-51	SB-30 1-3'	12/12/18	Soil	Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:23	B8L0552	S8L0264
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:38		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:23		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:23		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 02:23	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:26	B8L0730	S8L0355
18L0509-52	SB-30 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:44	B9A0158	
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17	B9A0160	S9A0094
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:28		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 18:46		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 20:28		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 18:46		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:28		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 22:17		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 13:02	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 17:23	B9A0180	S9A0123
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:12	B9A0599	S9A0294
18L0509-53	SB-31 1-3'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:29	B8L0498	
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42	B8L0552	S8L0264
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:27		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-53	SB-31 1-3'	12/12/18	Soil	Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:42	B8L0552	S8L0264
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:36		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:27		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:42		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:27		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:27		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:36		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/26/18 23:20	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:48	B8L0731	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 06:38	B8L0745	S8L0353
				Thallium, TCLP ICP-MS	01/24/19 16:47	01/28/19 14:16	01/29/19 11:30	B9A0875	S9A0425
				Iron, TCLP ICP-MS	01/24/19 16:47	01/28/19 14:16	01/29/19 11:30		
				Silver, TCLP ICP-MS	01/24/19 16:47	01/28/19 14:16	01/29/19 11:30		
				Lead, TCLP ICP-MS	01/24/19 16:47	01/28/19 14:16	01/29/19 11:30		
18L0509-54	SB-31 3-5'	12/12/18		Total Solids / Percent Moisture		01/08/19 08:09	01/08/19 08:46	B9A0158	
				Zinc, Total ICP-AES		01/08/19 08:30	01/08/19 22:21	B9A0160	S9A0094
				Magnesium, Total ICP-AES		01/08/19 08:30	01/08/19 20:32		
				Manganese, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Nickel, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Antimony, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Selenium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Potassium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Vanadium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Sodium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Thallium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Copper, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Chromium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Cobalt, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Silver, Total ICP-AES		01/08/19 08:30	01/08/19 20:32		
				Cadmium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Lead, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Calcium, Total ICP-AES		01/08/19 08:30	01/08/19 20:32		
				Beryllium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Barium, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		
				Arsenic, Total ICP-AES		01/08/19 08:30	01/08/19 22:21		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-54	SB-31 3-5'	12/12/18	Soil	Aluminum, Total ICP-AES		01/08/19 08:30	01/08/19 20:32	B9A0160	S9A0094
				Iron, Total ICP-AES		01/08/19 08:30	01/08/19 19:07		
				Mercury, Total CVAA		01/08/19 08:15	01/08/19 13:05	B9A0170	S9A0086
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		01/08/19 11:12	01/09/19 18:00	B9A0180	S9A0123
				Iron, TCLP ICP-MS	01/18/19 13:35	01/21/19 10:10	01/21/19 15:14	B9A0599	S9A0294
18L0509-55	SB-32 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:31	B8L0498	
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47	B8L0552	S8L0264
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 20:40		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:40		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:31		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:31		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:31		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 00:47		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:40		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 06:09	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:51	B8L0731	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 07:10	B8L0745	S8L0353
18L0509-56	SB-33 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:33	B8L0498	
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:44	B8L0552	S8L0264
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-56	SB-33 0-1'	12/12/18	Soil	Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 01:08	B8L0552	S8L0264
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:44		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:36		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:36		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:36		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:36		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 01:08		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/26/18 20:52	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 14:58	B8L0731	S8L0355
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 07:43	B8L0745	S8L0353
18L0509-57	SB-34 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:35	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 21:14	B8L0622	S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:27		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:27		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:14		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Calcium, Total ICP-AES		12/19/18 12:45	12/20/18 23:02		S8L0317
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		S8L0288
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:27		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 00:15		
				Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 15:38	B8L0714	S8L0360

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-57	SB-34 0-1'	12/12/18	Soil	Semivolatile Organic Compounds by GC/MS		12/22/18 12:33	12/26/18 21:29	B8L0714	S8L0360
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 15:00	B8L0731	S8L0355
				Volatile Organic Compounds by GC/MS		12/20/18 13:16	12/21/18 10:17	B8L0747	S8L0357
18L0509-58	SB-35 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:37	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 22:48	B8L0622	S8L0288
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:48		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:48		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:48		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:48		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Calcium, Total ICP-AES		12/19/18 12:45	12/20/18 23:06		S8L0317
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		S8L0288
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 00:19		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/26/18 23:56	B8L0673	S8L0373
				Mercury, Total CVAA		12/26/18 08:00	12/26/18 15:02	B8L0731	S8L0355
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:33	B9A0188	S9A0096
				Manganese, SPLP ICP-MS	01/08/19 17:14	01/09/19 14:19	01/10/19 12:03	B9A0224	S9A0121
18L0509-59	SB-36 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:39	B8L0498	
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12	B8L0552	S8L0264
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 22:40		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-59	SB-36 0-1'	12/12/18	Soil	Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 01:12	B8L0552	S8L0264
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 20:49		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Calcium, Total ICP-AES		12/18/18 08:39	12/18/18 20:49		
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:40		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:40		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 01:12		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:40		
				Potassium, Total ICP-AES		12/18/18 08:39	12/18/18 22:40		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 00:33	B8L0673	S8L0373
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 12:42	B8L0785	S8L0374
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:35	B9A0188	S9A0096
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:35		
				Manganese, SPLP ICP-MS	01/08/19 17:14	01/09/19 14:19	01/10/19 12:11	B9A0224	S9A0121
18L0509-60	SB-37 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:41	B8L0498	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24	B8L0622	S8L0288
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:53		S8L0317
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:52		
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Potassium, Total ICP-AES		12/19/18 12:45	12/19/18 22:52		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:22		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:24		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 22:52		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:52		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 21:22		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-60	SB-37 0-1'	12/12/18	Soil	Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/20/18 20:23	12/27/18 01:10	B8L0673	S8L0373
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 12:51	B8L0785	S8L0374
				Silver, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:37	B9A0188	S9A0096
				Chromium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:37		
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:37		
18L0509-61	SB-38 0-1'	12/12/18		Total Solids / Percent Moisture		12/15/18 07:57	12/15/18 08:43	B8L0498	
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 01:17	B8L0552	S8L0264
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 21:09		
				Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 22:44		
				Calcium, Total ICP-AES		12/18/18 08:39	12/19/18 19:10		S8L0288
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		S8L0264
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 22:44		
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 01:17		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 22:44		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 21:09		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 06:46	B8L0635	S8L0373
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 12:54	B8L0785	S8L0374
18L0509-62	SB-39 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 06:55	B8L0510	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Potassium, Total ICP-AES		12/19/18 12:45	12/19/18 22:56	B8L0622	S8L0288
				Thallium, Total ICP-AES		12/19/18 12:45	12/20/18 23:58		S8L0317
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		S8L0288
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		

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Dates Report

(Continued)

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-62	SB-39 0-1'	12/12/18	Soil	Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:56	B8L0622	S8L0288
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 22:56		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:26		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 21:26		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 22:56		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:45		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/22/18 06:15	B8L0635	S8L0329
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 08:15	B8L0745	S8L0353
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 12:57	B8L0785	S8L0374
				Manganese, TCLP ICP-MS	01/09/19 17:56	01/10/19 14:34	01/11/19 12:08	B9A0271	S9A0141
				Chromium, TCLP ICP-MS	01/09/19 17:56	01/10/19 14:34	01/11/19 12:08		
				Silver, TCLP ICP-MS	01/09/19 17:56	01/10/19 14:34	01/11/19 12:08		
				Thallium, TCLP ICP-MS	01/09/19 17:56	01/10/19 14:34	01/11/19 12:08		
18L0509-63	SB-40 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 06:57	B8L0510	
				Selenium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22	B8L0552	S8L0264
				Magnesium, Total ICP-AES		12/18/18 08:39	12/18/18 21:13		
				Zinc, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Manganese, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Sodium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Nickel, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Antimony, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Chromium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Thallium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Vanadium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Lead, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Copper, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Cobalt, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Cadmium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Calcium, Total ICP-AES		12/18/18 08:39	12/19/18 19:14		S8L0288
				Beryllium, Total ICP-AES		12/18/18 08:39	12/18/18 23:04		S8L0264
				Barium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Arsenic, Total ICP-AES		12/18/18 08:39	12/19/18 01:22		
				Aluminum, Total ICP-AES		12/18/18 08:39	12/18/18 23:04		
				Silver, Total ICP-AES		12/18/18 08:39	12/18/18 23:04		
				Iron, Total ICP-AES		12/18/18 08:39	12/18/18 21:13		

Environmental Monitoring and Technologies, Inc.

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-63	SB-40 0-1'	12/12/18	Soil	Potassium, Total ICP-AES		12/18/18 08:39	12/19/18 01:22	B8L0552	S8L0264
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 07:26	B8L0635	S8L0373
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 08:48	B8L0745	S8L0353
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 12:59	B8L0785	S8L0374
18L0509-64	SB-41 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 06:59	B8L0510	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:00	B8L0622	S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 23:00		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:02		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:30		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 21:30		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:00		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 00:49		
				Potassium, Total ICP-AES		12/19/18 12:45	12/19/18 23:00		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/22/18 06:53	B8L0635	S8L0329
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:01	B8L0785	S8L0374
				Silver, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:39	B9A0188	S9A0096
				Iron, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:39		
				Chromium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:39		
				Thallium, TCLP ICP-MS	01/07/19 17:16	01/08/19 14:08	01/08/19 18:39		
18L0509-65	SB-42 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:01	B8L0510	
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 23:20	B8L0622	S8L0288
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-65	SB-42 0-1'	12/12/18	Soil	Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:20	B8L0622	S8L0288
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:07		S8L0317
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		S8L0288
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:51		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 21:51		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:20		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:13		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 13:47	B8L0635	S8L0382
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:04	B8L0785	S8L0374
18L0509-66	SB-43 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:03	B8L0510	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Volatile Organic Compounds by GC/MS		12/16/18 16:58	12/17/18 23:14	B8L0608	S8L0270
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:17	B8L0622	S8L0288
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:11		S8L0317
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		S8L0288
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 21:55		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:24		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:55		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 21:55		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:24		
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17		

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-66	SB-43 0-1'	12/12/18	Soil	Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:17	B8L0622	S8L0288
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 14:26	B8L0635	S8L0382
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:07	B8L0785	S8L0374
18L0509-67	SB-44 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:05	B8L0510	
				Volatile Organic Compounds by GC/MS		12/16/18 16:58	12/17/18 22:42	B8L0608	S8L0270
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:22	B8L0622	S8L0288
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:16		S8L0317
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 23:45		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 21:59		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:22		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 21:59		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:45		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 21:59		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/22/18 07:30	B8L0635	S8L0329
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:09	B8L0785	S8L0374
18L0509-68	SB-45 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:07	B8L0510	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 22:03	B8L0622	S8L0288
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:20		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-68	SB-45 0-1'	12/12/18	Soil	Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:49	B8L0622	S8L0288
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:49		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:03		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 22:03		
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:26		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/22/18 08:08	B8L0635	S8L0329
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 09:20	B8L0745	S8L0353
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:11	B8L0785	S8L0374
18L0509-69	SB-46 0-1'	12/12/18		Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:09	B8L0510	
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47	B8L0622	S8L0288
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:25		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 22:07		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 22:07		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Calcium, Total ICP-AES		12/19/18 12:45	12/19/18 22:07		
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:53		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:53		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:47		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 15:42	B8L0635	S8L0382
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 09:52	B8L0745	S8L0353
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:13	B8L0785	S8L0374

Environmental Monitoring and Technologies, Inc.

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Dates Report

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Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/30/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 18L0509

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
18L0509-70	SB-47 0-1'	12/12/18	Soil	Total Solids / Percent Moisture		12/17/18 06:49	12/17/18 07:11	B8L0510	
				pH / Corrosivity- 50% mix for solid		12/18/18 12:41	12/19/18 06:43	B8L0596	
				Beryllium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52	B8L0622	S8L0288
				Magnesium, Total ICP-AES		12/19/18 12:45	12/19/18 23:57		
				Zinc, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Vanadium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Thallium, Total ICP-AES		12/19/18 12:45	12/21/18 00:29		S8L0317
				Selenium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		S8L0288
				Antimony, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Lead, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Nickel, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Sodium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Manganese, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Potassium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Iron, Total ICP-AES		12/19/18 12:45	12/19/18 22:11		
				Copper, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Chromium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Cobalt, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Calcium, Total ICP-AES		12/19/18 12:45	12/20/18 23:10		S8L0317
				Barium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		S8L0288
				Arsenic, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Aluminum, Total ICP-AES		12/19/18 12:45	12/19/18 23:57		
				Silver, Total ICP-AES		12/19/18 12:45	12/19/18 23:57		
				Cadmium, Total ICP-AES		12/19/18 12:45	12/20/18 01:52		
				Semivolatile Organic Compounds, SIM, PNAs by GC/MS		12/19/18 18:59	12/27/18 15:04	B8L0635	S8L0382
				Volatile Organic Compounds by GC/MS		12/18/18 11:54	12/19/18 10:25	B8L0745	S8L0353
				Mercury, Total CVAA		12/27/18 08:15	12/27/18 13:21	B8L0785	S8L0374

Environmental Monitoring and Technologies, Inc.

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Quality Control

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0514 - SW3050											
Blank (B8L0514-BLK1)				*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 11:57*				
Aluminum	< 12.5	12.5	mg/Kg wet								1
Antimony	< 2.50	2.50	mg/Kg wet								1
Arsenic	< 2.50	2.50	mg/Kg wet								1
Barium	< 2.50	2.50	mg/Kg wet								1
Beryllium	< 0.250	0.250	mg/Kg wet								1
Cadmium	< 0.250	0.250	mg/Kg wet								1
Calcium	< 12.5	12.5	mg/Kg wet								1
Chromium	< 2.50	2.50	mg/Kg wet								1
Cobalt	< 2.50	2.50	mg/Kg wet								1
Copper	< 2.50	2.50	mg/Kg wet								1
Iron	< 5.00	5.00	mg/Kg wet								1
Lead	< 2.50	2.50	mg/Kg wet								1
Magnesium	< 12.5	12.5	mg/Kg wet								1
Manganese	< 2.50	2.50	mg/Kg wet								1
Nickel	< 2.50	2.50	mg/Kg wet								1
Potassium	< 12.5	12.5	mg/Kg wet								1
Selenium	< 2.50	2.50	mg/Kg wet								1
Silver	< 2.50	2.50	mg/Kg wet								1
Sodium	< 12.5	12.5	mg/Kg wet								1
Thallium	< 2.50	2.50	mg/Kg wet								1
Vanadium	< 2.50	2.50	mg/Kg wet								1
Zinc	< 2.50	2.50	mg/Kg wet								1
LCS (B8L0514-BS1)				*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 12:01*				
Aluminum	45.3	12.5	mg/Kg wet	50.00		90.6	80-119				1
Antimony	44.7	2.50	mg/Kg wet	50.00		89.4	80-105				1
Arsenic	45.3	2.50	mg/Kg wet	50.00		90.7	80-103				1
Barium	45.1	2.50	mg/Kg wet	50.00		90.3	80-108				1
Beryllium	4.40	0.250	mg/Kg wet	5.000		88.0	83-113				1
Cadmium	4.48	0.250	mg/Kg wet	5.000		89.7	82.4-105				1
Calcium	233	12.5	mg/Kg wet	250.0		93.1	84.7-119				1
Chromium	45.9	2.50	mg/Kg wet	50.00		91.8	81.1-105				1
Cobalt	46.4	2.50	mg/Kg wet	50.00		92.7	85-112				1
Copper	46.5	2.50	mg/Kg wet	50.00		93.0	80.8-108				1
Iron	96.4	5.00	mg/Kg wet	100.0		96.4	80.4-112				1
Lead	46.4	2.50	mg/Kg wet	50.00		92.8	81-104				1
Magnesium	227	12.5	mg/Kg wet	250.0		90.8	80-108				1
Manganese	46.6	2.50	mg/Kg wet	50.00		93.3	84-115				1
Nickel	46.5	2.50	mg/Kg wet	50.00		93.0	80-118				1
Potassium	234	12.5	mg/Kg wet	250.0		93.7	81-116				1
Selenium	45.9	2.50	mg/Kg wet	50.00		91.7	80-104				1
Silver	4.64	2.50	mg/Kg wet	5.000		92.8	80-109				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0514 - SW3050 *(Continued)*											
LCS (B8L0514-BS1) (Continued)				*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 12:01*				
Sodium	221	12.5	mg/Kg wet	250.0		88.6	83-118				1
Thallium	45.0	2.50	mg/Kg wet	50.00		90.0	80.4-109				1
Vanadium	46.2	2.50	mg/Kg wet	50.00		92.4	82-114				1
Zinc	46.1	2.50	mg/Kg wet	50.00		92.1	80-105				1
Serial Dilution (B8L0514-DUP1)		**Source: 18L0509-29RE1**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 17:57*				
Aluminum	4500	389	mg/Kg dry		3640			21.1	10	P	50
Beryllium	< 3.11	7.79	mg/Kg dry		ND				10		50
Calcium	8200	389	mg/Kg dry		6510			22.9	10	P	50
Iron	15600	156	mg/Kg dry		12600			21.1	10	P	50
Silver	< 4.98	77.9	mg/Kg dry		ND				10		50
Serial Dilution (B8L0514-DUP2)		**Source: 18L0509-29RE2**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 18:42*				
Antimony	< 2.80	7.79	mg/Kg dry		ND				10		5
Arsenic	12.9	7.79	mg/Kg dry		11.3			13.4	10	P	5
Barium	75.8	7.79	mg/Kg dry		74.3			2.01	10		5
Cadmium	< 0.280	0.779	mg/Kg dry		0.302				10		5
Calcium	7270	38.9	mg/Kg dry		6980			4.05	10		5
Chromium	18.5	7.79	mg/Kg dry		17.6			4.72	10		5
Cobalt	2.30	7.79	mg/Kg dry		2.33			1.21	10		5
Copper	132	7.79	mg/Kg dry		128			3.05	10		5
Lead	63.1	7.79	mg/Kg dry		58.8			7.03	10		5
Magnesium	450	38.9	mg/Kg dry		434			3.60	10		5
Manganese	19.5	7.79	mg/Kg dry		18.6			4.76	10		5
Nickel	5.78	7.79	mg/Kg dry		5.50			4.86	10		5
Potassium	708	38.9	mg/Kg dry		705			0.419	10		5
Selenium	< 2.80	7.79	mg/Kg dry		ND				10		5
Sodium	144	38.9	mg/Kg dry		142			1.70	10		5
Thallium	3.78	7.79	mg/Kg dry		2.78			30.7	10	P	5
Vanadium	31.3	7.79	mg/Kg dry		30.1			3.87	10		5
Zinc	12.3	7.79	mg/Kg dry		12.3			0.0253	10		5
MRL Check (B8L0514-MRL1)				*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 12:05*				
Aluminum	< 4.70	12.5	mg/Kg wet	2.000			70-130			S	1
Antimony	2.92	2.50	mg/Kg wet	2.500		117	70-130				1
Arsenic	2.70	2.50	mg/Kg wet	2.500		108	70-130				1
Barium	2.72	2.50	mg/Kg wet	2.500		109	70-130				1
Beryllium	0.215	0.250	mg/Kg wet	0.2500		86.0	70-130				1
Cadmium	0.190	0.250	mg/Kg wet	0.2500		76.0	70-130				1
Calcium	23.2	12.5	mg/Kg wet	10.00		232	70-130			S	1
Chromium	2.78	2.50	mg/Kg wet	2.500		111	70-130				1
Cobalt	2.10	2.50	mg/Kg wet	2.000		105	70-130				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0514 - SW3050 *(Continued)*											
MRL Check (B8L0514-MRL1) (Continued)				*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 12:05*				
Copper	2.82	2.50	mg/Kg wet	2.500		113	70-130				1
Iron	10.4	5.00	mg/Kg wet	5.000		209	70-130			S	1
Lead	2.52	2.50	mg/Kg wet	2.500		101	70-130				1
Magnesium	11.3	12.5	mg/Kg wet	10.00		113	70-130				1
Manganese	2.78	2.50	mg/Kg wet	2.500		111	70-130				1
Nickel	2.73	2.50	mg/Kg wet	2.500		109	70-130				1
Potassium	19.3	12.5	mg/Kg wet	10.00		193	70-130			S	1
Selenium	3.16	2.50	mg/Kg wet	2.500		127	70-130				1
Silver	0.320	2.50	mg/Kg wet	0.2500		128	70-130				1
Sodium	11.9	12.5	mg/Kg wet	10.00		119	70-130				1
Thallium	2.53	2.50	mg/Kg wet	2.500		101	70-130				1
Vanadium	2.12	2.50	mg/Kg wet	2.000		106	70-130				1
Zinc	2.92	2.50	mg/Kg wet	2.500		117	70-130				1
Matrix Spike (B8L0514-MS1)		**Source: 18L0509-29RE1**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 17:45*				
Aluminum	5110	78.3	mg/Kg dry	31.30	3640	4670	75-125			S	10
Beryllium	< 0.626	1.57	mg/Kg dry	3.130	ND		75-125			S	10
Calcium	7670	78.3	mg/Kg dry	156.5	6510	741	75-125			S	10
Iron	13000	31.3	mg/Kg dry	62.61	12600	656	75-125			S	10
Silver	5.32	15.7	mg/Kg dry	3.130	1.90	109	75-125				10
Matrix Spike (B8L0514-MS2)		**Source: 18L0509-29RE2**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 18:30*				
Antimony	< 0.563	1.57	mg/Kg dry	31.30	ND		75-125			S	1
Arsenic	40.5	1.57	mg/Kg dry	31.30	11.3	93.4	75-125				1
Barium	103	1.57	mg/Kg dry	31.30	74.3	93.0	75-125				1
Cadmium	2.96	0.157	mg/Kg dry	3.130	0.302	84.7	75-125				1
Calcium	7150	7.83	mg/Kg dry	156.5	6980	112	75-125				1
Chromium	47.3	1.57	mg/Kg dry	31.30	17.6	94.8	75-125				1
Cobalt	29.5	1.57	mg/Kg dry	31.30	2.33	86.8	75-125				1
Copper	151	1.57	mg/Kg dry	31.30	128	74.1	75-125			S	1
Lead	81.2	1.57	mg/Kg dry	31.30	58.8	71.5	81-112			S	1
Magnesium	1140	7.83	mg/Kg dry	156.5	434	451	75-125			S	1
Manganese	51.7	1.57	mg/Kg dry	31.30	18.6	106	75-125				1
Nickel	33.9	1.57	mg/Kg dry	31.30	5.50	90.7	75-125				1
Potassium	967	7.83	mg/Kg dry	156.5	705	167	75-125			S	1
Selenium	30.9	1.57	mg/Kg dry	31.30	ND	98.6	75-125				1
Sodium	284	7.83	mg/Kg dry	156.5	142	90.6	75-125				1
Thallium	29.4	1.57	mg/Kg dry	31.30	2.78	85.2	75-125				1
Vanadium	57.6	1.57	mg/Kg dry	31.30	30.1	87.8	75-125				1
Zinc	40.3	1.57	mg/Kg dry	31.30	12.3	89.4	75-125				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0514 - SW3050 *(Continued)*											
Matrix Spike Dup (B8L0514-MSD1)		**Source: 18L0509-29RE1**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 17:49*				
Aluminum	5030	76.2	mg/Kg dry	30.46	3640	4540	75-125	1.56	20	S	10
Beryllium	< 0.609	1.52	mg/Kg dry	3.046	ND		75-125		20	S	10
Calcium	7050	76.2	mg/Kg dry	152.3	6510	354	75-125	8.42	20	S	10
Iron	18600	30.5	mg/Kg dry	60.93	12600	9810	75-125	35.3	20	P, S	10
Silver	5.54	15.2	mg/Kg dry	3.046	1.90	120	75-125	4.10	20		10
Matrix Spike Dup (B8L0514-MSD2)		**Source: 18L0509-29RE2**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 18:34*				
Antimony	< 0.548	1.52	mg/Kg dry	30.46	ND		75-125		20	S	1
Arsenic	40.9	1.52	mg/Kg dry	30.46	11.3	97.1	75-125	0.848	20		1
Barium	121	1.52	mg/Kg dry	30.46	74.3	155	75-125	16.1	20	S	1
Cadmium	2.99	0.152	mg/Kg dry	3.046	0.302	88.2	75-125	1.13	20		1
Calcium	6630	7.62	mg/Kg dry	152.3	6980	NR	75-125	7.65	20	S	1
Chromium	46.2	1.52	mg/Kg dry	30.46	17.6	93.7	75-125	2.46	20		1
Cobalt	29.0	1.52	mg/Kg dry	30.46	2.33	87.5	75-125	1.80	20		1
Copper	173	1.52	mg/Kg dry	30.46	128	150	75-125	13.8	20	S	1
Lead	101	1.52	mg/Kg dry	30.46	58.8	138	75-125	21.7	20	P, S	1
Magnesium	604	7.62	mg/Kg dry	152.3	434	112	75-125	61.5	20	P	1
Manganese	46.2	1.52	mg/Kg dry	30.46	18.6	90.4	75-125	11.2	20		1
Nickel	33.8	1.52	mg/Kg dry	30.46	5.50	92.7	75-125	0.437	20		1
Potassium	968	7.62	mg/Kg dry	152.3	705	173	75-125	0.152	20	S	1
Selenium	28.6	1.52	mg/Kg dry	30.46	ND	94.0	75-125	7.50	20		1
Sodium	331	7.62	mg/Kg dry	152.3	142	124	75-125	15.5	20		1
Thallium	28.4	1.52	mg/Kg dry	30.46	2.78	84.2	75-125	3.48	20		1
Vanadium	60.5	1.52	mg/Kg dry	30.46	30.1	99.7	75-125	4.86	20		1
Zinc	37.2	1.52	mg/Kg dry	30.46	12.3	81.7	75-125	7.98	20		1
Post Spike (B8L0514-PS1)		**Source: 18L0509-29RE1**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 17:53*				
Aluminum	4130	77.9	mg/Kg dry	155.7	3640	310	80-120			S	1
Beryllium	145	1.56	mg/Kg dry	155.7	ND	93.4	80-120				1
Calcium	7250	77.9	mg/Kg dry	155.7	6510	476	80-120			S	1
Iron	13900	31.1	mg/Kg dry	155.7	12600	846	80-120			S	1
Silver	171	15.6	mg/Kg dry	155.7	1.90	109	80-120				1
Post Spike (B8L0514-PS2)		**Source: 18L0509-29RE2**		*Prepared: 12/17/2018 08:42*			*Analyzed: 12/18/2018 18:38*				
Antimony	6.34	1.73	mg/Kg dry	17.30	ND	36.6	80-120			S	1
Arsenic	31.5	1.73	mg/Kg dry	17.30	11.3	117	80-120				1
Barium	93.9	1.73	mg/Kg dry	17.30	74.3	113	80-120				1
Cadmium	18.7	0.173	mg/Kg dry	17.30	0.302	106	80-120				1
Calcium	6920	8.65	mg/Kg dry	17.30	6980	NR	80-120			S	1
Chromium	37.5	1.73	mg/Kg dry	17.30	17.6	115	80-120				1
Cobalt	21.0	1.73	mg/Kg dry	17.30	2.33	108	80-120				1
Copper	146	1.73	mg/Kg dry	17.30	128	107	80-120				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0514 - SW3050 *(Continued)*											
Post Spike (B8L0514-PS2) (Continued)				**Source: 18L0509-29RE2**		*Prepared: 12/17/2018 08:42*	*Analyzed: 12/18/2018 18:38*				
Lead	76.8	1.73	mg/Kg dry	17.30	58.8	104	80-120				1
Magnesium	449	8.65	mg/Kg dry	17.30	434	86.6	80-120				1
Manganese	37.6	1.73	mg/Kg dry	17.30	18.6	110	80-120				1
Nickel	24.4	1.73	mg/Kg dry	17.30	5.50	109	80-120				1
Potassium	722	8.65	mg/Kg dry	17.30	705	96.6	80-120				1
Selenium	20.7	1.73	mg/Kg dry	17.30	ND	119	80-120				1
Sodium	160	8.65	mg/Kg dry	17.30	142	103	80-120				1
Thallium	22.8	1.73	mg/Kg dry	17.30	2.78	116	80-120				1
Vanadium	49.3	1.73	mg/Kg dry	17.30	30.1	111	80-120				1
Zinc	31.3	1.73	mg/Kg dry	17.30	12.3	110	80-120				1
Reference (B8L0514-SRM1)						*Prepared: 12/17/2018 08:42*	*Analyzed: 12/18/2018 12:09*				
Aluminum	6380	125	mg/Kg wet	6713		95.0	50-150				10
Antimony	19.6	25.0	mg/Kg wet	12.91		151	50-150			S	10
Arsenic	117	25.0	mg/Kg wet	128.1		91.3	50-150				10
Barium	334	25.0	mg/Kg wet	377.5		88.5	50-150				10
Beryllium	12.0	2.50	mg/Kg wet	28.61		41.8	50-150			S	10
Cadmium	52.4	2.50	mg/Kg wet	61.97		84.6	50-150				10
Calcium	3610	125	mg/Kg wet	4312		83.7	50-150				10
Chromium	32.6	25.0	mg/Kg wet	35.58		91.5	50-150				10
Cobalt	118	25.0	mg/Kg wet	132.2		89.2	50-150				10
Copper	139	25.0	mg/Kg wet	148.2		93.8	50-150				10
Iron	8000	50.0	mg/Kg wet	9140		87.6	50-150				10
Lead	48.1	25.0	mg/Kg wet	51.64		93.1	50-150				10
Magnesium	3370	125	mg/Kg wet	3827		88.0	50-150				10
Manganese	326	25.0	mg/Kg wet	369.7		88.3	50-150				10
Nickel	24.4	25.0	mg/Kg wet	27.06		90.0	50-150				10
Potassium	8330	125	mg/Kg wet	9192		90.6	50-150				10
Selenium	83.4	25.0	mg/Kg wet	96.57		86.4	50-150				10
Silver	17.5	25.0	mg/Kg wet	17.35		101	50-150				10
Sodium	4830	125	mg/Kg wet	5680		85.0	50-150				10
Thallium	93.0	25.0	mg/Kg wet	102.8		90.5	50-150				10
Vanadium	58.4	25.0	mg/Kg wet	66.62		87.6	50-150				10
Zinc	241	25.0	mg/Kg wet	268.5		89.8	50-150				10
Batch: B8L0552 - SW3050											
Blank (B8L0552-BLK1)						*Prepared: 12/18/2018 08:39*	*Analyzed: 12/18/2018 18:46*				
Aluminum	< 12.5	12.5	mg/Kg wet								1
Antimony	< 2.50	2.50	mg/Kg wet								1
Arsenic	< 2.50	2.50	mg/Kg wet								1
Barium	< 2.50	2.50	mg/Kg wet								1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0552 - SW3050 *(Continued)*											
Blank (B8L0552-BLK1) (Continued)				*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 18:46*				
Beryllium	< 0.250	0.250	mg/Kg wet								1
Cadmium	< 0.250	0.250	mg/Kg wet								1
Calcium	20.2	12.5	mg/Kg wet								1
Chromium	< 2.50	2.50	mg/Kg wet								1
Cobalt	< 2.50	2.50	mg/Kg wet								1
Copper	< 2.50	2.50	mg/Kg wet								1
Iron	< 5.00	5.00	mg/Kg wet								1
Lead	< 2.50	2.50	mg/Kg wet								1
Magnesium	< 12.5	12.5	mg/Kg wet								1
Manganese	< 2.50	2.50	mg/Kg wet								1
Nickel	< 2.50	2.50	mg/Kg wet								1
Potassium	12.5	12.5	mg/Kg wet								1
Selenium	< 2.50	2.50	mg/Kg wet								1
Silver	< 2.50	2.50	mg/Kg wet								1
Sodium	< 12.5	12.5	mg/Kg wet								1
Thallium	< 2.50	2.50	mg/Kg wet								1
Vanadium	< 2.50	2.50	mg/Kg wet								1
Zinc	< 2.50	2.50	mg/Kg wet								1
LCS (B8L0552-BS1)				*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 18:50*				
Aluminum	39.8	12.5	mg/Kg wet	50.00		79.7	80-119			S	1
Antimony	39.7	2.50	mg/Kg wet	50.00		79.3	80-105			S	1
Arsenic	40.8	2.50	mg/Kg wet	50.00		81.5	80-103				1
Barium	40.1	2.50	mg/Kg wet	50.00		80.2	80-108				1
Beryllium	3.92	0.250	mg/Kg wet	5.000		78.3	83-113			S	1
Cadmium	3.84	0.250	mg/Kg wet	5.000		76.8	82.4-105			S	1
Calcium	202	12.5	mg/Kg wet	250.0		80.7	84.7-119			B, S	1
Chromium	41.9	2.50	mg/Kg wet	50.00		83.8	81.1-105				1
Cobalt	39.0	2.50	mg/Kg wet	50.00		78.0	85-112			S	1
Copper	41.3	2.50	mg/Kg wet	50.00		82.6	80.8-108				1
Iron	86.4	5.00	mg/Kg wet	100.0		86.4	80.4-112				1
Lead	41.2	2.50	mg/Kg wet	50.00		82.4	81-104				1
Magnesium	194	12.5	mg/Kg wet	250.0		77.5	80-108			S	1
Manganese	40.1	2.50	mg/Kg wet	50.00		80.2	84-115			S	1
Nickel	41.1	2.50	mg/Kg wet	50.00		82.3	80-118				1
Potassium	207	12.5	mg/Kg wet	250.0		82.8	81-116			B	1
Selenium	40.5	2.50	mg/Kg wet	50.00		81.1	80-104				1
Silver	4.11	2.50	mg/Kg wet	5.000		82.2	80-109				1
Sodium	203	12.5	mg/Kg wet	250.0		81.1	83-118			S	1
Thallium	42.4	2.50	mg/Kg wet	50.00		84.8	80.4-109				1
Vanadium	38.7	2.50	mg/Kg wet	50.00		77.5	82-114			S	1
Zinc	38.9	2.50	mg/Kg wet	50.00		77.8	80-105			S	1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0552 - SW3050 *(Continued)*											
LCS (B8L0552-BS1) (Continued)				*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 18:50*				
Serial Dilution (B8L0552-DUP1)			**Source: 18L0509-63RE1**	*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 23:21*				
Aluminum	2820	309	mg/Kg dry		3010			6.79	10		50
Beryllium	< 2.47	6.19	mg/Kg dry		ND				10		50
Calcium	195000	309	mg/Kg dry		195000			0.355	10	B	50
Iron	11200	124	mg/Kg dry		11500			2.46	10		50
Magnesium	18400	309	mg/Kg dry		19200			4.56	10		50
Silver	< 3.96	61.9	mg/Kg dry		ND				10		50
Serial Dilution (B8L0552-DUP2)			**Source: 18L0509-63RE2**	*Prepared: 12/18/2018 08:39*			*Analyzed: 12/19/2018 01:40*				
Antimony	< 2.23	6.19	mg/Kg dry		ND				10		5
Arsenic	19.0	6.19	mg/Kg dry		16.8			12.2	10	P	5
Barium	54.3	6.19	mg/Kg dry		49.8			8.68	10		5
Cadmium	2.77	0.619	mg/Kg dry		2.29			19.1	10	P	5
Chromium	3.25	6.19	mg/Kg dry		2.71			18.1	10	P	5
Cobalt	2.85	6.19	mg/Kg dry		2.50			12.8	10	P	5
Copper	18.3	6.19	mg/Kg dry		16.8			8.64	10		5
Lead	52.9	6.19	mg/Kg dry		42.4			22.0	10	P	5
Manganese	645	6.19	mg/Kg dry		539			17.9	10	P	5
Nickel	9.57	6.19	mg/Kg dry		7.85			19.8	10	P	5
Potassium	397	30.9	mg/Kg dry		391			1.48	10	B	5
Selenium	< 2.23	6.19	mg/Kg dry		ND				10		5
Silver	0.866	6.19	mg/Kg dry		0.717			18.7	10	P	5
Sodium	177	30.9	mg/Kg dry		168			5.07	10		5
Thallium	2.82	6.19	mg/Kg dry		ND			64.5	10	P	5
Vanadium	13.0	6.19	mg/Kg dry		11.2			14.9	10	P	5
Zinc	59.6	6.19	mg/Kg dry		53.3			11.1	10	P	5
MRL Check (B8L0552-MRL1)				*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 18:54*				
Aluminum	< 4.70	12.5	mg/Kg wet	2.000			70-130			S	1
Antimony	2.46	2.50	mg/Kg wet	2.500		98.6	70-130				1
Arsenic	2.30	2.50	mg/Kg wet	2.500		91.8	70-130				1
Barium	2.35	2.50	mg/Kg wet	2.500		94.0	70-130				1
Beryllium	0.185	0.250	mg/Kg wet	0.2500		74.0	70-130				1
Cadmium	0.145	0.250	mg/Kg wet	0.2500		58.0	70-130			S	1
Calcium	17.6	12.5	mg/Kg wet	10.00		176	70-130			B, S	1
Chromium	2.42	2.50	mg/Kg wet	2.500		96.6	70-130				1
Cobalt	1.74	2.50	mg/Kg wet	2.000		86.8	70-130				1
Copper	2.38	2.50	mg/Kg wet	2.500		95.0	70-130				1
Iron	6.56	5.00	mg/Kg wet	5.000		131	70-130			S	1
Lead	2.48	2.50	mg/Kg wet	2.500		99.0	70-130				1
Magnesium	9.60	12.5	mg/Kg wet	10.00		96.0	70-130				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0552 - SW3050 *(Continued)*											
MRL Check (B8L0552-MRL1) (Continued)				*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 18:54*				
Manganese	2.34	2.50	mg/Kg wet	2.500		93.4	70-130				1
Nickel	2.38	2.50	mg/Kg wet	2.500		95.4	70-130				1
Potassium	18.8	12.5	mg/Kg wet	10.00		188	70-130			B, S	1
Selenium	2.21	2.50	mg/Kg wet	2.500		88.4	70-130				1
Silver	0.275	2.50	mg/Kg wet	0.2500		110	70-130				1
Sodium	10.8	12.5	mg/Kg wet	10.00		108	70-130				1
Thallium	2.54	2.50	mg/Kg wet	2.500		102	70-130				1
Vanadium	1.78	2.50	mg/Kg wet	2.000		88.8	70-130				1
Zinc	2.42	2.50	mg/Kg wet	2.500		97.0	70-130				1
Matrix Spike (B8L0552-MS1)		**Source: 18L0509-63RE1**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 23:09*				
Aluminum	3770	64.8	mg/Kg dry	25.90	3010	2920	75-125			S	10
Beryllium	< 0.518	1.30	mg/Kg dry	2.590	ND		75-125			S	10
Calcium	111000	64.8	mg/Kg dry	129.5	195000	NR	75-125			B, S	10
Iron	12500	25.9	mg/Kg dry	51.81	11500	1820	75-125			S	10
Magnesium	27200	64.8	mg/Kg dry	129.5	19200	6170	75-125			S	10
Silver	4.17	13.0	mg/Kg dry	2.590	1.39	108	75-125				10
Matrix Spike (B8L0552-MS2)		**Source: 18L0509-63RE2**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/19/2018 01:26*				
Antimony	< 0.466	1.30	mg/Kg dry	25.90	ND		75-125			S	1
Arsenic	45.2	1.30	mg/Kg dry	25.90	16.8	110	75-125				1
Barium	70.0	1.30	mg/Kg dry	25.90	49.8	78.3	75-125				1
Cadmium	4.59	0.130	mg/Kg dry	2.590	2.29	88.8	75-125				1
Chromium	22.3	1.30	mg/Kg dry	25.90	2.71	75.5	75-125				1
Cobalt	19.6	1.30	mg/Kg dry	25.90	2.50	65.9	75-125			S	1
Copper	44.9	1.30	mg/Kg dry	25.90	16.8	108	75-125				1
Lead	67.6	1.30	mg/Kg dry	25.90	42.4	97.2	81-112				1
Manganese	438	1.30	mg/Kg dry	25.90	539	NR	75-125			S	1
Nickel	25.6	1.30	mg/Kg dry	25.90	7.85	68.4	75-125			S	1
Potassium	685	6.48	mg/Kg dry	129.5	391	227	75-125			B, S	1
Selenium	18.7	1.30	mg/Kg dry	25.90	ND	72.3	75-125			S	1
Silver	3.22	1.30	mg/Kg dry	2.590	0.717	96.6	75-125				1
Sodium	360	6.48	mg/Kg dry	129.5	168	148	75-125			S	1
Thallium	18.1	1.30	mg/Kg dry	25.90	1.44	64.3	75-125			S	1
Vanadium	34.7	1.30	mg/Kg dry	25.90	11.2	90.8	75-125				1
Zinc	93.2	1.30	mg/Kg dry	25.90	53.3	154	75-125			S	1
Matrix Spike Dup (B8L0552-MSD1)		**Source: 18L0509-63RE1**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 23:13*				
Aluminum	3190	62.9	mg/Kg dry	25.15	3010	716	75-125	16.5	20	S	10
Beryllium	< 0.503	1.26	mg/Kg dry	2.515	ND		75-125		20	S	10
Calcium	157000	62.9	mg/Kg dry	125.7	195000	NR	75-125	34.2	20	B, P, S	10
Iron	10500	25.1	mg/Kg dry	50.29	11500	NR	75-125	17.5	20	S	10

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0552 - SW3050 *(Continued)*											
Matrix Spike Dup (B8L0552-MSD1) (Continued)		**Source: 18L0509-63RE1**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 23:13*				
Magnesium	12500	62.9	mg/Kg dry	125.7	19200	NR	75-125	74.2	20	P, S	10
Silver	3.22	12.6	mg/Kg dry	2.515	1.39	72.9	75-125	25.8	20	P, S	10
Matrix Spike Dup (B8L0552-MSD2)		**Source: 18L0509-63RE2**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/19/2018 01:31*				
Antimony	< 0.453	1.26	mg/Kg dry	25.15	ND		75-125		20	S	1
Arsenic	34.1	1.26	mg/Kg dry	25.15	16.8	68.7	75-125	28.0	20	P, S	1
Barium	59.7	1.26	mg/Kg dry	25.15	49.8	39.7	75-125	15.9	20	S	1
Cadmium	3.31	0.126	mg/Kg dry	2.515	2.29	40.8	75-125	32.2	20	P, S	1
Chromium	20.5	1.26	mg/Kg dry	25.15	2.71	70.9	75-125	8.19	20	S	1
Cobalt	17.9	1.26	mg/Kg dry	25.15	2.50	61.4	75-125	8.65	20	S	1
Copper	38.5	1.26	mg/Kg dry	25.15	16.8	86.3	75-125	15.3	20		1
Lead	59.2	1.26	mg/Kg dry	25.15	42.4	66.8	75-125	13.2	20	S	1
Manganese	499	1.26	mg/Kg dry	25.15	539	NR	75-125	13.1	20	S	1
Nickel	23.0	1.26	mg/Kg dry	25.15	7.85	60.4	75-125	10.4	20	S	1
Potassium	607	6.29	mg/Kg dry	125.7	391	171	75-125	12.2	20	B, S	1
Selenium	18.3	1.26	mg/Kg dry	25.15	ND	72.7	75-125	2.45	20	S	1
Silver	2.88	1.26	mg/Kg dry	2.515	0.717	86.0	75-125	11.2	20		1
Sodium	290	6.29	mg/Kg dry	125.7	168	96.8	75-125	21.7	20	P	1
Thallium	16.5	1.26	mg/Kg dry	25.15	1.44	59.8	75-125	9.40	20	S	1
Vanadium	31.1	1.26	mg/Kg dry	25.15	11.2	79.1	75-125	11.1	20		1
Zinc	75.3	1.26	mg/Kg dry	25.15	53.3	87.4	75-125	21.2	20	P	1
Post Spike (B8L0552-PS1)		**Source: 18L0509-63RE1**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/18/2018 23:17*				
Aluminum	2520	61.9	mg/Kg dry	123.7	3010	NR	80-120			S	1
Beryllium	112	1.24	mg/Kg dry	123.7	ND	90.7	80-120				1
Calcium	158000	61.9	mg/Kg dry	123.7	195000	NR	80-120			B, S	1
Iron	9340	24.7	mg/Kg dry	123.7	11500	NR	80-120			S	1
Magnesium	15600	61.9	mg/Kg dry	123.7	19200	NR	80-120			S	1
Silver	88.1	12.4	mg/Kg dry	123.7	1.39	70.1	80-120			S	1
Post Spike (B8L0552-PS2)		**Source: 18L0509-63RE2**		*Prepared: 12/18/2018 08:39*			*Analyzed: 12/19/2018 01:35*				
Antimony	3.56	1.37	mg/Kg dry	13.74	ND	25.9	80-120			S	1
Arsenic	29.1	1.37	mg/Kg dry	13.74	16.8	88.9	80-120				1
Barium	62.5	1.37	mg/Kg dry	13.74	49.8	92.4	80-120				1
Cadmium	11.6	0.137	mg/Kg dry	13.74	2.29	68.1	80-120			S	1
Chromium	13.4	1.37	mg/Kg dry	13.74	2.71	77.7	80-120			S	1
Cobalt	12.5	1.37	mg/Kg dry	13.74	2.50	72.6	80-120			S	1
Copper	29.7	1.37	mg/Kg dry	13.74	16.8	93.8	80-120				1
Lead	53.1	1.37	mg/Kg dry	13.74	42.4	78.3	80-120			S	1
Manganese	558	1.37	mg/Kg dry	13.74	539	142	80-120			S	1
Nickel	17.7	1.37	mg/Kg dry	13.74	7.85	71.4	80-120			S	1
Potassium	406	6.87	mg/Kg dry	13.74	391	106	80-120			B	1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0552 - SW3050 *(Continued)*											
Post Spike (B8L0552-PS2) (Continued)			**Source: 18L0509-63RE2**	*Prepared: 12/18/2018 08:39*		*Analyzed: 12/19/2018 01:35*					
Selenium	10.7	1.37	mg/Kg dry	13.74	ND	77.9	80-120			S	1
Silver	14.1	1.37	mg/Kg dry	13.74	0.717	97.7	80-120				1
Sodium	182	6.87	mg/Kg dry	13.74	168	102	80-120				1
Thallium	11.4	1.37	mg/Kg dry	13.74	1.44	72.7	80-120			S	1
Vanadium	22.5	1.37	mg/Kg dry	13.74	11.2	82.7	80-120				1
Zinc	65.2	1.37	mg/Kg dry	13.74	53.3	86.3	80-120				1
Reference (B8L0552-SRM1)				*Prepared: 12/18/2018 08:39*		*Analyzed: 12/18/2018 19:15*					
Aluminum	6580	125	mg/Kg wet	6553		100	50-150				10
Antimony	21.6	25.0	mg/Kg wet	12.60		172	50-150			S	10
Arsenic	116	25.0	mg/Kg wet	125.0		92.5	50-150				10
Barium	324	25.0	mg/Kg wet	368.5		87.9	50-150				10
Beryllium	12.8	2.50	mg/Kg wet	27.93		45.8	50-150			S	10
Cadmium	53.4	2.50	mg/Kg wet	60.49		88.4	50-150				10
Calcium	3500	125	mg/Kg wet	4209		83.2	50-150			B	10
Chromium	32.8	25.0	mg/Kg wet	34.73		94.4	50-150				10
Cobalt	114	25.0	mg/Kg wet	129.0		88.3	50-150				10
Copper	134	25.0	mg/Kg wet	144.7		93.0	50-150				10
Iron	8140	50.0	mg/Kg wet	8923		91.2	50-150				10
Lead	49.2	25.0	mg/Kg wet	50.41		97.6	50-150				10
Magnesium	3200	125	mg/Kg wet	3735		85.8	50-150				10
Manganese	310	25.0	mg/Kg wet	360.9		85.9	50-150				10
Nickel	24.0	25.0	mg/Kg wet	26.41		91.0	50-150				10
Potassium	7880	125	mg/Kg wet	8973		87.9	50-150			B	10
Selenium	85.7	25.0	mg/Kg wet	94.27		90.9	50-150				10
Silver	17.2	25.0	mg/Kg wet	16.94		102	50-150				10
Sodium	5040	125	mg/Kg wet	5545		91.0	50-150				10
Thallium	94.5	25.0	mg/Kg wet	100.3		94.2	50-150				10
Vanadium	56.5	25.0	mg/Kg wet	65.03		86.9	50-150				10
Zinc	231	25.0	mg/Kg wet	262.1		88.2	50-150				10
Batch: B8L0622 - SW3050											
Blank (B8L0622-BLK1)				*Prepared: 12/19/2018 12:45*		*Analyzed: 12/19/2018 19:18*					
Aluminum	< 12.5	12.5	mg/Kg wet								1
Antimony	< 2.50	2.50	mg/Kg wet								1
Arsenic	< 2.50	2.50	mg/Kg wet								1
Barium	< 2.50	2.50	mg/Kg wet								1
Beryllium	< 0.250	0.250	mg/Kg wet								1
Cadmium	< 0.250	0.250	mg/Kg wet								1
Calcium	< 12.5	12.5	mg/Kg wet								1
Chromium	< 2.50	2.50	mg/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0622 - SW3050 *(Continued)*											
Blank (B8L0622-BLK1) (Continued)				*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 19:18*				
Cobalt	< 2.50	2.50	mg/Kg wet								1
Copper	< 2.50	2.50	mg/Kg wet								1
Iron	8.97	5.00	mg/Kg wet								1
Lead	< 2.50	2.50	mg/Kg wet								1
Magnesium	< 12.5	12.5	mg/Kg wet								1
Manganese	< 2.50	2.50	mg/Kg wet								1
Nickel	< 2.50	2.50	mg/Kg wet								1
Potassium	< 12.5	12.5	mg/Kg wet								1
Selenium	< 2.50	2.50	mg/Kg wet								1
Silver	< 2.50	2.50	mg/Kg wet								1
Sodium	< 12.5	12.5	mg/Kg wet								1
Thallium	< 2.50	2.50	mg/Kg wet								1
Vanadium	< 2.50	2.50	mg/Kg wet								1
Zinc	< 2.50	2.50	mg/Kg wet								1
LCS (B8L0622-BS1)				*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 19:22*				
Aluminum	46.4	12.5	mg/Kg wet	50.00		92.8	80-119				1
Antimony	45.7	2.50	mg/Kg wet	50.00		91.4	80-105				1
Arsenic	46.9	2.50	mg/Kg wet	50.00		93.8	80-103				1
Barium	47.2	2.50	mg/Kg wet	50.00		94.4	80-108				1
Beryllium	4.66	0.250	mg/Kg wet	5.000		93.2	83-113				1
Cadmium	4.61	0.250	mg/Kg wet	5.000		92.2	82.4-105				1
Calcium	247	12.5	mg/Kg wet	250.0		98.9	84.7-119				1
Chromium	46.4	2.50	mg/Kg wet	50.00		92.9	81.1-105				1
Cobalt	46.6	2.50	mg/Kg wet	50.00		93.2	85-112				1
Copper	47.6	2.50	mg/Kg wet	50.00		95.3	80.8-108				1
Iron	100	5.00	mg/Kg wet	100.0		100	80.4-112			B	1
Lead	47.6	2.50	mg/Kg wet	50.00		95.1	81-104				1
Magnesium	229	12.5	mg/Kg wet	250.0		91.5	80-108				1
Manganese	47.0	2.50	mg/Kg wet	50.00		94.0	84-115				1
Nickel	47.7	2.50	mg/Kg wet	50.00		95.4	80-118				1
Potassium	243	12.5	mg/Kg wet	250.0		97.1	81-116				1
Selenium	47.1	2.50	mg/Kg wet	50.00		94.2	80-104				1
Silver	4.70	2.50	mg/Kg wet	5.000		93.9	80-109				1
Sodium	231	12.5	mg/Kg wet	250.0		92.4	83-118				1
Thallium	48.6	2.50	mg/Kg wet	50.00		97.2	80.4-109				1
Vanadium	46.6	2.50	mg/Kg wet	50.00		93.2	82-114				1
Zinc	47.0	2.50	mg/Kg wet	50.00		94.0	80-105				1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0622 - SW3050 *(Continued)*											
Serial Dilution (B8L0622-DUP1)			**Source: 18L0509-64RE1**	*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 23:16*				
Aluminum	7740	338	mg/Kg dry		8500			9.37	10		50
Calcium	46300	338	mg/Kg dry		50700			8.89	10		50
Iron	15800	135	mg/Kg dry		16900			6.78	10	B	50
Magnesium	8390	338	mg/Kg dry		9190			9.08	10		50
Potassium	1040	338	mg/Kg dry		1150			9.78	10		50
Silver	27.0	67.6	mg/Kg dry		31.5			15.1	10	P	50
Serial Dilution (B8L0622-DUP2)			**Source: 18L0509-64RE2**	*Prepared: 12/19/2018 12:45*			*Analyzed: 12/20/2018 01:08*				
Antimony	< 2.43	6.76	mg/Kg dry		ND				10		5
Arsenic	8.64	6.76	mg/Kg dry		7.42			15.2	10	P	5
Barium	94.1	6.76	mg/Kg dry		90.2			4.31	10		5
Beryllium	< 0.270	0.676	mg/Kg dry		ND				10		5
Cadmium	0.717	0.676	mg/Kg dry		0.630			12.9	10	P	5
Chromium	39.2	6.76	mg/Kg dry		34.9			11.5	10	P	5
Cobalt	7.02	6.76	mg/Kg dry		6.02			15.3	10	P	5
Copper	22.7	6.76	mg/Kg dry		21.0			7.77	10		5
Lead	94.0	6.76	mg/Kg dry		81.4			14.4	10	P	5
Manganese	703	6.76	mg/Kg dry		623			12.2	10	P	5
Nickel	15.4	6.76	mg/Kg dry		13.0			16.4	10	P	5
Selenium	< 2.43	6.76	mg/Kg dry		ND				10		5
Sodium	68.9	33.8	mg/Kg dry		69.6			1.01	10		5
Thallium	5.18	6.76	mg/Kg dry		3.11			50.0	10	P	5
Vanadium	19.9	6.76	mg/Kg dry		18.0			9.66	10		5
Zinc	97.6	6.76	mg/Kg dry		88.7			9.52	10		5
MRL Check (B8L0622-MRL1)				*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 19:26*				
Aluminum	< 4.70	12.5	mg/Kg wet	2.000			70-130			S	1
Antimony	2.48	2.50	mg/Kg wet	2.500		99.2	70-130				1
Arsenic	2.64	2.50	mg/Kg wet	2.500		105	70-130				1
Barium	2.62	2.50	mg/Kg wet	2.500		105	70-130				1
Beryllium	0.250	0.250	mg/Kg wet	0.2500		100	70-130				1
Cadmium	0.255	0.250	mg/Kg wet	0.2500		102	70-130				1
Calcium	36.3	12.5	mg/Kg wet	10.00		363	70-130			S	1
Chromium	2.72	2.50	mg/Kg wet	2.500		109	70-130				1
Cobalt	2.04	2.50	mg/Kg wet	2.000		102	70-130				1
Copper	2.70	2.50	mg/Kg wet	2.500		108	70-130				1
Iron	7.22	5.00	mg/Kg wet	5.000		144	70-130			B, S	1
Lead	2.57	2.50	mg/Kg wet	2.500		103	70-130				1
Magnesium	11.0	12.5	mg/Kg wet	10.00		110	70-130				1
Manganese	2.60	2.50	mg/Kg wet	2.500		104	70-130				1
Nickel	2.64	2.50	mg/Kg wet	2.500		106	70-130				1
Potassium	21.6	12.5	mg/Kg wet	10.00		216	70-130			S	1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0622 - SW3050 *(Continued)*											
MRL Check (B8L0622-MRL1) (Continued)				*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 19:26*				
Selenium	2.63	2.50	mg/Kg wet	2.500		105	70-130				1
Silver	0.235	2.50	mg/Kg wet	0.2500		94.0	70-130				1
Sodium	13.1	12.5	mg/Kg wet	10.00		131	70-130			S	1
Thallium	2.98	2.50	mg/Kg wet	2.500		119	70-130				1
Vanadium	2.06	2.50	mg/Kg wet	2.000		103	70-130				1
Zinc	5.17	2.50	mg/Kg wet	2.500		207	70-130			S	1
Matrix Spike (B8L0622-MS1)		**Source: 18L0509-64RE1**		*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 23:04*				
Aluminum	8580	70.2	mg/Kg dry	28.08	8500	264	75-125			S	10
Calcium	61800	70.2	mg/Kg dry	140.4	50700	7930	75-125			S	10
Iron	12500	28.1	mg/Kg dry	56.17	16900	NR	75-125			B, S	10
Magnesium	6090	70.2	mg/Kg dry	140.4	9190	NR	75-125			S	10
Potassium	1310	70.2	mg/Kg dry	140.4	1150	117	75-125				10
Silver	25.8	14.0	mg/Kg dry	2.808	31.5	NR	75-125			S	10
Matrix Spike (B8L0622-MS2)		**Source: 18L0509-64RE2**		*Prepared: 12/19/2018 12:45*			*Analyzed: 12/20/2018 00:54*				
Antimony	< 0.506	1.40	mg/Kg dry	28.08	ND		75-125			S	1
Arsenic	30.8	1.40	mg/Kg dry	28.08	7.42	83.4	75-125				1
Barium	100	1.40	mg/Kg dry	28.08	90.2	36.5	75-125			S	1
Beryllium	1.35	0.140	mg/Kg dry	2.808	ND	48.2	75-125			S	1
Cadmium	2.50	0.140	mg/Kg dry	2.808	0.630	66.7	75-125			S	1
Chromium	48.6	1.40	mg/Kg dry	28.08	34.9	48.9	75-125			S	1
Cobalt	27.4	1.40	mg/Kg dry	28.08	6.02	76.2	75-125				1
Copper	40.0	1.40	mg/Kg dry	28.08	21.0	67.6	75-125			S	1
Lead	57.2	1.40	mg/Kg dry	28.08	81.4	NR	81-112			S	1
Manganese	691	1.40	mg/Kg dry	28.08	623	245	75-125			S	1
Nickel	31.4	1.40	mg/Kg dry	28.08	13.0	65.5	75-125			S	1
Selenium	23.3	1.40	mg/Kg dry	28.08	ND	82.9	75-125				1
Sodium	185	7.02	mg/Kg dry	140.4	69.6	82.1	75-125				1
Thallium	24.1	1.40	mg/Kg dry	28.08	3.11	74.7	75-125			S	1
Vanadium	41.4	1.40	mg/Kg dry	28.08	18.0	83.1	75-125				1
Zinc	76.0	1.40	mg/Kg dry	28.08	88.7	NR	75-125			S	1
Matrix Spike Dup (B8L0622-MSD1)		**Source: 18L0509-64RE1**		*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 23:08*				
Aluminum	8620	68.4	mg/Kg dry	27.38	8500	413	75-125	0.454	20	S	10
Calcium	45300	68.4	mg/Kg dry	136.9	50700	NR	75-125	30.9	20	P, S	10
Iron	13900	27.4	mg/Kg dry	54.76	16900	NR	75-125	11.2	20	B, S	10
Magnesium	8440	68.4	mg/Kg dry	136.9	9190	NR	75-125	32.3	20	P, S	10
Potassium	1280	68.4	mg/Kg dry	136.9	1150	95.7	75-125	2.52	20		10
Silver	27.9	13.7	mg/Kg dry	2.738	31.5	NR	75-125	8.00	20	S	10

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0622 - SW3050 *(Continued)*											
Matrix Spike Dup (B8L0622-MSD2)			**Source: 18L0509-64RE2**	*Prepared: 12/19/2018 12:45*			*Analyzed: 12/20/2018 00:59*				
Antimony	< 0.493	1.37	mg/Kg dry	27.38	ND		75-125		20	S	1
Arsenic	32.1	1.37	mg/Kg dry	27.38	7.42	90.3	75-125	4.15	20		1
Barium	104	1.37	mg/Kg dry	27.38	90.2	51.9	75-125	3.84	20	S	1
Beryllium	1.02	0.137	mg/Kg dry	2.738	ND	37.1	75-125	28.5	20	P, S	1
Cadmium	2.61	0.137	mg/Kg dry	2.738	0.630	72.2	75-125	4.08	20	S	1
Chromium	54.2	1.37	mg/Kg dry	27.38	34.9	70.6	75-125	10.9	20	S	1
Cobalt	27.8	1.37	mg/Kg dry	27.38	6.02	79.7	75-125	1.55	20		1
Copper	43.2	1.37	mg/Kg dry	27.38	21.0	81.1	75-125	7.73	20		1
Lead	70.7	1.37	mg/Kg dry	27.38	81.4	NR	81-112	21.1	20	P, S	1
Manganese	654	1.37	mg/Kg dry	27.38	623	116	75-125	5.51	20		1
Nickel	33.1	1.37	mg/Kg dry	27.38	13.0	73.4	75-125	5.27	20	S	1
Selenium	23.2	1.37	mg/Kg dry	27.38	ND	84.9	75-125	0.186	20		1
Sodium	188	6.84	mg/Kg dry	136.9	69.6	86.3	75-125	1.55	20		1
Thallium	24.4	1.37	mg/Kg dry	27.38	3.11	77.8	75-125	1.33	20		1
Vanadium	41.0	1.37	mg/Kg dry	27.38	18.0	83.7	75-125	1.06	20		1
Zinc	91.3	1.37	mg/Kg dry	27.38	88.7	9.20	75-125	18.3	20	S	1
Post Spike (B8L0622-PS1)			**Source: 18L0509-64RE1**	*Prepared: 12/19/2018 12:45*			*Analyzed: 12/19/2018 23:12*				
Aluminum	8500	67.6	mg/Kg dry	135.2	8500	NR	80-120			S	1
Calcium	50000	67.6	mg/Kg dry	135.2	50700	NR	80-120			S	1
Iron	16800	27.0	mg/Kg dry	135.2	16900	NR	80-120			B, S	1
Magnesium	9170	67.6	mg/Kg dry	135.2	9190	NR	80-120			S	1
Potassium	1260	67.6	mg/Kg dry	135.2	1150	83.2	80-120				1
Silver	109	13.5	mg/Kg dry	135.2	31.5	57.3	80-120			S	1
Post Spike (B8L0622-PS2)			**Source: 18L0509-64RE2**	*Prepared: 12/19/2018 12:45*			*Analyzed: 12/20/2018 01:04*				
Antimony	< 0.541	1.50	mg/Kg dry	15.03	ND		80-120			S	1
Arsenic	23.6	1.50	mg/Kg dry	15.03	7.42	107	80-120				1
Barium	102	1.50	mg/Kg dry	15.03	90.2	76.5	80-120			S	1
Beryllium	9.72	0.150	mg/Kg dry	15.03	ND	64.7	80-120			S	1
Cadmium	14.2	0.150	mg/Kg dry	15.03	0.630	90.3	80-120				1
Chromium	46.0	1.50	mg/Kg dry	15.03	34.9	74.2	80-120			S	1
Cobalt	20.2	1.50	mg/Kg dry	15.03	6.02	94.4	80-120				1
Copper	33.1	1.50	mg/Kg dry	15.03	21.0	80.8	80-120				1
Lead	95.8	1.50	mg/Kg dry	15.03	81.4	96.0	80-120				1
Manganese	653	1.50	mg/Kg dry	15.03	623	200	80-120			S	1
Nickel	26.9	1.50	mg/Kg dry	15.03	13.0	92.4	80-120				1
Selenium	14.9	1.50	mg/Kg dry	15.03	ND	99.4	80-120				1
Sodium	82.9	7.51	mg/Kg dry	15.03	69.6	88.5	80-120				1
Thallium	17.1	1.50	mg/Kg dry	15.03	3.11	93.0	80-120				1
Vanadium	29.3	1.50	mg/Kg dry	15.03	18.0	74.8	80-120			S	1
Zinc	104	1.50	mg/Kg dry	15.03	88.7	100	80-120				1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0622 - SW3050 *(Continued)*											
Post Spike (B8L0622-PS2) (Continued)				**Source: 18L0509-64RE2**	*Prepared: 12/19/2018 12:45*		*Analyzed: 12/20/2018 01:04*				
Reference (B8L0622-SRM1)					*Prepared: 12/19/2018 12:45*		*Analyzed: 12/19/2018 19:30*				
Aluminum	6420	125	mg/Kg wet	7124		90.1	50-150				10
Antimony	16.4	25.0	mg/Kg wet	13.70		120	50-150				10
Arsenic	119	25.0	mg/Kg wet	135.9		87.5	50-150				10
Barium	328	25.0	mg/Kg wet	400.6		81.9	50-150				10
Beryllium	24.5	2.50	mg/Kg wet	30.36		80.7	50-150				10
Cadmium	56.2	2.50	mg/Kg wet	65.76		85.5	50-150				10
Calcium	3610	125	mg/Kg wet	4576		78.9	50-150				10
Chromium	43.7	25.0	mg/Kg wet	37.76		116	50-150				10
Cobalt	121	25.0	mg/Kg wet	140.3		86.1	50-150				10
Copper	137	25.0	mg/Kg wet	157.3		87.1	50-150				10
Iron	8320	50.0	mg/Kg wet	9700		85.8	50-150			B	10
Lead	50.8	25.0	mg/Kg wet	54.80		92.7	50-150				10
Magnesium	3290	125	mg/Kg wet	4061		81.0	50-150				10
Manganese	320	25.0	mg/Kg wet	392.4		81.6	50-150				10
Nickel	25.0	25.0	mg/Kg wet	28.72		86.9	50-150				10
Potassium	8090	125	mg/Kg wet	9754		82.9	50-150				10
Selenium	86.4	25.0	mg/Kg wet	102.5		84.4	50-150				10
Silver	30.5	25.0	mg/Kg wet	18.41		166	50-150			S	10
Sodium	4750	125	mg/Kg wet	6028		78.9	50-150				10
Thallium	101	25.0	mg/Kg wet	109.1		92.8	50-150				10
Vanadium	57.5	25.0	mg/Kg wet	70.69		81.3	50-150				10
Zinc	243	25.0	mg/Kg wet	285.0		85.3	50-150				10
Batch: B9A0160 - SW3050											
Blank (B9A0160-BLK1)					*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 16:51*				
Aluminum	< 12.5	12.5	mg/Kg wet								1
Antimony	< 2.50	2.50	mg/Kg wet								1
Arsenic	< 2.50	2.50	mg/Kg wet								1
Barium	< 2.50	2.50	mg/Kg wet								1
Beryllium	< 0.250	0.250	mg/Kg wet								1
Cadmium	< 0.250	0.250	mg/Kg wet								1
Calcium	< 12.5	12.5	mg/Kg wet								1
Chromium	< 2.50	2.50	mg/Kg wet								1
Cobalt	< 2.50	2.50	mg/Kg wet								1
Copper	< 2.50	2.50	mg/Kg wet								1
Iron	< 5.00	5.00	mg/Kg wet								1
Lead	< 2.50	2.50	mg/Kg wet								1
Magnesium	< 12.5	12.5	mg/Kg wet								1
Manganese	< 2.50	2.50	mg/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0160 - SW3050 *(Continued)*											
Blank (B9A0160-BLK1) (Continued)				*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 16:51*				
Nickel	< 2.50	2.50	mg/Kg wet								1
Potassium	< 12.5	12.5	mg/Kg wet								1
Selenium	< 2.50	2.50	mg/Kg wet								1
Silver	< 2.50	2.50	mg/Kg wet								1
Sodium	< 12.5	12.5	mg/Kg wet								1
Thallium	< 2.50	2.50	mg/Kg wet								1
Vanadium	< 2.50	2.50	mg/Kg wet								1
Zinc	< 2.50	2.50	mg/Kg wet								1
LCS (B9A0160-BS1)				*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 17:12*				
Aluminum	48.4	12.5	mg/Kg wet	50.00		96.8	80-119				1
Antimony	47.3	2.50	mg/Kg wet	50.00		94.5	80-105				1
Arsenic	47.3	2.50	mg/Kg wet	50.00		94.6	80-103				1
Barium	49.4	2.50	mg/Kg wet	50.00		98.8	80-108				1
Beryllium	4.94	0.250	mg/Kg wet	5.000		98.7	83-113				1
Cadmium	4.80	0.250	mg/Kg wet	5.000		96.0	82.4-105				1
Calcium	246	12.5	mg/Kg wet	250.0		98.4	84.7-119				1
Chromium	48.8	2.50	mg/Kg wet	50.00		97.6	81.1-105				1
Cobalt	47.5	2.50	mg/Kg wet	50.00		95.0	85-112				1
Copper	50.4	2.50	mg/Kg wet	50.00		101	80.8-108				1
Iron	103	5.00	mg/Kg wet	100.0		103	80.4-112				1
Lead	49.7	2.50	mg/Kg wet	50.00		99.4	80-104				1
Magnesium	242	12.5	mg/Kg wet	250.0		97.0	80-108				1
Manganese	48.8	2.50	mg/Kg wet	50.00		97.5	84-115				1
Nickel	49.7	2.50	mg/Kg wet	50.00		99.4	80-118				1
Potassium	247	12.5	mg/Kg wet	250.0		99.0	81-116				1
Selenium	49.0	2.50	mg/Kg wet	50.00		97.9	80-104				1
Silver	2.93	2.50	mg/Kg wet	5.000		58.6	80-109			S	1
Sodium	235	12.5	mg/Kg wet	250.0		94.2	83-118				1
Thallium	49.7	2.50	mg/Kg wet	50.00		99.5	80.4-109				1
Vanadium	48.2	2.50	mg/Kg wet	50.00		96.5	82-114				1
Zinc	48.8	2.50	mg/Kg wet	50.00		97.5	80-105				1
Serial Dilution (B9A0160-DUP1)		**Source: 18L0509-54RE1**		*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 21:05*				
Aluminum	4810	387	mg/Kg dry		4360			9.78	10		50
Calcium	11700	387	mg/Kg dry		10400			11.8	10	P	50
Iron	27500	155	mg/Kg dry		24900			9.94	10		50
Magnesium	4710	387	mg/Kg dry		4220			11.1	10	P	50
Silver	< 4.95	77.4	mg/Kg dry		ND				10		50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0160 - SW3050 *(Continued)*											
Serial Dilution (B9A0160-DUP2)				**Source: 18L0509-54RE2**	*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 22:38*				
Antimony	< 2.79	7.74	mg/Kg dry		ND				10		5
Arsenic	11.0	7.74	mg/Kg dry		8.97			20.5	10	P	5
Barium	66.6	7.74	mg/Kg dry		65.3			1.97	10		5
Beryllium	< 0.310	0.774	mg/Kg dry		ND				10		5
Cadmium	1.36	0.774	mg/Kg dry		1.28			6.33	10		5
Chromium	8.77	7.74	mg/Kg dry		10.9			21.8	10	P	5
Cobalt	6.16	7.74	mg/Kg dry		5.93			3.79	10		5
Copper	88.5	7.74	mg/Kg dry		84.2			5.02	10		5
Lead	88.5	7.74	mg/Kg dry		81.7			7.89	10		5
Manganese	170	7.74	mg/Kg dry		156			8.17	10		5
Nickel	15.7	7.74	mg/Kg dry		14.6			6.97	10		5
Potassium	453	38.7	mg/Kg dry		441			2.80	10		5
Selenium	< 2.79	7.74	mg/Kg dry		ND				10		5
Sodium	172	38.7	mg/Kg dry		168			1.97	10		5
Thallium	4.50	7.74	mg/Kg dry		3.11			36.7	10	P	5
Vanadium	20.1	7.74	mg/Kg dry		19.3			4.28	10		5
Zinc	84.2	7.74	mg/Kg dry		80.8			4.16	10		5
MRL Check (B9A0160-MRL1)					*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 17:16*				
Aluminum	< 4.70	12.5	mg/Kg wet	2.000			70-130			S	1
Antimony	2.46	2.50	mg/Kg wet	2.500		98.4	70-130				1
Arsenic	2.96	2.50	mg/Kg wet	2.500		119	70-130				1
Barium	2.49	2.50	mg/Kg wet	2.500		99.6	70-130				1
Beryllium	0.245	0.250	mg/Kg wet	0.2500		98.0	70-130				1
Cadmium	0.250	0.250	mg/Kg wet	0.2500		100	70-130				1
Calcium	16.0	12.5	mg/Kg wet	10.00		160	70-130			S	1
Chromium	2.48	2.50	mg/Kg wet	2.500		99.2	70-130				1
Cobalt	1.84	2.50	mg/Kg wet	2.000		92.2	70-130				1
Copper	2.66	2.50	mg/Kg wet	2.500		106	70-130				1
Iron	6.76	5.00	mg/Kg wet	5.000		135	70-130			S	1
Lead	2.32	2.50	mg/Kg wet	2.500		92.8	70-130				1
Magnesium	10.4	12.5	mg/Kg wet	10.00		104	70-130				1
Manganese	2.43	2.50	mg/Kg wet	2.500		97.2	70-130				1
Nickel	2.47	2.50	mg/Kg wet	2.500		98.8	70-130				1
Potassium	16.6	12.5	mg/Kg wet	10.00		166	70-130			S	1
Selenium	2.76	2.50	mg/Kg wet	2.500		110	70-130				1
Sodium	10.9	12.5	mg/Kg wet	10.00		109	70-130				1
Thallium	2.86	2.50	mg/Kg wet	2.500		115	70-130				1
Vanadium	1.91	2.50	mg/Kg wet	2.000		95.5	70-130				1
Zinc	2.78	2.50	mg/Kg wet	2.500		111	70-130				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0160 - SW3050 *(Continued)*											
Matrix Spike (B9A0160-MS1)		**Source: 18L0509-54RE1**		*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 20:36*					
Aluminum	5010	76.3	mg/Kg dry	30.52	4360	2130	75-125			S	10
Calcium	4950	76.3	mg/Kg dry	152.6	10400	NR	75-125			S	10
Iron	32100	30.5	mg/Kg dry	61.04	24900	11700	75-125			S	10
Magnesium	2100	76.3	mg/Kg dry	152.6	4220	NR	75-125			S	10
Silver	5.25	15.3	mg/Kg dry	3.052	2.72	82.8	75-125				10
Matrix Spike (B9A0160-MS2)		**Source: 18L0509-54RE2**		*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 22:26*					
Antimony	< 0.549	1.53	mg/Kg dry	30.52	ND		75-125			S	1
Arsenic	32.9	1.53	mg/Kg dry	30.52	8.97	78.4	75-125				1
Barium	68.7	1.53	mg/Kg dry	30.52	65.3	11.3	75-125			S	1
Beryllium	< 0.0610	0.153	mg/Kg dry	3.052	ND		75-125			S	1
Cadmium	3.18	0.153	mg/Kg dry	3.052	1.28	62.4	75-125			S	1
Chromium	32.7	1.53	mg/Kg dry	30.52	10.9	71.5	75-125			S	1
Cobalt	28.3	1.53	mg/Kg dry	30.52	5.93	73.4	75-125			S	1
Copper	107	1.53	mg/Kg dry	30.52	84.2	75.6	75-125				1
Lead	73.2	1.53	mg/Kg dry	30.52	81.7	NR	75-125			S	1
Manganese	138	1.53	mg/Kg dry	30.52	156	NR	75-125			S	1
Nickel	39.6	1.53	mg/Kg dry	30.52	14.6	81.7	75-125				1
Potassium	737	7.63	mg/Kg dry	152.6	441	194	75-125			S	1
Selenium	22.1	1.53	mg/Kg dry	30.52	ND	72.5	75-125			S	1
Sodium	262	7.63	mg/Kg dry	152.6	168	61.5	75-125			S	1
Thallium	26.4	1.53	mg/Kg dry	30.52	3.11	76.2	75-125				1
Vanadium	39.5	1.53	mg/Kg dry	30.52	19.3	66.3	75-125			S	1
Zinc	59.8	1.53	mg/Kg dry	30.52	80.8	NR	75-125			S	1
Matrix Spike Dup (B9A0160-MSD1)		**Source: 18L0509-54RE1**		*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 20:40*					
Aluminum	3130	76.3	mg/Kg dry	30.51	4360	NR	75-125	46.3	20	P, S	10
Calcium	3700	76.3	mg/Kg dry	152.6	10400	NR	75-125	28.9	20	S, P	10
Iron	19600	30.5	mg/Kg dry	61.02	24900	NR	75-125	48.2	20	P, S	10
Magnesium	1760	76.3	mg/Kg dry	152.6	4220	NR	75-125	17.7	20	S	10
Nickel	26.5	15.3	mg/Kg dry	30.51	16.0	34.6	75-125	43.3	20	P, S	10
Silver	2.90	15.3	mg/Kg dry	3.051	2.72	5.73	75-125	57.7	20	P, S	10
Matrix Spike Dup (B9A0160-MSD2)		**Source: 18L0509-54RE2**		*Prepared: 01/08/2019 08:30*		*Analyzed: 01/08/2019 22:30*					
Antimony	< 0.549	1.53	mg/Kg dry	30.51	ND		75-125		20	S	1
Arsenic	22.3	1.53	mg/Kg dry	30.51	8.97	43.6	75-125	38.5	20	P, S	1
Barium	42.8	1.53	mg/Kg dry	30.51	65.3	NR	75-125	46.5	20	P, S	1
Beryllium	< 0.0610	0.153	mg/Kg dry	3.051	ND		75-125		20	S	1
Cadmium	2.06	0.153	mg/Kg dry	3.051	1.28	25.7	75-125	42.7	20	P, S	1
Chromium	20.5	1.53	mg/Kg dry	30.51	10.9	31.4	75-125	46.0	20	P, S	1
Cobalt	18.5	1.53	mg/Kg dry	30.51	5.93	41.1	75-125	42.1	20	P, S	1
Copper	76.9	1.53	mg/Kg dry	30.51	84.2	NR	75-125	33.0	20	P, S	1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0160 - SW3050 *(Continued)*											
Matrix Spike Dup (B9A0160-MSD2) (Continued)		**Source: 18L0509-54RE2**		*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 22:30*				
Lead	49.7	1.53	mg/Kg dry	30.51	81.7	NR	75-125	38.3	20	P, S	1
Manganese	78.5	1.53	mg/Kg dry	30.51	156	NR	75-125	54.8	20	P, S	1
Nickel	26.9	1.53	mg/Kg dry	30.51	14.6	40.4	75-125	37.9	20	P, S	1
Potassium	497	7.63	mg/Kg dry	152.6	441	36.7	75-125	39.0	20	P, S	1
Selenium	14.5	1.53	mg/Kg dry	30.51	ND	47.4	75-125	42.0	20	P, S	1
Sodium	304	7.63	mg/Kg dry	152.6	168	89.0	75-125	14.8	20		1
Thallium	16.5	1.53	mg/Kg dry	30.51	3.11	43.9	75-125	46.0	20	P, S	1
Vanadium	27.4	1.53	mg/Kg dry	30.51	19.3	26.7	75-125	36.1	20	P, S	1
Zinc	42.3	1.53	mg/Kg dry	30.51	80.8	NR	75-125	34.4	20	P, S	1
Post Spike (B9A0160-PS1)		**Source: 18L0509-54RE1**		*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 21:01*				
Aluminum	4480	77.4	mg/Kg dry	154.8	4360	78.0	80-120			S	1
Calcium	10500	77.4	mg/Kg dry	154.8	10400	82.0	80-120				1
Iron	24900	31.0	mg/Kg dry	154.8	24900	2.00	80-120			S	1
Magnesium	4340	77.4	mg/Kg dry	154.8	4220	78.0	80-120			S	1
Silver	118	15.5	mg/Kg dry	154.8	2.72	74.2	80-120			S	1
Post Spike (B9A0160-PS2)		**Source: 18L0509-54RE2**		*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 22:34*				
Antimony	1.26	1.72	mg/Kg dry	17.20	ND	7.32	80-120			S	1
Arsenic	24.9	1.72	mg/Kg dry	17.20	8.97	92.6	80-120				1
Barium	82.9	1.72	mg/Kg dry	17.20	65.3	103	80-120				1
Beryllium	15.2	0.172	mg/Kg dry	17.20	ND	88.6	80-120				1
Cadmium	16.8	0.172	mg/Kg dry	17.20	1.28	90.3	80-120				1
Chromium	26.4	1.72	mg/Kg dry	17.20	10.9	90.0	80-120				1
Cobalt	21.8	1.72	mg/Kg dry	17.20	5.93	92.0	80-120				1
Copper	102	1.72	mg/Kg dry	17.20	84.2	106	80-120				1
Lead	97.4	1.72	mg/Kg dry	17.20	81.7	91.2	80-120				1
Manganese	174	1.72	mg/Kg dry	17.20	156	102	80-120				1
Nickel	30.6	1.72	mg/Kg dry	17.20	14.6	92.9	80-120				1
Potassium	458	8.60	mg/Kg dry	17.20	441	101	80-120				1
Selenium	15.5	1.72	mg/Kg dry	17.20	ND	90.2	80-120				1
Sodium	187	8.60	mg/Kg dry	17.20	168	110	80-120				1
Thallium	19.3	1.72	mg/Kg dry	17.20	3.11	94.3	80-120				1
Vanadium	35.9	1.72	mg/Kg dry	17.20	19.3	96.8	80-120				1
Zinc	97.5	1.72	mg/Kg dry	17.20	80.8	97.0	80-120				1
Reference (B9A0160-SRM1)				*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 17:20*				
Aluminum	5920	125	mg/Kg wet	6506		90.9	50-150				10
Antimony	17.2	25.0	mg/Kg wet	12.51		138	50-150				10
Arsenic	114	25.0	mg/Kg wet	124.1		91.5	50-150				10
Barium	323	25.0	mg/Kg wet	365.9		88.2	50-150				10
Beryllium	24.0	2.50	mg/Kg wet	27.73		86.6	50-150				10

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Metals by ICP-AES

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0160 - SW3050 *(Continued)*											
Reference (B9A0160-SRM1) (Continued)				*Prepared: 01/08/2019 08:30*			*Analyzed: 01/08/2019 17:20*				
Cadmium	55.8	2.50	mg/Kg wet	60.06		92.9	50-150				10
Calcium	3520	125	mg/Kg wet	4179		84.1	50-150				10
Chromium	31.8	25.0	mg/Kg wet	34.48		92.2	50-150				10
Cobalt	116	25.0	mg/Kg wet	128.1		90.2	50-150				10
Copper	137	25.0	mg/Kg wet	143.6		95.1	50-150				10
Iron	7400	50.0	mg/Kg wet	8859		83.6	50-150				10
Lead	51.8	25.0	mg/Kg wet	50.05		103	50-150				10
Magnesium	3220	125	mg/Kg wet	3709		86.8	50-150				10
Manganese	308	25.0	mg/Kg wet	358.4		85.9	50-150				10
Nickel	23.3	25.0	mg/Kg wet	26.23		88.8	50-150				10
Potassium	7920	125	mg/Kg wet	8909		89.0	50-150				10
Selenium	84.6	25.0	mg/Kg wet	93.59		90.4	50-150				10
Silver	16.9	25.0	mg/Kg wet	16.82		100	50-150				10
Sodium	4840	125	mg/Kg wet	5506		87.9	50-150				10
Thallium	96.7	25.0	mg/Kg wet	99.60		97.1	50-150				10
Vanadium	55.2	25.0	mg/Kg wet	64.56		85.5	50-150				10
Zinc	234	25.0	mg/Kg wet	260.3		90.0	50-150				10

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Mercury by CVAA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0599											
Blank (B8L0599-BLK1)				*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:23*				
Mercury	< 0.060	0.060	mg/Kg wet								1
LCS (B8L0599-BS1)				*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:25*				
Mercury	0.517	0.060	mg/Kg wet	0.5000		103	89.7-115				1
MRL Check (B8L0599-MRL1)				*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:05*				
Mercury	0.066	0.060	mg/Kg wet	0.06000		111	70-130				1
Matrix Spike (B8L0599-MS1)		**Source: 18L0454-05**		*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:37*				
Mercury	0.556	0.062	mg/Kg dry	0.5202	0.039	99.3	75-125				1
Matrix Spike Dup (B8L0599-MSD1)		**Source: 18L0454-05**		*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:39*				
Mercury	0.569	0.064	mg/Kg dry	0.5367	0.039	98.8	75-125	2.44	20		1
Reference (B8L0599-SRM1)				*Prepared: 12/19/2018 07:45*			*Analyzed: 12/19/2018 10:27*				
Mercury	0.168	0.060	mg/Kg wet	0.1622		104	50-150				1
Batch: B8L0730											
Blank (B8L0730-BLK1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 13:10*				
Mercury	< 0.060	0.060	mg/Kg wet								1
LCS (B8L0730-BS1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 13:13*				
Mercury	0.501	0.060	mg/Kg wet	0.5000		100	89.7-115				1
MRL Check (B8L0730-MRL1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 12:52*				
Mercury	0.067	0.060	mg/Kg wet	0.06000		112	70-130				1
Matrix Spike (B8L0730-MS1)		**Source: 18L0509-51**		*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:28*				
Mercury	0.770	0.078	mg/Kg dry	0.6502	0.123	99.5	75-125				1
Matrix Spike Dup (B8L0730-MSD1)		**Source: 18L0509-51**		*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:30*				
Mercury	0.799	0.077	mg/Kg dry	0.6408	0.123	105	75-125	3.69	20		1
Reference (B8L0730-SRM1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 13:15*				
Mercury	0.172	0.060	mg/Kg wet	0.1600		107	50-150				1
Batch: B8L0731											
Blank (B8L0731-BLK1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:33*				
Mercury	< 0.060	0.060	mg/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Mercury by CVAA

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0731 *(Continued)*											
LCS (B8L0731-BS1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:35*				
Mercury	0.505	0.060	mg/Kg wet	0.5000		101	89.7-115				1
MRL Check (B8L0731-MRL1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:40*				
Mercury	0.055	0.060	mg/Kg wet	0.06000		91.7	70-130				1
Matrix Spike (B8L0731-MS1)		**Source: 18L0509-55**		*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:53*				
Mercury	0.649	0.065	mg/Kg dry	0.5400	0.098	102	75-125				1
Matrix Spike Dup (B8L0731-MSD1)		**Source: 18L0509-55**		*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:56*				
Mercury	0.645	0.065	mg/Kg dry	0.5384	0.098	102	75-125	0.564	20		1
Reference (B8L0731-SRM1)				*Prepared: 12/26/2018 08:00*			*Analyzed: 12/26/2018 14:38*				
Mercury	0.170	0.060	mg/Kg wet	0.1709		99.4	50-150				1
Batch: B8L0785											
Blank (B8L0785-BLK1)				*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 12:23*				
Mercury	< 0.060	0.060	mg/Kg wet								1
LCS (B8L0785-BS1)				*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 12:26*				
Mercury	0.476	0.060	mg/Kg wet	0.5000		95.2	89.7-115				1
MRL Check (B8L0785-MRL2)				*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 11:39*				
Mercury	0.051	0.060	mg/Kg wet	0.06000		85.2	70-130				1
Matrix Spike (B8L0785-MS1)		**Source: 18L0025-01**		*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 12:33*				
Mercury	0.432	0.059	mg/Kg dry	0.4930	ND	87.6	75-125				1
Matrix Spike Dup (B8L0785-MSD1)		**Source: 18L0025-01**		*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 12:35*				
Mercury	0.439	0.059	mg/Kg dry	0.4944	ND	88.7	75-125	1.51	20		1
Reference (B8L0785-SRM1)				*Prepared: 12/27/2018 08:15*			*Analyzed: 12/27/2018 12:28*				
Mercury	0.184	0.060	mg/Kg wet	0.1890		97.3	50-150				1
Batch: B9A0170											
Blank (B9A0170-BLK1)				*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 11:50*				
Mercury	< 0.060	0.060	mg/Kg wet								1

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Quality Control

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Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Mercury by CVAA

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0170 *(Continued)*											
LCS (B9A0170-BS1)				*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 12:12*				
Mercury	0.520	0.060	mg/Kg wet	0.5000		104	89.7-115				1
MRL Check (B9A0170-MRL1)				*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 11:33*				
Mercury	0.058	0.060	mg/Kg wet	0.06000		97.1	70-130				1
Matrix Spike (B9A0170-MS1)		**Source: 18L0509-54**		*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 13:07*				
Mercury	0.733	0.073	mg/Kg dry	0.6076	0.083	107	75-125				1
Matrix Spike Dup (B9A0170-MSD1)		**Source: 18L0509-54**		*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 13:09*				
Mercury	0.744	0.073	mg/Kg dry	0.6123	0.083	108	75-125	1.58	20		1
Reference (B9A0170-SRM1)				*Prepared: 01/08/2019 08:15*			*Analyzed: 01/08/2019 12:14*				
Mercury	0.216	0.060	mg/Kg wet	0.1564		138	50-150				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0496											
Blank (B8L0496-BLK1)				*Prepared: 12/15/2018 06:30*			*Analyzed: 12/15/2018 07:30*				
Total Solids	< 0.100	0.100	%								1
LCS (B8L0496-BS1)				*Prepared: 12/15/2018 06:30*			*Analyzed: 12/15/2018 07:32*				
Total Solids	0.187	0.100	%	0.2027		92.1	80.2-112				1
Duplicate (B8L0496-DUP1)		**Source: 18L0509-20**		*Prepared: 12/15/2018 06:30*			*Analyzed: 12/15/2018 07:34*				
Total Solids	76.4	0.100	%		75.6			1.12	5		1
Duplicate (B8L0496-DUP2)		**Source: 18L0544-03**		*Prepared: 12/15/2018 06:30*			*Analyzed: 12/15/2018 07:36*				
Total Solids	90.4	0.100	%		88.6			1.98	5		1
Batch: B8L0498											
Blank (B8L0498-BLK1)				*Prepared: 12/15/2018 07:57*			*Analyzed: 12/15/2018 08:45*				
Total Solids	< 0.100	0.100	%								1
LCS (B8L0498-BS1)				*Prepared: 12/15/2018 07:57*			*Analyzed: 12/15/2018 08:47*				
Total Solids	0.187	0.100	%	0.2027		92.4	80.2-112				1
Duplicate (B8L0498-DUP1)		**Source: 18L0509-47**		*Prepared: 12/15/2018 07:57*			*Analyzed: 12/15/2018 08:49*				
Total Solids	85.4	0.100	%		86.9			1.75	5		1
Duplicate (B8L0498-DUP2)		**Source: 18L0509-61**		*Prepared: 12/15/2018 07:57*			*Analyzed: 12/15/2018 08:51*				
Total Solids	91.8	0.100	%		92.2			0.427	5		1
Batch: B8L0510											
Blank (B8L0510-BLK1)				*Prepared: 12/17/2018 06:49*			*Analyzed: 12/17/2018 07:13*				
Total Solids	< 0.100	0.100	%								1
LCS (B8L0510-BS1)				*Prepared: 12/17/2018 06:49*			*Analyzed: 12/17/2018 07:15*				
Total Solids	0.184	0.100	%	0.2059		89.6	80.2-112				1
Duplicate (B8L0510-DUP1)		**Source: 18L0509-70**		*Prepared: 12/17/2018 06:49*			*Analyzed: 12/17/2018 07:17*				
Total Solids	82.5	0.100	%		83.8			1.60	5		1
Batch: B8L0596											
LCS (B8L0596-BS1)				*Prepared: 12/18/2018 12:41*			*Analyzed: 12/19/2018 06:43*				
pH	7.03		pH Units	7.000		100	90-110				1

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Quality Control

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Matrix: Solid

Wet Chemistry

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0596 *(Continued)*											
LCS (B8L0596-BS2)				*Prepared: 12/18/2018 12:41*			*Analyzed: 12/19/2018 06:43*				
pH	7.03		pH Units	7.000		100	90-110				1
Duplicate (B8L0596-DUP1)		**Source: 18L0509-60**		*Prepared: 12/18/2018 12:41*			*Analyzed: 12/19/2018 06:43*				
pH	7.91		pH Units		7.89			0.253	10		1
Duplicate (B8L0596-DUP2)		**Source: 18L0509-70**		*Prepared: 12/18/2018 12:41*			*Analyzed: 12/19/2018 06:43*				
pH	7.99		pH Units		8.10			1.37	10		1
Batch: B9A0158											
Blank (B9A0158-BLK1)				*Prepared: 01/08/2019 08:09*			*Analyzed: 01/08/2019 08:54*				
Total Solids	< 0.100	0.100	%								1
LCS (B9A0158-BS1)				*Prepared: 01/08/2019 08:09*			*Analyzed: 01/08/2019 08:56*				
Total Solids	0.192	0.100	%	0.2045		93.7	80.2-112				1
Duplicate (B9A0158-DUP1)		**Source: 18L0509-30**		*Prepared: 01/08/2019 08:09*			*Analyzed: 01/08/2019 08:58*				
Total Solids	75.8	0.100	%		77.1			1.65	5		1
Duplicate (B9A0158-DUP2)		**Source: 19A0256-01**		*Prepared: 01/08/2019 08:09*			*Analyzed: 01/08/2019 09:00*				
Total Solids	94.1	0.100	%		94.4			0.252	5		1

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Quality Control

(Continued)

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Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0608 - SW5035											
Blank (B8L0608-BLK1)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 21:15*				
1,1,1-Trichloroethane	< 2.00	2.00	ug/Kg wet								1
1,1,2,2-Tetrachloroethane	< 2.00	2.00	ug/Kg wet								1
1,1,2-Trichloroethane	< 2.00	2.00	ug/Kg wet								1
1,1-Dichloroethane	< 4.00	4.00	ug/Kg wet								1
1,1-Dichloroethene	< 2.00	2.00	ug/Kg wet								1
1,2-Dibromo-3-chloropropane	< 8.00	8.00	ug/Kg wet								1
1,2-Dibromoethane	< 2.00	2.00	ug/Kg wet								1
1,2-Dichloroethane	< 2.00	2.00	ug/Kg wet								1
1,2-Dichloropropane	< 2.00	2.00	ug/Kg wet								1
1-Butanol	< 200	200	ug/Kg wet								1
2-Butanone	< 28.0	28.0	ug/Kg wet								1
2-Hexanone	< 28.0	28.0	ug/Kg wet								1
4-Methyl-2-pentanone	< 28.0	28.0	ug/Kg wet								1
Acetone	< 70.0	70.0	ug/Kg wet								1
Acrylonitrile	< 4.00	4.00	ug/Kg wet								1
Benzene	< 2.00	2.00	ug/Kg wet								1
Bromodichloromethane	< 2.00	2.00	ug/Kg wet								1
Bromoform	< 4.00	4.00	ug/Kg wet								1
Bromomethane	< 20.0	20.0	ug/Kg wet								1
Carbon disulfide	< 4.00	4.00	ug/Kg wet								1
Carbon tetrachloride	< 2.00	2.00	ug/Kg wet								1
Chlorobenzene	< 2.00	2.00	ug/Kg wet								1
Chloroethane	< 8.00	8.00	ug/Kg wet								1
Chloroform	< 4.00	4.00	ug/Kg wet								1
Chloromethane	< 8.00	8.00	ug/Kg wet								1
cis-1,2-Dichloroethene	< 4.00	4.00	ug/Kg wet								1
Dibromochloromethane	< 2.00	2.00	ug/Kg wet								1
Ethylbenzene	< 8.00	8.00	ug/Kg wet								1
m,p-Xylene	< 8.00	8.00	ug/Kg wet								1
Methyl tert-butyl ether	< 2.00	2.00	ug/Kg wet								1
Methylene chloride	< 8.00	8.00	ug/Kg wet								1
o-Xylene	< 8.00	8.00	ug/Kg wet								1
Styrene	< 8.00	8.00	ug/Kg wet								1
Tetrachloroethene	< 4.00	4.00	ug/Kg wet								1
Toluene	< 2.00	2.00	ug/Kg wet								1
trans-1,2-Dichloroethene	< 4.00	4.00	ug/Kg wet								1
Trichloroethene	< 2.00	2.00	ug/Kg wet								1
Vinyl acetate	< 20.0	20.0	ug/Kg wet								1
Vinyl chloride	< 4.00	4.00	ug/Kg wet								1
Xylenes, Total	< 12.0	12.0	ug/Kg wet								1
1,3-Dichloropropene, Total	< 8.00	8.00	ug/Kg wet								1
Surrogate: Dibromofluoromethane	*24.1*		*ug/Kg*	*20.00*		*121*	*88-136*				*1*

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Quality Control

(Continued)

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Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0608 - SW5035 *(Continued)*											
Blank (B8L0608-BLK1) (Continued)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 21:15*				
Surrogate: 1,2-Dichloroethane-d4	*22.9*		*ug/Kg*	*20.00*		*115*	*71-136*				*1*
Surrogate: Fluorobenzene	*19.3*		*ug/Kg*	*20.00*		*96*	*81-114*				*1*
Surrogate: Toluene-d8	*18.1*		*ug/Kg*	*20.00*		*90*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*9.93*		*ug/Kg*	*10.00*		*99*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*22.2*		*ug/Kg*	*20.00*		*111*	*90-142*				*1*
LCS (B8L0608-BS1)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 19:39*				
1,1,1-Trichloroethane	20.1	2.00	ug/Kg wet	19.96		101	73-113				1
1,1,2,2-Tetrachloroethane	21.0	2.00	ug/Kg wet	19.96		105	70-124				1
1,1,2-Trichloroethane	21.4	2.00	ug/Kg wet	19.96		107	78-121				1
1,1-Dichloroethane	19.9	3.99	ug/Kg wet	19.96		100	76-125				1
1,1-Dichloroethene	19.3	2.00	ug/Kg wet	19.96		97	70-131				1
1,2-Dibromo-3-chloropropane	20.5	7.98	ug/Kg wet	19.96		103	69-128				1
1,2-Dibromoethane	20.9	2.00	ug/Kg wet	19.96		105	78-122				1
1,2-Dichloroethane	21.0	2.00	ug/Kg wet	19.96		105	73-128				1
1,2-Dichloropropane	20.2	2.00	ug/Kg wet	19.96		101	76-123				1
1-Butanol	191	200	ug/Kg wet	199.6		96	70-130				1
2-Butanone	64.2	27.9	ug/Kg wet	69.86		92	66-147				1
2-Hexanone	64.8	27.9	ug/Kg wet	69.86		93	60-145				1
4-Methyl-2-pentanone	68.0	27.9	ug/Kg wet	69.86		97	65-135				1
Acetone	60.8	69.9	ug/Kg wet	69.86		87	36-164				1
Acrylonitrile	19.9	3.99	ug/Kg wet	19.96		100	65-134				1
Benzene	19.4	2.00	ug/Kg wet	19.96		97	77-121				1
Bromodichloromethane	20.8	2.00	ug/Kg wet	19.96		104	75-127				1
Bromoform	22.2	3.99	ug/Kg wet	19.96		111	67-132				1
Bromomethane	21.7	20.0	ug/Kg wet	19.96		109	53-143				1
Carbon disulfide	16.7	3.99	ug/Kg wet	19.96		84	63-132				1
Carbon tetrachloride	21.0	2.00	ug/Kg wet	19.96		105	70-135				1
Chlorobenzene	19.6	2.00	ug/Kg wet	19.96		98	73-123				1
Chloroethane	15.7	7.98	ug/Kg wet	19.96		79	59-139				1
Chloroform	20.1	3.99	ug/Kg wet	19.96		101	73-127				1
Chloromethane	14.8	7.98	ug/Kg wet	19.96		74	50-136				1
cis-1,2-Dichloroethene	19.2	3.99	ug/Kg wet	19.96		96	77-123				1
Dibromochloromethane	21.9	2.00	ug/Kg wet	19.96		110	74-126				1
Ethylbenzene	16.5	7.98	ug/Kg wet	19.96		83	76-122				1
m,p-Xylene	35.4	7.98	ug/Kg wet	39.92		89	77-124				1
Methyl tert-butyl ether	21.6	2.00	ug/Kg wet	19.96		108	73-118				1
Methylene chloride	20.7	7.98	ug/Kg wet	19.96		104	70-128				1
o-Xylene	16.6	7.98	ug/Kg wet	19.96		83	77-123				1
Styrene	17.1	7.98	ug/Kg wet	19.96		86	76-124				1
Tetrachloroethene	18.1	3.99	ug/Kg wet	19.96		91	73-125				1
Toluene	17.9	2.00	ug/Kg wet	19.96		89	77-121				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0608 - SW5035 *(Continued)*											
LCS (B8L0608-BS1) (Continued)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 19:39*				
trans-1,2-Dichloroethene	19.2	3.99	ug/Kg wet	19.96		96	74-125				1
Trichloroethene	19.7	2.00	ug/Kg wet	19.96		99	72-126				1
Vinyl acetate	19.9	20.0	ug/Kg wet	19.96		100	50-151				1
Vinyl chloride	16.5	3.99	ug/Kg wet	19.96		83	56-135				1
Xylenes, Total	52.0	12.0	ug/Kg wet	59.88		87	78-124				1
1,3-Dichloropropene, Total	41.3	7.98	ug/Kg wet	39.92		103	77-126				1
Surrogate: Dibromofluoromethane	*21.8*		*ug/Kg*	*20.00*		*109*	*88-136*				*1*
Surrogate: 1,2-Dichloroethane-d4	*20.8*		*ug/Kg*	*20.00*		*104*	*71-136*				*1*
Surrogate: Fluorobenzene	*19.5*		*ug/Kg*	*20.00*		*97*	*81-114*				*1*
Surrogate: Toluene-d8	*19.2*		*ug/Kg*	*20.00*		*96*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*9.53*		*ug/Kg*	*10.00*		*95*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*21.4*		*ug/Kg*	*20.00*		*107*	*90-142*				*1*
LCS Dup (B8L0608-BSD1)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 20:11*				
1,1,1-Trichloroethane	19.6	1.99	ug/Kg wet	19.92		99	73-113	2	20		1
1,1,2,2-Tetrachloroethane	19.7	1.99	ug/Kg wet	19.92		99	70-124	6	20		1
1,1,2-Trichloroethane	20.5	1.99	ug/Kg wet	19.92		103	78-121	4	20		1
1,1-Dichloroethane	19.1	3.98	ug/Kg wet	19.92		96	76-125	4	20		1
1,1-Dichloroethene	19.0	1.99	ug/Kg wet	19.92		95	70-131	2	20		1
1,2-Dibromo-3-chloropropane	20.5	7.97	ug/Kg wet	19.92		103	69-128	0.1	20		1
1,2-Dibromoethane	20.2	1.99	ug/Kg wet	19.92		102	78-122	3	20		1
1,2-Dichloroethane	20.7	1.99	ug/Kg wet	19.92		104	73-128	1	20		1
1,2-Dichloropropane	18.7	1.99	ug/Kg wet	19.92		94	76-123	8	20		1
1-Butanol	193	199	ug/Kg wet	199.2		97	70-130	1	20		1
2-Butanone	63.2	27.9	ug/Kg wet	69.72		91	66-147	2	20		1
2-Hexanone	60.8	27.9	ug/Kg wet	69.72		87	60-145	6	20		1
4-Methyl-2-pentanone	62.6	27.9	ug/Kg wet	69.72		90	65-135	8	20		1
Acetone	54.2	69.7	ug/Kg wet	69.72		78	36-164	12	20		1
Acrylonitrile	20.3	3.98	ug/Kg wet	19.92		102	65-134	2	20		1
Benzene	18.5	1.99	ug/Kg wet	19.92		93	77-121	4	20		1
Bromodichloromethane	20.2	1.99	ug/Kg wet	19.92		101	75-127	3	20		1
Bromoform	21.3	3.98	ug/Kg wet	19.92		107	67-132	4	20		1
Bromomethane	22.0	19.9	ug/Kg wet	19.92		110	53-143	1	20		1
Carbon disulfide	16.0	3.98	ug/Kg wet	19.92		81	63-132	4	20		1
Carbon tetrachloride	20.0	1.99	ug/Kg wet	19.92		100	70-135	5	20		1
Chlorobenzene	19.3	1.99	ug/Kg wet	19.92		97	73-123	1	20		1
Chloroethane	16.2	7.97	ug/Kg wet	19.92		81	59-139	3	20		1
Chloroform	19.3	3.98	ug/Kg wet	19.92		97	73-127	4	20		1
Chloromethane	13.8	7.97	ug/Kg wet	19.92		69	50-136	7	20		1
cis-1,2-Dichloroethene	18.1	3.98	ug/Kg wet	19.92		91	77-123	6	20		1
Dibromochloromethane	20.9	1.99	ug/Kg wet	19.92		105	74-126	5	20		1
Ethylbenzene	15.9	7.97	ug/Kg wet	19.92		80	76-122	3	20		1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0608 - SW5035 *(Continued)*											
LCS Dup (B8L0608-BSD1) (Continued)				*Prepared: 12/16/2018 14:58*			*Analyzed: 12/16/2018 20:11*				
m,p-Xylene	34.0	7.97	ug/Kg wet	39.84		85	77-124	4	20		1
Methyl tert-butyl ether	20.8	1.99	ug/Kg wet	19.92		104	73-118	4	20		1
Methylene chloride	20.6	7.97	ug/Kg wet	19.92		104	70-128	0.4	20		1
o-Xylene	16.0	7.97	ug/Kg wet	19.92		80	77-123	4	20		1
Styrene	17.4	7.97	ug/Kg wet	19.92		87	76-124	1	20		1
Tetrachloroethene	17.3	3.98	ug/Kg wet	19.92		87	73-125	5	20		1
Toluene	17.1	1.99	ug/Kg wet	19.92		86	77-121	4	20		1
trans-1,2-Dichloroethene	18.9	3.98	ug/Kg wet	19.92		95	74-125	2	20		1
Trichloroethene	18.6	1.99	ug/Kg wet	19.92		94	72-126	6	20		1
Vinyl acetate	20.0	19.9	ug/Kg wet	19.92		101	50-151	0.8	20		1
Vinyl chloride	16.1	3.98	ug/Kg wet	19.92		81	56-135	2	20		1
Xylenes, Total	50.0	12.0	ug/Kg wet	59.76		84	78-124	4	20		1
1,3-Dichloropropene, Total	38.9	7.97	ug/Kg wet	39.84		98	77-126	6	20		1
Surrogate: Dibromofluoromethane	*20.8*		*ug/Kg*	*20.00*		*104*	*88-136*				*1*
Surrogate: 1,2-Dichloroethane-d4	*21.3*		*ug/Kg*	*20.00*		*106*	*71-136*				*1*
Surrogate: Fluorobenzene	*19.0*		*ug/Kg*	*20.00*		*95*	*81-114*				*1*
Surrogate: Toluene-d8	*19.0*		*ug/Kg*	*20.00*		*95*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*9.99*		*ug/Kg*	*10.00*		*100*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*22.0*		*ug/Kg*	*20.00*		*110*	*90-142*				*1*
Batch: B8L0740 - SW5035											
Blank (B8L0740-BLK1)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 03:31*				
1,1,1-Trichloroethane	< 198	198	ug/Kg wet								50
1,1,2,2-Tetrachloroethane	< 99.2	99.2	ug/Kg wet								50
1,1,2-Trichloroethane	< 99.2	99.2	ug/Kg wet								50
1,1-Dichloroethane	< 198	198	ug/Kg wet								50
1,1-Dichloroethene	< 198	198	ug/Kg wet								50
1,2-Dibromo-3-chloropropane	< 198	198	ug/Kg wet								50
1,2-Dibromoethane	< 198	198	ug/Kg wet								50
1,2-Dichloroethane	< 198	198	ug/Kg wet								50
1,2-Dichloropropane	< 198	198	ug/Kg wet								50
1-Butanol	< 3970	3970	ug/Kg wet								50
2-Butanone	< 1390	1390	ug/Kg wet								50
2-Hexanone	< 1390	1390	ug/Kg wet								50
4-Methyl-2-pentanone	< 694	694	ug/Kg wet								50
Acetone	< 3470	3470	ug/Kg wet								50
Acrylonitrile	< 397	397	ug/Kg wet								50
Benzene	< 99.2	99.2	ug/Kg wet								50
Bromodichloromethane	< 99.2	99.2	ug/Kg wet								50
Bromoform	< 99.2	99.2	ug/Kg wet								50
Bromomethane	< 794	794	ug/Kg wet								50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0740 - SW5035 *(Continued)*											
Blank (B8L0740-BLK1) (Continued)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 03:31*				
Carbon disulfide	< 198	198	ug/Kg wet								50
Carbon tetrachloride	< 198	198	ug/Kg wet								50
Chlorobenzene	< 99.2	99.2	ug/Kg wet								50
Chloroethane	< 397	397	ug/Kg wet								50
Chloroform	< 397	397	ug/Kg wet								50
Chloromethane	< 397	397	ug/Kg wet								50
cis-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Dibromochloromethane	< 99.2	99.2	ug/Kg wet								50
Ethylbenzene	< 198	198	ug/Kg wet								50
m,p-Xylene	< 397	397	ug/Kg wet								50
Methyl tert-butyl ether	< 99.2	99.2	ug/Kg wet								50
Methylene chloride	< 794	794	ug/Kg wet								50
o-Xylene	< 198	198	ug/Kg wet								50
Styrene	< 397	397	ug/Kg wet								50
Tetrachloroethene	< 198	198	ug/Kg wet								50
Toluene	< 99.2	99.2	ug/Kg wet								50
trans-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Trichloroethene	< 198	198	ug/Kg wet								50
Vinyl acetate	< 198	198	ug/Kg wet								50
Vinyl chloride	< 198	198	ug/Kg wet								50
Xylenes, Total	< 595	595	ug/Kg wet								50
1,3-Dichloropropene, Total	< 397	397	ug/Kg wet								50
Surrogate: Dibromofluoromethane	*23.9*		*ug/Kg*	*20.00*		*120*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*23.7*		*ug/Kg*	*20.00*		*119*	*71-136*				*50*
Surrogate: Fluorobenzene	*18.8*		*ug/Kg*	*20.00*		*94*	*91-106*				*50*
Surrogate: Toluene-d8	*17.5*		*ug/Kg*	*20.00*		*88*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.58*		*ug/Kg*	*10.00*		*96*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.2*		*ug/Kg*	*20.00*		*111*	*80-120*				*50*
LCS (B8L0740-BS1)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 01:55*				
1,1,1-Trichloroethane	970	200	ug/Kg wet	1000		97	65-127				50
1,1,2,2-Tetrachloroethane	1040	100	ug/Kg wet	1000		104	47-146				50
1,1,2-Trichloroethane	1160	100	ug/Kg wet	1000		116	78-121				50
1,1-Dichloroethane	955	200	ug/Kg wet	1000		96	76-125				50
1,1-Dichloroethene	941	200	ug/Kg wet	1000		94	70-131				50
1,2-Dibromo-3-chloropropane	1130	200	ug/Kg wet	1000		113	69-128				50
1,2-Dibromoethane	1180	200	ug/Kg wet	1000		118	78-122				50
1,2-Dichloroethane	1080	200	ug/Kg wet	1000		108	73-128				50
1,2-Dichloropropane	1000	200	ug/Kg wet	1000		100	76-123				50
1-Butanol	12800	4000	ug/Kg wet	10000		128	70-130				50
2-Butanone	2730	1400	ug/Kg wet	3500		78	66-129				50
2-Hexanone	3210	1400	ug/Kg wet	3500		92	68-128				50

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0740 - SW5035 *(Continued)*											
LCS (B8L0740-BS1) (Continued)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 01:55*				
4-Methyl-2-pentanone	3080	700	ug/Kg wet	3500		88	65-135				50
Acetone	2400	3500	ug/Kg wet	3500		68	36-164				50
Acrylonitrile	842	400	ug/Kg wet	1000		84	65-134				50
Benzene	973	100	ug/Kg wet	1000		97	77-121				50
Bromodichloromethane	1180	100	ug/Kg wet	1000		118	75-127				50
Bromoform	1400	100	ug/Kg wet	1000		140	67-132				50
Bromomethane	1130	800	ug/Kg wet	1000		113	53-143				50
Carbon disulfide	792	200	ug/Kg wet	1000		79	63-132				50
Carbon tetrachloride	1100	200	ug/Kg wet	1000		110	70-135				50
Chlorobenzene	1020	100	ug/Kg wet	1000		102	83-127				50
Chloroethane	760	400	ug/Kg wet	1000		76	59-139				50
Chloroform	1030	400	ug/Kg wet	1000		103	80-131				50
Chloromethane	655	400	ug/Kg wet	1000		66	50-136				50
cis-1,2-Dichloroethene	872	200	ug/Kg wet	1000		87	77-123				50
Dibromochloromethane	1300	100	ug/Kg wet	1000		130	74-126				50
Ethylbenzene	810	200	ug/Kg wet	1000		81	76-122				50
m,p-Xylene	1750	400	ug/Kg wet	2000		88	77-124				50
Methyl tert-butyl ether	955	100	ug/Kg wet	1000		96	73-118				50
Methylene chloride	1020	800	ug/Kg wet	1000		102	70-128				50
o-Xylene	880	200	ug/Kg wet	1000		88	77-123				50
Styrene	872	400	ug/Kg wet	1000		87	76-124				50
Tetrachloroethene	1010	200	ug/Kg wet	1000		101	73-135				50
Toluene	931	100	ug/Kg wet	1000		93	77-121				50
trans-1,2-Dichloroethene	888	200	ug/Kg wet	1000		89	74-125				50
Trichloroethene	964	200	ug/Kg wet	1000		96	77-125				50
Vinyl acetate	828	200	ug/Kg wet	1000		83	50-151				50
Vinyl chloride	743	200	ug/Kg wet	1000		74	56-135				50
Xylenes, Total	2630	600	ug/Kg wet	3000		88	78-124				50
1,3-Dichloropropene, Total	1940	400	ug/Kg wet	2000		97	77-126				50
Surrogate: Dibromofluoromethane	*22.6*		*ug/Kg*	*20.00*		*113*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*22.0*		*ug/Kg*	*20.00*		*110*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.6*		*ug/Kg*	*20.00*		*98*	*91-106*				*50*
Surrogate: Toluene-d8	*20.7*		*ug/Kg*	*20.00*		*104*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.36*		*ug/Kg*	*10.00*		*94*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*21.6*		*ug/Kg*	*20.00*		*108*	*80-120*				*50*
LCS Dup (B8L0740-BSD1)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 02:27*				
1,1,1-Trichloroethane	914	200	ug/Kg wet	1000		91	65-127	6	20		50
1,1,2,2-Tetrachloroethane	1060	100	ug/Kg wet	1000		106	47-146	1	20		50
1,1,2-Trichloroethane	1070	100	ug/Kg wet	1000		107	78-121	8	20		50
1,1-Dichloroethane	908	200	ug/Kg wet	1000		91	76-125	5	20		50
1,1-Dichloroethene	894	200	ug/Kg wet	1000		89	70-131	5	20		50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0740 - SW5035 *(Continued)*											
LCS Dup (B8L0740-BSD1) (Continued)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 02:27*				
1,2-Dibromo-3-chloropropane	1070	200	ug/Kg wet	1000		107	69-128	6	20		50
1,2-Dibromoethane	1030	200	ug/Kg wet	1000		103	78-122	13	20		50
1,2-Dichloroethane	1020	200	ug/Kg wet	1000		102	73-128	6	20		50
1,2-Dichloropropane	892	200	ug/Kg wet	1000		89	76-123	12	20		50
1-Butanol	11600	4000	ug/Kg wet	10000		116	70-130	10	20		50
2-Butanone	2730	1400	ug/Kg wet	3500		78	66-129	0.2	20		50
2-Hexanone	3010	1400	ug/Kg wet	3500		86	68-128	6	20		50
4-Methyl-2-pentanone	2910	700	ug/Kg wet	3500		83	65-135	5	20		50
Acetone	2380	3500	ug/Kg wet	3500		68	36-164	0.4	20		50
Acrylonitrile	782	400	ug/Kg wet	1000		78	65-134	7	20		50
Benzene	890	100	ug/Kg wet	1000		89	77-121	9	20		50
Bromodichloromethane	1060	100	ug/Kg wet	1000		106	75-127	11	20		50
Bromoform	1220	100	ug/Kg wet	1000		122	67-132	13	20		50
Bromomethane	1120	800	ug/Kg wet	1000		112	53-143	0.9	20		50
Carbon disulfide	748	200	ug/Kg wet	1000		75	63-132	6	20		50
Carbon tetrachloride	1010	200	ug/Kg wet	1000		101	70-135	9	20		50
Chlorobenzene	944	100	ug/Kg wet	1000		94	83-127	8	20		50
Chloroethane	689	400	ug/Kg wet	1000		69	59-139	10	20		50
Chloroform	965	400	ug/Kg wet	1000		96	80-131	7	20		50
Chloromethane	638	400	ug/Kg wet	1000		64	50-136	3	20		50
cis-1,2-Dichloroethene	828	200	ug/Kg wet	1000		83	77-123	5	20		50
Dibromochloromethane	1180	100	ug/Kg wet	1000		118	74-126	10	20		50
Ethylbenzene	814	200	ug/Kg wet	1000		81	76-122	0.4	20		50
m,p-Xylene	1690	400	ug/Kg wet	2000		84	77-124	4	20		50
Methyl tert-butyl ether	935	100	ug/Kg wet	1000		94	73-118	2	20		50
Methylene chloride	983	800	ug/Kg wet	1000		98	70-128	4	20		50
o-Xylene	808	200	ug/Kg wet	1000		81	77-123	8	20		50
Styrene	800	400	ug/Kg wet	1000		80	76-124	9	20		50
Tetrachloroethene	930	200	ug/Kg wet	1000		93	73-135	8	20		50
Toluene	818	100	ug/Kg wet	1000		82	77-121	13	20		50
trans-1,2-Dichloroethene	838	200	ug/Kg wet	1000		84	74-125	6	20		50
Trichloroethene	862	200	ug/Kg wet	1000		86	77-125	11	20		50
Vinyl acetate	794	200	ug/Kg wet	1000		79	50-151	4	20		50
Vinyl chloride	689	200	ug/Kg wet	1000		69	56-135	8	20		50
Xylenes, Total	2500	600	ug/Kg wet	3000		83	78-124	5	20		50
1,3-Dichloropropene, Total	1820	400	ug/Kg wet	2000		91	77-126	6	20		50
Surrogate: Dibromofluoromethane	*22.7*		*ug/Kg*	*20.00*		*113*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*21.8*		*ug/Kg*	*20.00*		*109*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.4*		*ug/Kg*	*20.00*		*97*	*91-106*				*50*
Surrogate: Toluene-d8	*20.1*		*ug/Kg*	*20.00*		*101*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*10.2*		*ug/Kg*	*10.00*		*102*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.6*		*ug/Kg*	*20.00*		*113*	*80-120*				*50*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0740 - SW5035 *(Continued)*											
LCS Dup (B8L0740-BSD1) (Continued)				*Prepared: 12/17/2018 11:48*			*Analyzed: 12/18/2018 02:27*				
Batch: B8L0744 - SW5035											
Blank (B8L0744-BLK1)				*Prepared: 12/18/2018 11:51*			*Analyzed: 12/18/2018 19:18*				
1,1,1-Trichloroethane	< 198	198	ug/Kg wet								50
1,1,2,2-Tetrachloroethane	< 99.2	99.2	ug/Kg wet								50
1,1,2-Trichloroethane	< 99.2	99.2	ug/Kg wet								50
1,1-Dichloroethane	< 198	198	ug/Kg wet								50
1,1-Dichloroethene	< 198	198	ug/Kg wet								50
1,2-Dibromo-3-chloropropane	< 198	198	ug/Kg wet								50
1,2-Dibromoethane	< 198	198	ug/Kg wet								50
1,2-Dichloroethane	< 198	198	ug/Kg wet								50
1,2-Dichloropropane	< 198	198	ug/Kg wet								50
1-Butanol	< 3970	3970	ug/Kg wet								50
2-Butanone	< 1390	1390	ug/Kg wet								50
2-Hexanone	< 1390	1390	ug/Kg wet								50
4-Methyl-2-pentanone	< 694	694	ug/Kg wet								50
Acetone	< 3470	3470	ug/Kg wet								50
Acrylonitrile	< 397	397	ug/Kg wet								50
Benzene	< 99.2	99.2	ug/Kg wet								50
Bromodichloromethane	< 99.2	99.2	ug/Kg wet								50
Bromoform	< 99.2	99.2	ug/Kg wet								50
Bromomethane	< 794	794	ug/Kg wet								50
Carbon disulfide	< 198	198	ug/Kg wet								50
Carbon tetrachloride	< 198	198	ug/Kg wet								50
Chlorobenzene	< 99.2	99.2	ug/Kg wet								50
Chloroethane	< 397	397	ug/Kg wet								50
Chloroform	< 397	397	ug/Kg wet								50
Chloromethane	< 397	397	ug/Kg wet								50
cis-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Dibromochloromethane	< 99.2	99.2	ug/Kg wet								50
Ethylbenzene	< 198	198	ug/Kg wet								50
m,p-Xylene	< 397	397	ug/Kg wet								50
Methyl tert-butyl ether	< 99.2	99.2	ug/Kg wet								50
Methylene chloride	< 794	794	ug/Kg wet								50
o-Xylene	< 198	198	ug/Kg wet								50
Styrene	< 397	397	ug/Kg wet								50
Tetrachloroethene	< 198	198	ug/Kg wet								50
Toluene	< 99.2	99.2	ug/Kg wet								50
trans-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Trichloroethene	< 198	198	ug/Kg wet								50
Vinyl acetate	< 198	198	ug/Kg wet								50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0744 - SW5035 *(Continued)*											
Blank (B8L0744-BLK1) (Continued)				*Prepared: 12/18/2018 11:51*			*Analyzed: 12/18/2018 19:18*				
Vinyl chloride	< 198	198	ug/Kg wet								50
Xylenes, Total	< 595	595	ug/Kg wet								50
1,3-Dichloropropene, Total	< 397	397	ug/Kg wet								50
Surrogate: Dibromofluoromethane	*23.9*		*ug/Kg*	*20.00*		*120*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*24.0*		*ug/Kg*	*20.00*		*120*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.3*		*ug/Kg*	*20.00*		*97*	*91-106*				*50*
Surrogate: Toluene-d8	*17.4*		*ug/Kg*	*20.00*		*87*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*8.95*		*ug/Kg*	*10.00*		*90*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.8*		*ug/Kg*	*20.00*		*114*	*80-120*				*50*
LCS (B8L0744-BS1)				*Prepared: 12/18/2018 11:51*			*Analyzed: 12/18/2018 17:41*				
1,1,1-Trichloroethane	1050	200	ug/Kg wet	1000		105	65-127				50
1,1,2,2-Tetrachloroethane	1010	100	ug/Kg wet	1000		101	47-146				50
1,1,2-Trichloroethane	1200	100	ug/Kg wet	1000		120	78-121				50
1,1-Dichloroethane	965	200	ug/Kg wet	1000		96	76-125				50
1,1-Dichloroethene	956	200	ug/Kg wet	1000		96	70-131				50
1,2-Dibromo-3-chloropropane	1070	200	ug/Kg wet	1000		107	69-128				50
1,2-Dibromoethane	1170	200	ug/Kg wet	1000		117	78-122				50
1,2-Dichloroethane	1140	200	ug/Kg wet	1000		114	73-128				50
1,2-Dichloropropane	1000	200	ug/Kg wet	1000		100	76-123				50
1-Butanol	12200	4000	ug/Kg wet	10000		122	70-130				50
2-Butanone	3100	1400	ug/Kg wet	3500		89	66-129				50
2-Hexanone	3340	1400	ug/Kg wet	3500		96	68-128				50
4-Methyl-2-pentanone	3330	700	ug/Kg wet	3500		95	65-135				50
Acetone	3530	3500	ug/Kg wet	3500		101	36-164				50
Acrylonitrile	1000	400	ug/Kg wet	1000		100	65-134				50
Benzene	956	100	ug/Kg wet	1000		96	77-121				50
Bromodichloromethane	1120	100	ug/Kg wet	1000		112	75-127				50
Bromoform	1300	100	ug/Kg wet	1000		130	67-132				50
Bromomethane	1170	800	ug/Kg wet	1000		117	53-143				50
Carbon disulfide	784	200	ug/Kg wet	1000		78	63-132				50
Carbon tetrachloride	1090	200	ug/Kg wet	1000		109	70-135				50
Chlorobenzene	1030	100	ug/Kg wet	1000		103	83-127				50
Chloroethane	727	400	ug/Kg wet	1000		73	59-139				50
Chloroform	1010	400	ug/Kg wet	1000		101	80-131				50
Chloromethane	624	400	ug/Kg wet	1000		62	50-136				50
cis-1,2-Dichloroethene	920	200	ug/Kg wet	1000		92	77-123				50
Dibromochloromethane	1200	100	ug/Kg wet	1000		120	74-126				50
Ethylbenzene	834	200	ug/Kg wet	1000		83	76-122				50
m,p-Xylene	1750	400	ug/Kg wet	2000		87	77-124				50
Methyl tert-butyl ether	1040	100	ug/Kg wet	1000		104	73-118				50
Methylene chloride	1020	800	ug/Kg wet	1000		102	70-128				50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0744 - SW5035 *(Continued)*											
LCS (B8L0744-BS1) (Continued)				*Prepared: 12/18/2018 11:51*			*Analyzed: 12/18/2018 17:41*				
o-Xylene	810	200	ug/Kg wet	1000		81	77-123				50
Styrene	862	400	ug/Kg wet	1000		86	76-124				50
Tetrachloroethene	943	200	ug/Kg wet	1000		94	73-135				50
Toluene	874	100	ug/Kg wet	1000		87	77-121				50
trans-1,2-Dichloroethene	910	200	ug/Kg wet	1000		91	74-125				50
Trichloroethene	945	200	ug/Kg wet	1000		94	77-125				50
Vinyl acetate	969	200	ug/Kg wet	1000		97	50-151				50
Vinyl chloride	709	200	ug/Kg wet	1000		71	56-135				50
Xylenes, Total	2560	600	ug/Kg wet	3000		85	78-124				50
1,3-Dichloropropene, Total	2120	400	ug/Kg wet	2000		106	77-126				50
Surrogate: Dibromofluoromethane	*21.9*		*ug/Kg*	*20.00*		*109*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*21.9*		*ug/Kg*	*20.00*		*109*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.4*		*ug/Kg*	*20.00*		*97*	*91-106*				*50*
Surrogate: Toluene-d8	*19.6*		*ug/Kg*	*20.00*		*98*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.18*		*ug/Kg*	*10.00*		*92*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.0*		*ug/Kg*	*20.00*		*110*	*80-120*				*50*
LCS Dup (B8L0744-BSD1)				*Prepared: 12/18/2018 11:51*			*Analyzed: 12/18/2018 18:13*				
1,1,1-Trichloroethane	1080	200	ug/Kg wet	1000		108	65-127	3	20		50
1,1,2,2-Tetrachloroethane	1150	100	ug/Kg wet	1000		115	47-146	13	20		50
1,1,2-Trichloroethane	1230	100	ug/Kg wet	1000		123	78-121	3	20		50
1,1-Dichloroethane	996	200	ug/Kg wet	1000		100	76-125	3	20		50
1,1-Dichloroethene	992	200	ug/Kg wet	1000		99	70-131	4	20		50
1,2-Dibromo-3-chloropropane	1240	200	ug/Kg wet	1000		124	69-128	15	20		50
1,2-Dibromoethane	1220	200	ug/Kg wet	1000		122	78-122	4	20		50
1,2-Dichloroethane	1170	200	ug/Kg wet	1000		117	73-128	3	20		50
1,2-Dichloropropane	1050	200	ug/Kg wet	1000		105	76-123	5	20		50
1-Butanol	12500	4000	ug/Kg wet	10000		125	70-130	2	20		50
2-Butanone	3470	1400	ug/Kg wet	3500		99	66-129	11	20		50
2-Hexanone	3570	1400	ug/Kg wet	3500		102	68-128	6	20		50
4-Methyl-2-pentanone	3670	700	ug/Kg wet	3500		105	65-135	10	20		50
Acetone	3460	3500	ug/Kg wet	3500		99	36-164	2	20		50
Acrylonitrile	1090	400	ug/Kg wet	1000		109	65-134	9	20		50
Benzene	1040	100	ug/Kg wet	1000		104	77-121	8	20		50
Bromodichloromethane	1240	100	ug/Kg wet	1000		124	75-127	10	20		50
Bromoform	1320	100	ug/Kg wet	1000		132	67-132	2	20		50
Bromomethane	1190	800	ug/Kg wet	1000		119	53-143	2	20		50
Carbon disulfide	833	200	ug/Kg wet	1000		83	63-132	6	20		50
Carbon tetrachloride	1190	200	ug/Kg wet	1000		119	70-135	9	20		50
Chlorobenzene	1050	100	ug/Kg wet	1000		105	83-127	2	20		50
Chloroethane	772	400	ug/Kg wet	1000		77	59-139	6	20		50
Chloroform	1060	400	ug/Kg wet	1000		106	80-131	5	20		50

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0744 - SW5035 (Continued)

LCS Dup (B8L0744-BSD1) (Continued) *Prepared: 12/18/2018 11:51 Analyzed: 12/18/2018 18:13*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Chloromethane	643	400	ug/Kg wet	1000		64	50-136	3	20		50
cis-1,2-Dichloroethene	944	200	ug/Kg wet	1000		94	77-123	3	20		50
Dibromochloromethane	1220	100	ug/Kg wet	1000		122	74-126	2	20		50
Ethylbenzene	844	200	ug/Kg wet	1000		84	76-122	1	20		50
m,p-Xylene	1880	400	ug/Kg wet	2000		94	77-124	8	20		50
Methyl tert-butyl ether	1140	100	ug/Kg wet	1000		114	73-118	9	20		50
Methylene chloride	1090	800	ug/Kg wet	1000		109	70-128	6	20		50
o-Xylene	827	200	ug/Kg wet	1000		83	77-123	2	20		50
Styrene	932	400	ug/Kg wet	1000		93	76-124	8	20		50
Tetrachloroethene	1000	200	ug/Kg wet	1000		100	73-135	6	20		50
Toluene	938	100	ug/Kg wet	1000		94	77-121	7	20		50
trans-1,2-Dichloroethene	969	200	ug/Kg wet	1000		97	74-125	6	20		50
Trichloroethene	1030	200	ug/Kg wet	1000		103	77-125	9	20		50
Vinyl acetate	1040	200	ug/Kg wet	1000		104	50-151	7	20		50
Vinyl chloride	737	200	ug/Kg wet	1000		74	56-135	4	20		50
Xylenes, Total	2710	600	ug/Kg wet	3000		90	78-124	6	20		50
1,3-Dichloropropene, Total	2300	400	ug/Kg wet	2000		115	77-126	8	20		50
Surrogate: Dibromofluoromethane	*22.0*		*ug/Kg*	*20.00*		*110*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*22.5*		*ug/Kg*	*20.00*		*112*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.7*		*ug/Kg*	*20.00*		*99*	*91-106*				*50*
Surrogate: Toluene-d8	*19.2*		*ug/Kg*	*20.00*		*96*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.15*		*ug/Kg*	*10.00*		*92*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.2*		*ug/Kg*	*20.00*		*111*	*80-120*				*50*

Batch: B8L0745 - SW5035

Blank (B8L0745-BLK1) *Prepared: 12/18/2018 11:54 Analyzed: 12/19/2018 06:06*

1,1,1-Trichloroethane	< 198	198	ug/Kg wet								50
1,1,2,2-Tetrachloroethane	< 99.2	99.2	ug/Kg wet								50
1,1,2-Trichloroethane	< 99.2	99.2	ug/Kg wet								50
1,1-Dichloroethane	< 198	198	ug/Kg wet								50
1,1-Dichloroethene	< 198	198	ug/Kg wet								50
1,2-Dibromo-3-chloropropane	< 198	198	ug/Kg wet								50
1,2-Dibromoethane	< 198	198	ug/Kg wet								50
1,2-Dichloroethane	< 198	198	ug/Kg wet								50
1,2-Dichloropropane	< 198	198	ug/Kg wet								50
1-Butanol	< 3970	3970	ug/Kg wet								50
2-Butanone	< 1390	1390	ug/Kg wet								50
2-Hexanone	< 1390	1390	ug/Kg wet								50
4-Methyl-2-pentanone	< 694	694	ug/Kg wet								50
Acetone	< 3470	3470	ug/Kg wet								50
Acrylonitrile	< 397	397	ug/Kg wet								50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0745 - SW5035 *(Continued)*											
Blank (B8L0745-BLK1) (Continued)				*Prepared: 12/18/2018 11:54*			*Analyzed: 12/19/2018 06:06*				
Benzene	< 99.2	99.2	ug/Kg wet								50
Bromodichloromethane	< 99.2	99.2	ug/Kg wet								50
Bromoform	< 99.2	99.2	ug/Kg wet								50
Bromomethane	< 794	794	ug/Kg wet								50
Carbon disulfide	< 198	198	ug/Kg wet								50
Carbon tetrachloride	< 198	198	ug/Kg wet								50
Chlorobenzene	< 99.2	99.2	ug/Kg wet								50
Chloroethane	< 397	397	ug/Kg wet								50
Chloroform	< 397	397	ug/Kg wet								50
Chloromethane	< 397	397	ug/Kg wet								50
cis-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Dibromochloromethane	< 99.2	99.2	ug/Kg wet								50
Ethylbenzene	< 198	198	ug/Kg wet								50
m,p-Xylene	< 397	397	ug/Kg wet								50
Methyl tert-butyl ether	< 99.2	99.2	ug/Kg wet								50
Methylene chloride	< 794	794	ug/Kg wet								50
o-Xylene	< 198	198	ug/Kg wet								50
Styrene	< 397	397	ug/Kg wet								50
Tetrachloroethene	< 198	198	ug/Kg wet								50
Toluene	< 99.2	99.2	ug/Kg wet								50
trans-1,2-Dichloroethene	< 198	198	ug/Kg wet								50
Trichloroethene	< 198	198	ug/Kg wet								50
Vinyl acetate	< 198	198	ug/Kg wet								50
Vinyl chloride	< 198	198	ug/Kg wet								50
Xylenes, Total	< 595	595	ug/Kg wet								50
1,3-Dichloropropene, Total	< 397	397	ug/Kg wet								50
Surrogate: Dibromofluoromethane	*24.2*		*ug/Kg*	*20.00*		*121*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*23.7*		*ug/Kg*	*20.00*		*118*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.2*		*ug/Kg*	*20.00*		*96*	*91-106*				*50*
Surrogate: Toluene-d8	*17.1*		*ug/Kg*	*20.00*		*86*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.84*		*ug/Kg*	*10.00*		*98*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*20.7*		*ug/Kg*	*20.00*		*104*	*80-120*				*50*
LCS (B8L0745-BS1)				*Prepared: 12/18/2018 11:54*			*Analyzed: 12/19/2018 04:29*				
1,1,1-Trichloroethane	930	200	ug/Kg wet	1000		93	65-127				50
1,1,2,2-Tetrachloroethane	1040	100	ug/Kg wet	1000		104	47-146				50
1,1,2-Trichloroethane	1100	100	ug/Kg wet	1000		110	78-121				50
1,1-Dichloroethane	878	200	ug/Kg wet	1000		88	76-125				50
1,1-Dichloroethene	884	200	ug/Kg wet	1000		88	70-131				50
1,2-Dibromo-3-chloropropane	1100	200	ug/Kg wet	1000		110	69-128				50
1,2-Dibromoethane	1240	200	ug/Kg wet	1000		124	78-122				50
1,2-Dichloroethane	1080	200	ug/Kg wet	1000		108	73-128				50

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0745 - SW5035 (Continued)

LCS (B8L0745-BS1) (Continued) *Prepared: 12/18/2018 11:54 Analyzed: 12/19/2018 04:29*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
1,2-Dichloropropane	900	200	ug/Kg wet	1000		90	76-123				50
1-Butanol	11900	4000	ug/Kg wet	10000		119	70-130				50
2-Butanone	2670	1400	ug/Kg wet	3500		76	66-129				50
2-Hexanone	3260	1400	ug/Kg wet	3500		93	68-128				50
4-Methyl-2-pentanone	3250	700	ug/Kg wet	3500		93	65-135				50
Acetone	2880	3500	ug/Kg wet	3500		82	36-164				50
Acrylonitrile	734	400	ug/Kg wet	1000		73	65-134				50
Benzene	889	100	ug/Kg wet	1000		89	77-121				50
Bromodichloromethane	1100	100	ug/Kg wet	1000		110	75-127				50
Bromoform	1330	100	ug/Kg wet	1000		133	67-132				50
Bromomethane	1150	800	ug/Kg wet	1000		115	53-143				50
Carbon disulfide	702	200	ug/Kg wet	1000		70	63-132				50
Carbon tetrachloride	1020	200	ug/Kg wet	1000		102	70-135				50
Chlorobenzene	1020	100	ug/Kg wet	1000		102	83-127				50
Chloroethane	693	400	ug/Kg wet	1000		69	59-139				50
Chloroform	976	400	ug/Kg wet	1000		98	80-131				50
Chloromethane	579	400	ug/Kg wet	1000		58	50-136				50
cis-1,2-Dichloroethene	818	200	ug/Kg wet	1000		82	77-123				50
Dibromochloromethane	1280	100	ug/Kg wet	1000		128	74-126				50
Ethylbenzene	828	200	ug/Kg wet	1000		83	76-122				50
m,p-Xylene	1680	400	ug/Kg wet	2000		84	77-124				50
Methyl tert-butyl ether	938	100	ug/Kg wet	1000		94	73-118				50
Methylene chloride	965	800	ug/Kg wet	1000		96	70-128				50
o-Xylene	807	200	ug/Kg wet	1000		81	77-123				50
Styrene	850	400	ug/Kg wet	1000		85	76-124				50
Tetrachloroethene	1000	200	ug/Kg wet	1000		100	73-135				50
Toluene	880	100	ug/Kg wet	1000		88	77-121				50
trans-1,2-Dichloroethene	822	200	ug/Kg wet	1000		82	74-125				50
Trichloroethene	892	200	ug/Kg wet	1000		89	77-125				50
Vinyl acetate	832	200	ug/Kg wet	1000		83	50-151				50
Vinyl chloride	646	200	ug/Kg wet	1000		65	56-135				50
Xylenes, Total	2490	600	ug/Kg wet	3000		83	78-124				50
1,3-Dichloropropene, Total	1830	400	ug/Kg wet	2000		92	77-126				50
Surrogate: Dibromofluoromethane	*23.0*		*ug/Kg*	*20.00*		*115*	*78-119*				*50*
Surrogate: 1,2-Dichloroethane-d4	*22.2*		*ug/Kg*	*20.00*		*111*	*71-136*				*50*
Surrogate: Fluorobenzene	*19.5*		*ug/Kg*	*20.00*		*98*	*91-106*				*50*
Surrogate: Toluene-d8	*20.7*		*ug/Kg*	*20.00*		*103*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.65*		*ug/Kg*	*10.00*		*96*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*21.5*		*ug/Kg*	*20.00*		*108*	*80-120*				*50*

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0745 - SW5035 (Continued)

LCS Dup (B8L0745-BSD1) *Prepared: 12/18/2018 11:54 Analyzed: 12/19/2018 05:01*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
1,1,1-Trichloroethane	889	200	ug/Kg wet	1000		89	65-127	5	20		50
1,1,2,2-Tetrachloroethane	966	100	ug/Kg wet	1000		97	47-146	7	20		50
1,1,2-Trichloroethane	1150	100	ug/Kg wet	1000		115	78-121	4	20		50
1,1-Dichloroethane	893	200	ug/Kg wet	1000		89	76-125	2	20		50
1,1-Dichloroethene	828	200	ug/Kg wet	1000		83	70-131	7	20		50
1,2-Dibromo-3-chloropropane	1130	200	ug/Kg wet	1000		113	69-128	2	20		50
1,2-Dibromoethane	1050	200	ug/Kg wet	1000		105	78-122	17	20		50
1,2-Dichloroethane	1030	200	ug/Kg wet	1000		103	73-128	4	20		50
1,2-Dichloropropane	920	200	ug/Kg wet	1000		92	76-123	2	20		50
1-Butanol	11100	4000	ug/Kg wet	10000		111	70-130	7	20		50
2-Butanone	2610	1400	ug/Kg wet	3500		75	66-129	2	20		50
2-Hexanone	3120	1400	ug/Kg wet	3500		89	68-128	4	20		50
4-Methyl-2-pentanone	3010	700	ug/Kg wet	3500		86	65-135	7	20		50
Acetone	2520	3500	ug/Kg wet	3500		72	36-164	13	20		50
Acrylonitrile	726	400	ug/Kg wet	1000		73	65-134	1	20		50
Benzene	901	100	ug/Kg wet	1000		90	77-121	1	20		50
Bromodichloromethane	1080	100	ug/Kg wet	1000		108	75-127	2	20		50
Bromoform	1230	100	ug/Kg wet	1000		123	67-132	8	20		50
Bromomethane	1100	800	ug/Kg wet	1000		110	53-143	5	20		50
Carbon disulfide	690	200	ug/Kg wet	1000		69	63-132	2	20		50
Carbon tetrachloride	1000	200	ug/Kg wet	1000		100	70-135	2	20		50
Chlorobenzene	932	100	ug/Kg wet	1000		93	83-127	9	20		50
Chloroethane	634	400	ug/Kg wet	1000		63	59-139	9	20		50
Chloroform	957	400	ug/Kg wet	1000		96	80-131	2	20		50
Chloromethane	573	400	ug/Kg wet	1000		57	50-136	1	20		50
cis-1,2-Dichloroethene	824	200	ug/Kg wet	1000		82	77-123	0.6	20		50
Dibromochloromethane	1210	100	ug/Kg wet	1000		121	74-126	6	20		50
Ethylbenzene	851	200	ug/Kg wet	1000		85	76-122	3	20		50
m,p-Xylene	1680	400	ug/Kg wet	2000		84	77-124	0.4	20		50
Methyl tert-butyl ether	937	100	ug/Kg wet	1000		94	73-118	0.05	20		50
Methylene chloride	972	800	ug/Kg wet	1000		97	70-128	0.8	20		50
o-Xylene	808	200	ug/Kg wet	1000		81	77-123	0.2	20		50
Styrene	844	400	ug/Kg wet	1000		84	76-124	0.7	20		50
Tetrachloroethene	923	200	ug/Kg wet	1000		92	73-135	8	20		50
Toluene	822	100	ug/Kg wet	1000		82	77-121	7	20		50
trans-1,2-Dichloroethene	805	200	ug/Kg wet	1000		80	74-125	2	20		50
Trichloroethene	912	200	ug/Kg wet	1000		91	77-125	2	20		50
Vinyl acetate	814	200	ug/Kg wet	1000		81	50-151	2	20		50
Vinyl chloride	637	200	ug/Kg wet	1000		64	56-135	1	20		50
Xylenes, Total	2490	600	ug/Kg wet	3000		83	78-124	0.2	20		50
1,3-Dichloropropene, Total	1900	400	ug/Kg wet	2000		95	77-126	3	20		50
Surrogate: Dibromofluoromethane	*23.0*		*ug/Kg*	*20.00*		*115*	*78-119*				*50*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0745 - SW5035 *(Continued)*											
LCS Dup (B8L0745-BSD1) (Continued)				*Prepared: 12/18/2018 11:54*			*Analyzed: 12/19/2018 05:01*				
Surrogate: 1,2-Dichloroethane-d4	*22.4*		*ug/Kg*	*20.00*		*112*	*71-136*				*50*
Surrogate: Fluorobenzene	*20.1*		*ug/Kg*	*20.00*		*100*	*91-106*				*50*
Surrogate: Toluene-d8	*20.3*		*ug/Kg*	*20.00*		*101*	*71-112*				*50*
Surrogate: 4-Bromofluorobenzene	*9.83*		*ug/Kg*	*10.00*		*98*	*85-119*				*50*
Surrogate: 1,2-Dichlorobenzene-d4	*22.0*		*ug/Kg*	*20.00*		*110*	*80-120*				*50*
Batch: B8L0747 - SW5035											
Blank (B8L0747-BLK1)				*Prepared: 12/20/2018 13:16*			*Analyzed: 12/21/2018 02:45*				
1,1,1-Trichloroethane	< 2.00	2.00	ug/Kg wet								1
1,1,2,2-Tetrachloroethane	< 2.00	2.00	ug/Kg wet								1
1,1,2-Trichloroethane	< 2.00	2.00	ug/Kg wet								1
1,1-Dichloroethane	< 4.00	4.00	ug/Kg wet								1
1,1-Dichloroethene	< 2.00	2.00	ug/Kg wet								1
1,2-Dibromo-3-chloropropane	< 8.00	8.00	ug/Kg wet								1
1,2-Dibromoethane	< 2.00	2.00	ug/Kg wet								1
1,2-Dichloroethane	< 2.00	2.00	ug/Kg wet								1
1,2-Dichloropropane	< 2.00	2.00	ug/Kg wet								1
1-Butanol	< 200	200	ug/Kg wet								1
2-Butanone	< 28.0	28.0	ug/Kg wet								1
2-Hexanone	< 28.0	28.0	ug/Kg wet								1
4-Methyl-2-pentanone	< 28.0	28.0	ug/Kg wet								1
Acetone	< 70.0	70.0	ug/Kg wet								1
Acrylonitrile	< 4.00	4.00	ug/Kg wet								1
Benzene	< 2.00	2.00	ug/Kg wet								1
Bromodichloromethane	< 2.00	2.00	ug/Kg wet								1
Bromoform	< 4.00	4.00	ug/Kg wet								1
Bromomethane	< 20.0	20.0	ug/Kg wet								1
Carbon disulfide	< 4.00	4.00	ug/Kg wet								1
Carbon tetrachloride	< 2.00	2.00	ug/Kg wet								1
Chlorobenzene	< 2.00	2.00	ug/Kg wet								1
Chloroethane	< 8.00	8.00	ug/Kg wet								1
Chloroform	< 4.00	4.00	ug/Kg wet								1
Chloromethane	< 8.00	8.00	ug/Kg wet								1
cis-1,2-Dichloroethene	< 4.00	4.00	ug/Kg wet								1
Dibromochloromethane	< 2.00	2.00	ug/Kg wet								1
Ethylbenzene	< 8.00	8.00	ug/Kg wet								1
m,p-Xylene	< 8.00	8.00	ug/Kg wet								1
Methyl tert-butyl ether	< 2.00	2.00	ug/Kg wet								1
Methylene chloride	< 8.00	8.00	ug/Kg wet								1
o-Xylene	< 8.00	8.00	ug/Kg wet								1
Styrene	< 8.00	8.00	ug/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0747 - SW5035 *(Continued)*											
Blank (B8L0747-BLK1) (Continued)				*Prepared: 12/20/2018 13:16*			*Analyzed: 12/21/2018 02:45*				
Tetrachloroethene	< 4.00	4.00	ug/Kg wet								1
Toluene	< 2.00	2.00	ug/Kg wet								1
trans-1,2-Dichloroethene	< 4.00	4.00	ug/Kg wet								1
Trichloroethene	< 2.00	2.00	ug/Kg wet								1
Vinyl acetate	< 20.0	20.0	ug/Kg wet								1
Vinyl chloride	< 4.00	4.00	ug/Kg wet								1
Xylenes, Total	< 12.0	12.0	ug/Kg wet								1
1,3-Dichloropropene, Total	< 8.00	8.00	ug/Kg wet								1
Surrogate: Dibromofluoromethane	*22.8*		*ug/Kg*	*20.00*		*114*	*88-136*				*1*
Surrogate: 1,2-Dichloroethane-d4	*22.3*		*ug/Kg*	*20.00*		*112*	*71-136*				*1*
Surrogate: Fluorobenzene	*18.3*		*ug/Kg*	*20.00*		*91*	*81-114*				*1*
Surrogate: Toluene-d8	*17.7*		*ug/Kg*	*20.00*		*89*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*9.89*		*ug/Kg*	*10.00*		*99*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*22.0*		*ug/Kg*	*20.00*		*110*	*90-142*				*1*
LCS (B8L0747-BS1)				*Prepared: 12/20/2018 13:16*			*Analyzed: 12/21/2018 01:08*				
1,1,1-Trichloroethane	19.8	2.00	ug/Kg wet	19.96		99	73-113				1
1,1,2,2-Tetrachloroethane	21.4	2.00	ug/Kg wet	19.96		107	70-124				1
1,1,2-Trichloroethane	23.7	2.00	ug/Kg wet	19.96		118	78-121				1
1,1-Dichloroethane	18.8	3.99	ug/Kg wet	19.96		94	76-125				1
1,1-Dichloroethene	17.9	2.00	ug/Kg wet	19.96		90	70-131				1
1,2-Dibromo-3-chloropropane	24.3	7.98	ug/Kg wet	19.96		122	69-128				1
1,2-Dibromoethane	24.2	2.00	ug/Kg wet	19.96		121	78-122				1
1,2-Dichloroethane	23.4	2.00	ug/Kg wet	19.96		117	73-128				1
1,2-Dichloropropane	19.3	2.00	ug/Kg wet	19.96		97	76-123				1
1-Butanol	236	200	ug/Kg wet	199.6		118	70-130				1
2-Butanone	72.6	27.9	ug/Kg wet	69.86		104	66-147				1
2-Hexanone	76.0	27.9	ug/Kg wet	69.86		109	60-145				1
4-Methyl-2-pentanone	70.1	27.9	ug/Kg wet	69.86		100	65-135				1
Acetone	68.9	69.9	ug/Kg wet	69.86		99	36-164				1
Acrylonitrile	22.0	3.99	ug/Kg wet	19.96		110	65-134				1
Benzene	17.6	2.00	ug/Kg wet	19.96		88	77-121				1
Bromodichloromethane	22.8	2.00	ug/Kg wet	19.96		114	75-127				1
Bromoform	25.0	3.99	ug/Kg wet	19.96		125	67-132				1
Bromomethane	23.1	20.0	ug/Kg wet	19.96		116	53-143				1
Carbon disulfide	18.6	3.99	ug/Kg wet	19.96		93	63-132				1
Carbon tetrachloride	19.7	2.00	ug/Kg wet	19.96		99	70-135				1
Chlorobenzene	20.0	2.00	ug/Kg wet	19.96		100	73-123				1
Chloroethane	16.9	7.98	ug/Kg wet	19.96		85	59-139				1
Chloroform	21.8	3.99	ug/Kg wet	19.96		109	73-127				1
Chloromethane	16.9	7.98	ug/Kg wet	19.96		85	50-136				1
cis-1,2-Dichloroethene	17.2	3.99	ug/Kg wet	19.96		86	77-123				1

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8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0747 - SW5035 *(Continued)*											
LCS (B8L0747-BS1) (Continued)				*Prepared: 12/20/2018 13:16*			*Analyzed: 12/21/2018 01:08*				
Dibromochloromethane	24.6	2.00	ug/Kg wet	19.96		123	74-126				1
Ethylbenzene	16.0	7.98	ug/Kg wet	19.96		80	76-122				1
m,p-Xylene	35.7	7.98	ug/Kg wet	39.92		90	77-124				1
Methyl tert-butyl ether	21.7	2.00	ug/Kg wet	19.96		109	73-118				1
Methylene chloride	21.2	7.98	ug/Kg wet	19.96		106	70-128				1
o-Xylene	16.3	7.98	ug/Kg wet	19.96		82	77-123				1
Styrene	17.4	7.98	ug/Kg wet	19.96		87	76-124				1
Tetrachloroethene	21.1	3.99	ug/Kg wet	19.96		106	73-125				1
Toluene	17.0	2.00	ug/Kg wet	19.96		85	77-121				1
trans-1,2-Dichloroethene	17.7	3.99	ug/Kg wet	19.96		89	74-125				1
Trichloroethene	17.4	2.00	ug/Kg wet	19.96		87	72-126				1
Vinyl acetate	18.3	20.0	ug/Kg wet	19.96		91	50-151				1
Vinyl chloride	19.6	3.99	ug/Kg wet	19.96		98	56-135				1
Xylenes, Total	52.0	12.0	ug/Kg wet	59.88		87	78-124				1
1,3-Dichloropropene, Total	38.7	7.98	ug/Kg wet	39.92		97	77-126				1
Surrogate: Dibromofluoromethane	*21.7*		*ug/Kg*	*20.00*		*109*	*88-136*				*1*
Surrogate: 1,2-Dichloroethane-d4	*23.6*		*ug/Kg*	*20.00*		*118*	*71-136*				*1*
Surrogate: Fluorobenzene	*19.1*		*ug/Kg*	*20.00*		*96*	*81-114*				*1*
Surrogate: Toluene-d8	*20.8*		*ug/Kg*	*20.00*		*104*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*9.32*		*ug/Kg*	*10.00*		*93*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*22.8*		*ug/Kg*	*20.00*		*114*	*90-142*				*1*
LCS Dup (B8L0747-BSD1)				*Prepared: 12/20/2018 13:16*			*Analyzed: 12/21/2018 01:41*				
1,1,1-Trichloroethane	19.9	2.00	ug/Kg wet	20.00		100	73-113	1	20		1
1,1,2,2-Tetrachloroethane	22.3	2.00	ug/Kg wet	20.00		111	70-124	4	20		1
1,1,2-Trichloroethane	23.1	2.00	ug/Kg wet	20.00		116	78-121	2	20		1
1,1-Dichloroethane	18.9	4.00	ug/Kg wet	20.00		94	76-125	0.8	20		1
1,1-Dichloroethene	17.5	2.00	ug/Kg wet	20.00		87	70-131	3	20		1
1,2-Dibromo-3-chloropropane	23.5	8.00	ug/Kg wet	20.00		118	69-128	3	20		1
1,2-Dibromoethane	23.0	2.00	ug/Kg wet	20.00		115	78-122	5	20		1
1,2-Dichloroethane	23.2	2.00	ug/Kg wet	20.00		116	73-128	1	20		1
1,2-Dichloropropane	18.7	2.00	ug/Kg wet	20.00		94	76-123	3	20		1
1-Butanol	253	200	ug/Kg wet	200.0		126	70-130	7	20		1
2-Butanone	70.0	28.0	ug/Kg wet	70.00		100	66-147	4	20		1
2-Hexanone	68.0	28.0	ug/Kg wet	70.00		97	60-145	11	20		1
4-Methyl-2-pentanone	70.2	28.0	ug/Kg wet	70.00		100	65-135	0.2	20		1
Acetone	67.1	70.0	ug/Kg wet	70.00		96	36-164	3	20		1
Acrylonitrile	21.9	4.00	ug/Kg wet	20.00		109	65-134	0.4	20		1
Benzene	17.7	2.00	ug/Kg wet	20.00		88	77-121	0.3	20		1
Bromodichloromethane	22.4	2.00	ug/Kg wet	20.00		112	75-127	1	20		1
Bromoform	24.7	4.00	ug/Kg wet	20.00		123	67-132	1	20		1
Bromomethane	24.1	20.0	ug/Kg wet	20.00		120	53-143	4	20		1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Volatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0747 - SW5035 (Continued)

LCS Dup (B8L0747-BSD1) (Continued) *Prepared: 12/20/2018 13:16 Analyzed: 12/21/2018 01:41*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Carbon disulfide	18.0	4.00	ug/Kg wet	20.00		90	63-132	3	20		1
Carbon tetrachloride	19.7	2.00	ug/Kg wet	20.00		99	70-135	0.3	20		1
Chlorobenzene	18.7	2.00	ug/Kg wet	20.00		93	73-123	7	20		1
Chloroethane	17.5	8.00	ug/Kg wet	20.00		87	59-139	3	20		1
Chloroform	20.7	4.00	ug/Kg wet	20.00		104	73-127	5	20		1
Chloromethane	18.8	8.00	ug/Kg wet	20.00		94	50-136	10	20		1
cis-1,2-Dichloroethene	17.6	4.00	ug/Kg wet	20.00		88	77-123	2	20		1
Dibromochloromethane	24.2	2.00	ug/Kg wet	20.00		121	74-126	2	20		1
Ethylbenzene	16.0	8.00	ug/Kg wet	20.00		80	76-122	0.2	20		1
m,p-Xylene	33.7	8.00	ug/Kg wet	40.00		84	77-124	6	20		1
Methyl tert-butyl ether	21.8	2.00	ug/Kg wet	20.00		109	73-118	0.8	20		1
Methylene chloride	20.9	8.00	ug/Kg wet	20.00		104	70-128	2	20		1
o-Xylene	16.5	8.00	ug/Kg wet	20.00		83	77-123	1	20		1
Styrene	16.4	8.00	ug/Kg wet	20.00		82	76-124	6	20		1
Tetrachloroethene	19.2	4.00	ug/Kg wet	20.00		96	73-125	9	20		1
Toluene	16.0	2.00	ug/Kg wet	20.00		80	77-121	6	20		1
trans-1,2-Dichloroethene	17.3	4.00	ug/Kg wet	20.00		86	74-125	2	20		1
Trichloroethene	17.2	2.00	ug/Kg wet	20.00		86	72-126	1	20		1
Vinyl acetate	18.8	20.0	ug/Kg wet	20.00		94	50-151	3	20		1
Vinyl chloride	18.5	4.00	ug/Kg wet	20.00		92	56-135	6	20		1
Xylenes, Total	50.2	12.0	ug/Kg wet	60.00		84	78-124	4	20		1
1,3-Dichloropropene, Total	39.3	8.00	ug/Kg wet	40.00		98	77-126	2	20		1
Surrogate: Dibromofluoromethane	*23.2*		*ug/Kg*	*20.00*		*116*	*88-136*				*1*
Surrogate: 1,2-Dichloroethane-d4	*23.6*		*ug/Kg*	*20.00*		*118*	*71-136*				*1*
Surrogate: Fluorobenzene	*19.3*		*ug/Kg*	*20.00*		*96*	*81-114*				*1*
Surrogate: Toluene-d8	*19.8*		*ug/Kg*	*20.00*		*99*	*85-116*				*1*
Surrogate: 4-Bromofluorobenzene	*10.0*		*ug/Kg*	*10.00*		*100*	*79-119*				*1*
Surrogate: 1,2-Dichlorobenzene-d4	*23.3*		*ug/Kg*	*20.00*		*116*	*90-142*				*1*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0562 - SW3550											
Blank (B8L0562-BLK1)				*Prepared: 12/18/2018 11:22*			*Analyzed: 12/21/2018 08:42*				
1-Methylnaphthalene	< 15.2	15.2	ug/Kg wet								1
2-Methylnaphthalene	< 15.2	15.2	ug/Kg wet								1
Acenaphthene	< 7.58	7.58	ug/Kg wet								1
Acenaphthylene	< 7.58	7.58	ug/Kg wet								1
Anthracene	< 3.79	3.79	ug/Kg wet								1
Benzo(a)anthracene	< 7.58	7.58	ug/Kg wet								1
Benzo(a)pyrene	< 15.2	15.2	ug/Kg wet								1
Benzo(b)fluoranthene	< 15.2	15.2	ug/Kg wet								1
Benzo(g,h,i)perylene	< 19.0	19.0	ug/Kg wet								1
Benzo(k)fluoranthene	< 7.58	7.58	ug/Kg wet								1
Chrysene	< 7.58	7.58	ug/Kg wet								1
Dibenzo(a,h)anthracene	< 37.9	37.9	ug/Kg wet								1
Fluoranthene	< 7.58	7.58	ug/Kg wet								1
Fluorene	< 7.58	7.58	ug/Kg wet								1
Indeno(1,2,3-cd)pyrene	< 7.58	7.58	ug/Kg wet								1
Naphthalene	< 19.0	19.0	ug/Kg wet								1
Phenanthrene	< 3.79	3.79	ug/Kg wet								1
Pyrene	< 15.2	15.2	ug/Kg wet								1
Surrogate: 2-Methylnaphthalene-d10	*1280*		*ug/Kg wet*	*1579*		*81*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1360*		*ug/Kg wet*	*1579*		*86*	*50-150*				*1*
LCS (B8L0562-BS1)				*Prepared: 12/18/2018 11:22*			*Analyzed: 12/21/2018 09:20*				
1-Methylnaphthalene	1490	15.9	ug/Kg wet	1652		90	40-119				1
2-Methylnaphthalene	1460	15.9	ug/Kg wet	1652		89	38-122				1
Acenaphthene	1470	7.93	ug/Kg wet	1652		89	40-123				1
Acenaphthylene	1540	7.93	ug/Kg wet	1652		94	32-132				1
Anthracene	1570	3.96	ug/Kg wet	1652		95	47-123				1
Benzo(a)anthracene	1470	7.93	ug/Kg wet	1652		89	49-126				1
Benzo(a)pyrene	1570	15.9	ug/Kg wet	1652		95	45-129				1
Benzo(b)fluoranthene	1440	15.9	ug/Kg wet	1652		87	45-132				1
Benzo(g,h,i)perylene	1480	19.8	ug/Kg wet	1652		90	43-134				1
Benzo(k)fluoranthene	1550	7.93	ug/Kg wet	1652		94	47-132				1
Chrysene	1480	7.93	ug/Kg wet	1652		90	50-124				1
Dibenzo(a,h)anthracene	1430	39.6	ug/Kg wet	1652		86	45-134				1
Fluoranthene	1580	7.93	ug/Kg wet	1652		96	50-127				1
Fluorene	1590	7.93	ug/Kg wet	1652		96	43-125				1
Indeno(1,2,3-cd)pyrene	1360	7.93	ug/Kg wet	1652		82	45-133				1
Naphthalene	1380	19.8	ug/Kg wet	1652		83	35-123				1
Phenanthrene	1500	3.96	ug/Kg wet	1652		91	50-121				1
Pyrene	1550	15.9	ug/Kg wet	1652		94	47-127				1
Surrogate: 2-Methylnaphthalene-d10	*1380*		*ug/Kg wet*	*1652*		*83*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1480*		*ug/Kg wet*	*1652*		*90*	*50-150*				*1*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0562 - SW3550 *(Continued)*											
LCS (B8L0562-BS1) (Continued)				*Prepared: 12/18/2018 11:22*			*Analyzed: 12/21/2018 09:20*				
Matrix Spike (B8L0562-MS1)			**Source: 18L0427-01RE1**	*Prepared: 12/18/2018 11:22*			*Analyzed: 12/22/2018 23:34*				
1-Methylnaphthalene	1500	377	ug/Kg wet	1572	114	88	50-150				25
2-Methylnaphthalene	1410	377	ug/Kg wet	1572	134	81	50-150				25
Acenaphthene	1840	189	ug/Kg wet	1572	990	54	50-150				25
Acenaphthylene	1700	189	ug/Kg wet	1572	226	93	50-150				25
Anthracene	3070	94.3	ug/Kg wet	1572	2780	18	50-150			S	25
Benzo(a)anthracene	7050	189	ug/Kg wet	1572	9470	NR	50-150			S	25
Benzo(a)pyrene	6830	377	ug/Kg wet	1572	9850	NR	50-150			S	25
Benzo(b)fluoranthene	6400	377	ug/Kg wet	1572	9610	NR	50-150			S	25
Benzo(g,h,i)perylene	3170	472	ug/Kg wet	1572	4100	NR	50-150			S	25
Benzo(k)fluoranthene	2610	189	ug/Kg wet	1572	3340	NR	50-150			S	25
Chrysene	5750	189	ug/Kg wet	1572	7700	NR	50-150			S	25
Dibenzo(a,h)anthracene	1330	943	ug/Kg wet	1572	958	24	50-150			S	25
Fluoranthene	11100	189	ug/Kg wet	1572	17800	NR	50-150			S	25
Fluorene	2000	189	ug/Kg wet	1572	1040	61	50-150				25
Indeno(1,2,3-cd)pyrene	5060	189	ug/Kg wet	1572	6620	NR	50-150			S	25
Naphthalene	1470	472	ug/Kg wet	1572	213	80	50-150				25
Phenanthrene	6290	94.3	ug/Kg wet	1572	9860	NR	50-150			S	25
Pyrene	9600	377	ug/Kg wet	1572	15400	NR	50-150			S	25
Surrogate: 2-Methylnaphthalene-d10	*1230*		*ug/Kg wet*	*1572*		*78*	*50-150*				*25*
Surrogate: Fluoranthene-d10	*1430*		*ug/Kg wet*	*1572*		*91*	*50-150*				*25*
Matrix Spike Dup (B8L0562-MSD1)			**Source: 18L0427-01RE1**	*Prepared: 12/18/2018 11:22*			*Analyzed: 12/23/2018 00:11*				
1-Methylnaphthalene	1500	379	ug/Kg wet	1579	114	88	50-150	0.2	30		25
2-Methylnaphthalene	1470	379	ug/Kg wet	1579	134	84	50-150	4	30		25
Acenaphthene	1830	189	ug/Kg wet	1579	990	53	50-150	0.5	30		25
Acenaphthylene	1640	189	ug/Kg wet	1579	226	89	50-150	4	30		25
Anthracene	2500	94.7	ug/Kg wet	1579	2780	NR	50-150	21	30	S	25
Benzo(a)anthracene	4790	189	ug/Kg wet	1579	9470	NR	50-150	38	30	P, S	25
Benzo(a)pyrene	4880	379	ug/Kg wet	1579	9850	NR	50-150	33	30	P, S	25
Benzo(b)fluoranthene	4500	379	ug/Kg wet	1579	9610	NR	50-150	35	30	P, S	25
Benzo(g,h,i)perylene	2470	474	ug/Kg wet	1579	4100	NR	50-150	25	30	S	25
Benzo(k)fluoranthene	2060	189	ug/Kg wet	1579	3340	NR	50-150	24	30	S	25
Chrysene	4010	189	ug/Kg wet	1579	7700	NR	50-150	36	30	P, S	25
Dibenzo(a,h)anthracene	1310	947	ug/Kg wet	1579	958	22	50-150	2	30	S	25
Fluoranthene	7590	189	ug/Kg wet	1579	17800	NR	50-150	38	30	P, S	25
Fluorene	1930	189	ug/Kg wet	1579	1040	57	50-150	3	30		25
Indeno(1,2,3-cd)pyrene	3880	189	ug/Kg wet	1579	6620	NR	50-150	26	30	S	25
Naphthalene	1570	474	ug/Kg wet	1579	213	86	50-150	6	30		25
Phenanthrene	5410	94.7	ug/Kg wet	1579	9860	NR	50-150	15	30	S	25
Pyrene	6700	379	ug/Kg wet	1579	15400	NR	50-150	36	30	P, S	25

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0562 - SW3550 *(Continued)*											
Matrix Spike Dup (B8L0562-MSD1) (Continued)			**Source: 18L0427-01RE1**	*Prepared: 12/18/2018 11:22*			*Analyzed: 12/23/2018 00:11*				
Surrogate: 2-Methylnaphthalene-d10	*1210*		*ug/Kg wet*	*1579*		*77*	*50-150*				*25*
Surrogate: Fluoranthene-d10	*1420*		*ug/Kg wet*	*1579*		*90*	*50-150*				*25*
Batch: B8L0635 - SW3550											
Blank (B8L0635-BLK1)				*Prepared: 12/19/2018 18:59*			*Analyzed: 12/21/2018 22:16*				
1-Methylnaphthalene	< 15.7	15.7	ug/Kg wet								1
2-Methylnaphthalene	< 15.7	15.7	ug/Kg wet								1
Acenaphthene	< 7.87	7.87	ug/Kg wet								1
Acenaphthylene	< 7.87	7.87	ug/Kg wet								1
Anthracene	< 3.93	3.93	ug/Kg wet								1
Benzo(a)anthracene	< 7.87	7.87	ug/Kg wet								1
Benzo(a)pyrene	< 15.7	15.7	ug/Kg wet								1
Benzo(b)fluoranthene	< 15.7	15.7	ug/Kg wet								1
Benzo(g,h,i)perylene	< 19.7	19.7	ug/Kg wet								1
Benzo(k)fluoranthene	< 7.87	7.87	ug/Kg wet								1
Chrysene	< 7.87	7.87	ug/Kg wet								1
Dibenzo(a,h)anthracene	< 39.3	39.3	ug/Kg wet								1
Fluoranthene	< 7.87	7.87	ug/Kg wet								1
Fluorene	< 7.87	7.87	ug/Kg wet								1
Indeno(1,2,3-cd)pyrene	< 7.87	7.87	ug/Kg wet								1
Naphthalene	< 19.7	19.7	ug/Kg wet								1
Phenanthrene	< 3.93	3.93	ug/Kg wet								1
Pyrene	< 15.7	15.7	ug/Kg wet								1
Surrogate: 2-Methylnaphthalene-d10	*1330*		*ug/Kg wet*	*1639*		*81*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1400*		*ug/Kg wet*	*1639*		*85*	*50-150*				*1*
LCS (B8L0635-BS1)				*Prepared: 12/19/2018 18:59*			*Analyzed: 12/21/2018 22:52*				
1-Methylnaphthalene	1350	15.7	ug/Kg wet	1639		83	40-119				1
2-Methylnaphthalene	1320	15.7	ug/Kg wet	1639		81	38-122				1
Acenaphthene	1320	7.87	ug/Kg wet	1639		81	40-123				1
Acenaphthylene	1410	7.87	ug/Kg wet	1639		86	32-132				1
Anthracene	1430	3.93	ug/Kg wet	1639		87	47-123				1
Benzo(a)anthracene	1280	7.87	ug/Kg wet	1639		78	49-126				1
Benzo(a)pyrene	1370	15.7	ug/Kg wet	1639		83	45-129				1
Benzo(b)fluoranthene	1210	15.7	ug/Kg wet	1639		74	45-132				1
Benzo(g,h,i)perylene	1260	19.7	ug/Kg wet	1639		77	43-134				1
Benzo(k)fluoranthene	1380	7.87	ug/Kg wet	1639		84	47-132				1
Chrysene	1300	7.87	ug/Kg wet	1639		79	50-124				1
Dibenzo(a,h)anthracene	1170	39.3	ug/Kg wet	1639		71	45-134				1
Fluoranthene	1430	7.87	ug/Kg wet	1639		88	50-127				1
Fluorene	1420	7.87	ug/Kg wet	1639		87	43-125				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0635 - SW3550 *(Continued)*											
LCS (B8L0635-BS1) (Continued)				*Prepared: 12/19/2018 18:59*			*Analyzed: 12/21/2018 22:52*				
Indeno(1,2,3-cd)pyrene	1080	7.87	ug/Kg wet	1639		66	45-133				1
Naphthalene	1260	19.7	ug/Kg wet	1639		77	35-123				1
Phenanthrene	1360	3.93	ug/Kg wet	1639		83	50-121				1
Pyrene	1380	15.7	ug/Kg wet	1639		84	47-127				1
Surrogate: 2-Methylnaphthalene-d10	*1290*		*ug/Kg wet*	*1639*		*78*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1380*		*ug/Kg wet*	*1639*		*84*	*50-150*				*1*
Matrix Spike (B8L0635-MS1)		**Source: 18L0509-69**		*Prepared: 12/19/2018 18:59*			*Analyzed: 12/27/2018 16:21*				
1-Methylnaphthalene	2260	182	ug/Kg dry	1898	878	73	50-150				10
2-Methylnaphthalene	2280	182	ug/Kg dry	1898	1120	61	50-150				10
Acenaphthene	1670	91.1	ug/Kg dry	1898	26.1	87	50-150				10
Acenaphthylene	2200	91.1	ug/Kg dry	1898	477	91	50-150				10
Anthracene	1850	45.6	ug/Kg dry	1898	333	80	50-150				10
Benzo(a)anthracene	3470	91.1	ug/Kg dry	1898	1470	105	50-150				10
Benzo(a)pyrene	5060	182	ug/Kg dry	1898	2560	132	50-150				10
Benzo(b)fluoranthene	4620	182	ug/Kg dry	1898	2820	95	50-150				10
Benzo(g,h,i)perylene	2460	228	ug/Kg dry	1898	1120	71	50-150				10
Benzo(k)fluoranthene	1890	91.1	ug/Kg dry	1898	664	65	50-150				10
Chrysene	2890	91.1	ug/Kg dry	1898	1580	69	50-150				10
Dibenzo(a,h)anthracene	2080	456	ug/Kg dry	1898	342	92	50-150				10
Fluoranthene	3490	91.1	ug/Kg dry	1898	1990	79	50-150				10
Fluorene	2080	91.1	ug/Kg dry	1898	62.9	106	50-150				10
Indeno(1,2,3-cd)pyrene	4830	91.1	ug/Kg dry	1898	2280	134	50-150				10
Naphthalene	1950	228	ug/Kg dry	1898	619	70	50-150				10
Phenanthrene	2910	45.6	ug/Kg dry	1898	1740	62	50-150				10
Pyrene	3620	182	ug/Kg dry	1898	2060	82	50-150				10
Surrogate: 2-Methylnaphthalene-d10	*1730*		*ug/Kg dry*	*1898*		*91*	*50-150*				*10*
Surrogate: Fluoranthene-d10	*1790*		*ug/Kg dry*	*1898*		*94*	*50-150*				*10*
Matrix Spike Dup (B8L0635-MSD1)		**Source: 18L0509-69**		*Prepared: 12/19/2018 18:59*			*Analyzed: 12/27/2018 16:59*				
1-Methylnaphthalene	2490	180	ug/Kg dry	1875	878	86	50-150	10	30		10
2-Methylnaphthalene	2620	180	ug/Kg dry	1875	1120	80	50-150	14	30		10
Acenaphthene	1710	90.0	ug/Kg dry	1875	26.1	90	50-150	2	30		10
Acenaphthylene	2280	90.0	ug/Kg dry	1875	477	96	50-150	3	30		10
Anthracene	1860	45.0	ug/Kg dry	1875	333	81	50-150	0.5	30		10
Benzo(a)anthracene	3410	90.0	ug/Kg dry	1875	1470	103	50-150	2	30		10
Benzo(a)pyrene	4950	180	ug/Kg dry	1875	2560	127	50-150	2	30		10
Benzo(b)fluoranthene	4440	180	ug/Kg dry	1875	2820	87	50-150	4	30		10
Benzo(g,h,i)perylene	2500	225	ug/Kg dry	1875	1120	73	50-150	1	30		10
Benzo(k)fluoranthene	1590	90.0	ug/Kg dry	1875	664	49	50-150	17	30	S	10
Chrysene	2840	90.0	ug/Kg dry	1875	1580	67	50-150	2	30		10
Dibenzo(a,h)anthracene	1970	450	ug/Kg dry	1875	342	87	50-150	5	30		10

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0635 - SW3550 *(Continued)*											
Matrix Spike Dup (B8L0635-MSD1) (Continued)		**Source: 18L0509-69**		*Prepared: 12/19/2018 18:59*		*Analyzed: 12/27/2018 16:59*					
Fluoranthene	3510	90.0	ug/Kg dry	1875	1990	81	50-150	0.5	30		10
Fluorene	2030	90.0	ug/Kg dry	1875	62.9	105	50-150	2	30		10
Indeno(1,2,3-cd)pyrene	4350	90.0	ug/Kg dry	1875	2280	110	50-150	11	30		10
Naphthalene	2300	225	ug/Kg dry	1875	619	90	50-150	17	30		10
Phenanthrene	3480	45.0	ug/Kg dry	1875	1740	93	50-150	18	30		10
Pyrene	3860	180	ug/Kg dry	1875	2060	96	50-150	6	30		10
Surrogate: 2-Methylnaphthalene-d10	*1710*		*ug/Kg dry*	*1875*		*91*	*50-150*				*10*
Surrogate: Fluoranthene-d10	*1780*		*ug/Kg dry*	*1875*		*95*	*50-150*				*10*
Batch: B8L0673 - SW3550											
Blank (B8L0673-BLK1)				*Prepared: 12/20/2018 20:23*		*Analyzed: 12/22/2018 13:28*					
1-Methylnaphthalene	< 15.2	15.2	ug/Kg wet								1
2-Methylnaphthalene	< 15.2	15.2	ug/Kg wet								1
Acenaphthene	< 7.59	7.59	ug/Kg wet								1
Acenaphthylene	< 7.59	7.59	ug/Kg wet								1
Anthracene	< 3.80	3.80	ug/Kg wet								1
Benzo(a)anthracene	< 7.59	7.59	ug/Kg wet								1
Benzo(a)pyrene	< 15.2	15.2	ug/Kg wet								1
Benzo(b)fluoranthene	< 15.2	15.2	ug/Kg wet								1
Benzo(g,h,i)perylene	< 19.0	19.0	ug/Kg wet								1
Benzo(k)fluoranthene	< 7.59	7.59	ug/Kg wet								1
Chrysene	< 7.59	7.59	ug/Kg wet								1
Dibenzo(a,h)anthracene	< 38.0	38.0	ug/Kg wet								1
Fluoranthene	< 7.59	7.59	ug/Kg wet								1
Fluorene	< 7.59	7.59	ug/Kg wet								1
Indeno(1,2,3-cd)pyrene	< 7.59	7.59	ug/Kg wet								1
Naphthalene	< 19.0	19.0	ug/Kg wet								1
Phenanthrene	< 3.80	3.80	ug/Kg wet								1
Pyrene	< 15.2	15.2	ug/Kg wet								1
Surrogate: 2-Methylnaphthalene-d10	*1540*		*ug/Kg wet*	*1582*		*97*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1590*		*ug/Kg wet*	*1582*		*101*	*50-150*				*1*
LCS (B8L0673-BS1)				*Prepared: 12/20/2018 20:23*		*Analyzed: 12/22/2018 14:06*					
1-Methylnaphthalene	1630	15.4	ug/Kg wet	1609		101	40-119				1
2-Methylnaphthalene	1610	15.4	ug/Kg wet	1609		100	38-122				1
Acenaphthene	1610	7.72	ug/Kg wet	1609		100	40-123				1
Acenaphthylene	1730	7.72	ug/Kg wet	1609		108	32-132				1
Anthracene	1730	3.86	ug/Kg wet	1609		108	47-123				1
Benzo(a)anthracene	1650	7.72	ug/Kg wet	1609		103	49-126				1
Benzo(a)pyrene	1730	15.4	ug/Kg wet	1609		107	45-129				1
Benzo(b)fluoranthene	1580	15.4	ug/Kg wet	1609		98	45-132				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0673 - SW3550 *(Continued)*											
LCS (B8L0673-BS1) (Continued)				*Prepared: 12/20/2018 20:23*			*Analyzed: 12/22/2018 14:06*				
Benzo(g,h,i)perylene	1590	19.3	ug/Kg wet	1609		99	43-134				1
Benzo(k)fluoranthene	1690	7.72	ug/Kg wet	1609		105	47-132				1
Chrysene	1680	7.72	ug/Kg wet	1609		104	50-124				1
Dibenzo(a,h)anthracene	1470	38.6	ug/Kg wet	1609		91	45-134				1
Fluoranthene	1670	7.72	ug/Kg wet	1609		104	50-127				1
Fluorene	1770	7.72	ug/Kg wet	1609		110	43-125				1
Indeno(1,2,3-cd)pyrene	1410	7.72	ug/Kg wet	1609		88	45-133				1
Naphthalene	1530	19.3	ug/Kg wet	1609		95	35-123				1
Phenanthrene	1670	3.86	ug/Kg wet	1609		104	50-121				1
Pyrene	1750	15.4	ug/Kg wet	1609		109	47-127				1
Surrogate: 2-Methylnaphthalene-d10	*1600*		*ug/Kg wet*	*1609*		*100*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1630*		*ug/Kg wet*	*1609*		*101*	*50-150*				*1*
MRL Check (B8L0673-MRL1)				*Prepared: 12/20/2018 20:23*			*Analyzed: 12/30/2018 06:28*				
1-Methylnaphthalene	6.56	15.4	ug/Kg wet	6.428		102	0-200				1
2-Methylnaphthalene	6.65	15.4	ug/Kg wet	6.428		104	0-200				1
Acenaphthene	6.43	7.71	ug/Kg wet	6.428		100	0-200				1
Acenaphthylene	6.14	7.71	ug/Kg wet	6.428		96	0-200				1
Anthracene	7.39	3.86	ug/Kg wet	6.428		115	0-200				1
Benzo(a)anthracene	5.66	7.71	ug/Kg wet	6.428		88	0-200				1
Benzo(a)pyrene	9.55	15.4	ug/Kg wet	6.428		148	0-200				1
Benzo(b)fluoranthene	7.94	15.4	ug/Kg wet	6.428		124	0-200				1
Benzo(g,h,i)perylene	7.91	19.3	ug/Kg wet	6.428		123	0-200				1
Benzo(k)fluoranthene	7.87	7.71	ug/Kg wet	6.428		122	0-200				1
Chrysene	6.65	7.71	ug/Kg wet	6.428		104	0-200				1
Dibenzo(a,h)anthracene	8.55	38.6	ug/Kg wet	6.428		133	0-200				1
Fluoranthene	11.3	7.71	ug/Kg wet	6.428		176	0-200				1
Fluorene	5.82	7.71	ug/Kg wet	6.428		90	0-200				1
Indeno(1,2,3-cd)pyrene	8.87	7.71	ug/Kg wet	6.428		138	0-200				1
Naphthalene	6.07	19.3	ug/Kg wet	6.428		94	0-200				1
Phenanthrene	6.62	3.86	ug/Kg wet	6.428		103	0-200				1
Pyrene	6.75	15.4	ug/Kg wet	6.428		105	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1530*		*ug/Kg wet*	*1607*		*95*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1490*		*ug/Kg wet*	*1607*		*93*	*50-150*				*1*
Matrix Spike (B8L0673-MS1)		**Source: 18L0509-56**		*Prepared: 12/20/2018 20:23*			*Analyzed: 12/26/2018 21:28*				
1-Methylnaphthalene	2730	35.6	ug/Kg dry	1854	823	103	50-150				2
2-Methylnaphthalene	2900	35.6	ug/Kg dry	1854	1040	100	50-150				2
Acenaphthene	1780	17.8	ug/Kg dry	1854	52.1	93	50-150				2
Acenaphthylene	3340	17.8	ug/Kg dry	1854	1640	92	50-150				2
Anthracene	2220	8.90	ug/Kg dry	1854	570	89	50-150				2
Benzo(a)anthracene	5170	17.8	ug/Kg dry	1854	3730	78	50-150				2

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0673 - SW3550 *(Continued)*											
Matrix Spike (B8L0673-MS1) (Continued)		**Source: 18L0509-56**		*Prepared: 12/20/2018 20:23*		*Analyzed: 12/26/2018 21:28*					
Benzo(a)pyrene	4970	35.6	ug/Kg dry	1854	4360	33	50-150			S	2
Benzo(b)fluoranthene	6000	35.6	ug/Kg dry	1854	5600	22	50-150			S	2
Benzo(g,h,i)perylene	3180	44.5	ug/Kg dry	1854	2410	41	50-150			S	2
Benzo(k)fluoranthene	2220	17.8	ug/Kg dry	1854	1310	49	50-150			S	2
Chrysene	4560	17.8	ug/Kg dry	1854	3950	32	50-150			S	2
Dibenzo(a,h)anthracene	2440	89.0	ug/Kg dry	1854	907	83	50-150				2
Fluoranthene	5090	17.8	ug/Kg dry	1854	4000	59	50-150				2
Fluorene	2190	17.8	ug/Kg dry	1854	157	110	50-150				2
Indeno(1,2,3-cd)pyrene	5300	17.8	ug/Kg dry	1854	4800	27	50-150			S	2
Naphthalene	2310	44.5	ug/Kg dry	1854	584	93	50-150				2
Phenanthrene	4250	8.90	ug/Kg dry	1854	2660	86	50-150				2
Pyrene	6120	35.6	ug/Kg dry	1854	5400	39	50-150			S	2
Surrogate: 2-Methylnaphthalene-d10	*1850*		*ug/Kg dry*	*1854*		*100*	*50-150*				*2*
Surrogate: Fluoranthene-d10	*1770*		*ug/Kg dry*	*1854*		*96*	*50-150*				*2*
Matrix Spike Dup (B8L0673-MSD1)		**Source: 18L0509-56**		*Prepared: 12/20/2018 20:23*		*Analyzed: 12/26/2018 22:06*					
1-Methylnaphthalene	2950	35.1	ug/Kg dry	1828	823	116	50-150	8	30		2
2-Methylnaphthalene	3140	35.1	ug/Kg dry	1828	1040	115	50-150	8	30		2
Acenaphthene	1770	17.5	ug/Kg dry	1828	52.1	94	50-150	0.5	30		2
Acenaphthylene	3480	17.5	ug/Kg dry	1828	1640	101	50-150	4	30		2
Anthracene	2190	8.77	ug/Kg dry	1828	570	89	50-150	1	30		2
Benzo(a)anthracene	4810	17.5	ug/Kg dry	1828	3730	59	50-150	7	30		2
Benzo(a)pyrene	4910	35.1	ug/Kg dry	1828	4360	30	50-150	1	30	S	2
Benzo(b)fluoranthene	6030	35.1	ug/Kg dry	1828	5600	24	50-150	0.4	30	S	2
Benzo(g,h,i)perylene	3160	43.9	ug/Kg dry	1828	2410	41	50-150	0.8	30	S	2
Benzo(k)fluoranthene	2180	17.5	ug/Kg dry	1828	1310	48	50-150	2	30	S	2
Chrysene	4110	17.5	ug/Kg dry	1828	3950	9	50-150	10	30	S	2
Dibenzo(a,h)anthracene	2440	87.7	ug/Kg dry	1828	907	84	50-150	0.3	30		2
Fluoranthene	4670	17.5	ug/Kg dry	1828	4000	36	50-150	9	30	S	2
Fluorene	2200	17.5	ug/Kg dry	1828	157	112	50-150	0.4	30		2
Indeno(1,2,3-cd)pyrene	5300	17.5	ug/Kg dry	1828	4800	27	50-150	0.1	30	S	2
Naphthalene	2270	43.9	ug/Kg dry	1828	584	92	50-150	1	30		2
Phenanthrene	3880	8.77	ug/Kg dry	1828	2660	67	50-150	9	30		2
Pyrene	5690	35.1	ug/Kg dry	1828	5400	16	50-150	7	30	S	2
Surrogate: 2-Methylnaphthalene-d10	*1860*		*ug/Kg dry*	*1828*		*102*	*50-150*				*2*
Surrogate: Fluoranthene-d10	*1790*		*ug/Kg dry*	*1828*		*98*	*50-150*				*2*
Batch: B8L0714 - SW3550											
Blank (B8L0714-BLK1)				*Prepared: 12/22/2018 12:33*		*Analyzed: 12/26/2018 10:08*					
1,2,4-Trichlorobenzene	< 40.0	40.0	ug/Kg wet								1
1,2-Dichlorobenzene	< 40.0	40.0	ug/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0714 - SW3550 *(Continued)*											
Blank (B8L0714-BLK1) (Continued)				*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 10:08*				
1,3-Dichlorobenzene	< 40.0	40.0	ug/Kg wet								1
1,4-Dichlorobenzene	< 40.0	40.0	ug/Kg wet								1
2,4,5-Trichlorophenol	< 20.0	20.0	ug/Kg wet								1
2,4,6-Trichlorophenol	< 20.0	20.0	ug/Kg wet								1
2,4-Dichlorophenol	< 20.0	20.0	ug/Kg wet								1
2,4-Dimethylphenol	< 20.0	20.0	ug/Kg wet								1
2,4-Dinitrophenol	< 600	600	ug/Kg wet								1
2,4-Dinitrotoluene	< 120	120	ug/Kg wet								1
2,6-Dinitrotoluene	< 79.9	79.9	ug/Kg wet								1
2-Chloronaphthalene	< 20.0	20.0	ug/Kg wet								1
2-Chlorophenol	< 20.0	20.0	ug/Kg wet								1
2-Methylphenol	< 9.99	9.99	ug/Kg wet								1
2-Nitrophenol	< 79.9	79.9	ug/Kg wet								1
3,3´-Dichlorobenzidine	< 79.9	79.9	ug/Kg wet								1
3 & 4-Methylphenol	< 40.0	40.0	ug/Kg wet								1
4,6-Dinitro-2-methylphenol	< 300	300	ug/Kg wet								1
4-Bromophenyl-phenylether	< 30.0	30.0	ug/Kg wet								1
4-Chloro-3-methylphenol	< 20.0	20.0	ug/Kg wet								1
4-Chloroaniline	< 30.0	30.0	ug/Kg wet								1
4-Chlorophenyl-phenylether	< 30.0	30.0	ug/Kg wet								1
4-Nitrophenol	< 400	400	ug/Kg wet								1
Acenaphthene	< 20.0	20.0	ug/Kg wet								1
Acenaphthylene	< 20.0	20.0	ug/Kg wet								1
Anthracene	< 9.99	9.99	ug/Kg wet								1
Benzidine	< 2330	2330	ug/Kg wet								1
Benzo(a)anthracene	< 9.99	9.99	ug/Kg wet								1
Benzo(a)pyrene	< 79.9	79.9	ug/Kg wet								1
Benzo(b)fluoranthene	< 79.9	79.9	ug/Kg wet								1
Benzo(g,h,i)perylene	< 40.0	40.0	ug/Kg wet								1
Benzo(k)fluoranthene	< 40.0	40.0	ug/Kg wet								1
Bis(2-chloroethyl)ether	< 300	300	ug/Kg wet								1
Bis(2-chloroisopropyl)ether	< 400	400	ug/Kg wet								1
Bis(2-ethylhexyl)phthalate	< 60.0	60.0	ug/Kg wet								1
Butyl benzyl phthalate	< 60.0	60.0	ug/Kg wet								1
Carbazole	< 20.0	20.0	ug/Kg wet								1
Chrysene	< 20.0	20.0	ug/Kg wet								1
Dibenzo(a,h)anthracene	< 79.9	79.9	ug/Kg wet								1
Diethyl phthalate	< 20.0	20.0	ug/Kg wet								1
Dimethyl phthalate	< 9.99	9.99	ug/Kg wet								1
Di-n-butyl phthalate	< 20.0	20.0	ug/Kg wet								1
Di-n-octyl phthalate	< 79.9	79.9	ug/Kg wet								1
Fluoranthene	< 20.0	20.0	ug/Kg wet								1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0714 - SW3550 *(Continued)*											
Blank (B8L0714-BLK1) (Continued)				*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 10:08*				
Fluorene	< 20.0	20.0	ug/Kg wet								1
Hexachlorobenzene	< 20.0	20.0	ug/Kg wet								1
Hexachlorobutadiene	< 40.0	40.0	ug/Kg wet								1
Hexachlorocyclopentadiene	< 400	400	ug/Kg wet								1
Hexachloroethane	< 40.0	40.0	ug/Kg wet								1
Indeno(1,2,3-cd)pyrene	< 79.9	79.9	ug/Kg wet								1
Isophorone	< 120	120	ug/Kg wet								1
Naphthalene	< 40.0	40.0	ug/Kg wet								1
Nitrobenzene	< 40.0	40.0	ug/Kg wet								1
N-Nitrosodi-n-propylamine	< 60.0	60.0	ug/Kg wet								1
N-Nitrosodiphenylamine	< 20.0	20.0	ug/Kg wet								1
Pentachlorophenol	< 300	300	ug/Kg wet								1
Phenanthrene	< 20.0	20.0	ug/Kg wet								1
Phenol	< 40.0	40.0	ug/Kg wet								1
Pyrene	< 9.99	9.99	ug/Kg wet								1
Surrogate: 2-Fluorophenol	*1260*		*ug/Kg wet*	*1665*		*75*	*8-125*				*1*
Surrogate: Phenol-d5	*1340*		*ug/Kg wet*	*1665*		*81*	*17-131*				*1*
Surrogate: Nitrobenzene-d5	*1230*		*ug/Kg wet*	*1665*		*74*	*8-117*				*1*
Surrogate: 2-Fluorobiphenyl	*1190*		*ug/Kg wet*	*1665*		*72*	*15-124*				*1*
Surrogate: 2,4,6-Tribromophenol	*1270*		*ug/Kg wet*	*1665*		*76*	*26-120*				*1*
Surrogate: 4-Terphenyl-d14	*1500*		*ug/Kg wet*	*1665*		*90*	*42-143*				*1*
LCS (B8L0714-BS1)				*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 10:48*				
1,2,4-Trichlorobenzene	818	39.9	ug/Kg wet	997.4		82	28-99				1
1,2-Dichlorobenzene	815	39.9	ug/Kg wet	997.4		82	21-107				1
1,3-Dichlorobenzene	825	39.9	ug/Kg wet	997.4		83	20-107				1
1,4-Dichlorobenzene	808	39.9	ug/Kg wet	997.4		81	21-106				1
2,4,5-Trichlorophenol	807	19.9	ug/Kg wet	997.4		81	36-119				1
2,4,6-Trichlorophenol	913	19.9	ug/Kg wet	997.4		92	34-117				1
2,4-Dichlorophenol	911	19.9	ug/Kg wet	997.4		91	30-112				1
2,4-Dimethylphenol	849	19.9	ug/Kg wet	997.4		85	33-113				1
2,4-Dinitrophenol	582	598	ug/Kg wet	997.4		58	8-106				1
2,4-Dinitrotoluene	802	120	ug/Kg wet	997.4		80	33-120				1
2,6-Dinitrotoluene	892	79.8	ug/Kg wet	997.4		89	40-117				1
2-Chloronaphthalene	821	19.9	ug/Kg wet	997.4		82	32-102				1
2-Chlorophenol	885	19.9	ug/Kg wet	997.4		89	22-117				1
2-Methylphenol	860	9.97	ug/Kg wet	997.4		86	26-119				1
2-Nitrophenol	826	79.8	ug/Kg wet	997.4		83	22-112				1
3,3´-Dichlorobenzidine	1820	79.8	ug/Kg wet	1995		91	30-115				1
3 & 4-Methylphenol	829	39.9	ug/Kg wet	997.4		83	26-120				1
4,6-Dinitro-2-methylphenol	818	299	ug/Kg wet	997.4		82	20-117				1
4-Bromophenyl-phenylether	975	29.9	ug/Kg wet	997.4		98	40-120				1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0714 - SW3550 (Continued)

LCS (B8L0714-BS1) (Continued) *Prepared: 12/22/2018 12:33 Analyzed: 12/26/2018 10:48*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
4-Chloro-3-methylphenol	915	19.9	ug/Kg wet	997.4		92	36-117				1
4-Chloroaniline	889	29.9	ug/Kg wet	997.4		89	31-110				1
4-Chlorophenyl-phenylether	841	29.9	ug/Kg wet	997.4		84	39-107				1
4-Nitrophenol	719	399	ug/Kg wet	997.4		72	28-125				1
Acenaphthene	803	19.9	ug/Kg wet	997.4		81	35-105				1
Acenaphthylene	822	19.9	ug/Kg wet	997.4		82	33-110				1
Anthracene	954	9.97	ug/Kg wet	997.4		96	42-118				1
Benzidine	1840	2330	ug/Kg wet	1995		92	8-98				1
Benzo(a)anthracene	996	9.97	ug/Kg wet	997.4		100	33-130				1
Benzo(a)pyrene	1020	79.8	ug/Kg wet	997.4		103	40-123				1
Benzo(b)fluoranthene	978	79.8	ug/Kg wet	997.4		98	34-134				1
Benzo(g,h,i)perylene	975	39.9	ug/Kg wet	997.4		98	36-128				1
Benzo(k)fluoranthene	994	39.9	ug/Kg wet	997.4		100	38-126				1
Bis(2-chloroethyl)ether	804	299	ug/Kg wet	997.4		81	21-109				1
Bis(2-chloroisopropyl)ether	830	399	ug/Kg wet	997.4		83	22-107				1
Bis(2-ethylhexyl)phthalate	918	59.8	ug/Kg wet	997.4		92	26-138				1
Butyl benzyl phthalate	956	59.8	ug/Kg wet	997.4		96	28-133				1
Carbazole	983	19.9	ug/Kg wet	997.4		99	40-129				1
Chrysene	830	19.9	ug/Kg wet	997.4		83	34-124				1
Dibenzo(a,h)anthracene	636	79.8	ug/Kg wet	997.4		64	32-130				1
Diethyl phthalate	863	19.9	ug/Kg wet	997.4		87	37-123				1
Dimethyl phthalate	843	9.97	ug/Kg wet	997.4		85	38-116				1
Di-n-butyl phthalate	1070	19.9	ug/Kg wet	997.4		107	38-130				1
Di-n-octyl phthalate	920	79.8	ug/Kg wet	997.4		92	26-128				1
Fluoranthene	1010	19.9	ug/Kg wet	997.4		101	40-127				1
Fluorene	851	19.9	ug/Kg wet	997.4		85	39-112				1
Hexachlorobenzene	952	19.9	ug/Kg wet	997.4		95	41-109				1
Hexachlorobutadiene	805	39.9	ug/Kg wet	997.4		81	25-99				1
Hexachlorocyclopentadiene	760	399	ug/Kg wet	997.4		76	13-105				1
Hexachloroethane	801	39.9	ug/Kg wet	997.4		80	18-108				1
Indeno(1,2,3-cd)pyrene	974	79.8	ug/Kg wet	997.4		98	28-136				1
Isophorone	835	120	ug/Kg wet	997.4		84	27-107				1
Naphthalene	817	39.9	ug/Kg wet	997.4		82	29-98				1
Nitrobenzene	824	39.9	ug/Kg wet	997.4		83	28-103				1
N-Nitrosodi-n-propylamine	811	59.8	ug/Kg wet	997.4		81	21-123				1
N-Nitrosodiphenylamine	973	19.9	ug/Kg wet	997.4		98	40-122				1
Pentachlorophenol	835	299	ug/Kg wet	997.4		84	23-124				1
Phenanthrene	920	19.9	ug/Kg wet	997.4		92	38-112				1
Phenol	874	39.9	ug/Kg wet	997.4		88	26-113				1
Pyrene	985	9.97	ug/Kg wet	997.4		99	34-129				1
Surrogate: 2-Fluorophenol	*1080*		*ug/Kg wet*	*1662*		*65*	*8-125*				*1*
Surrogate: Phenol-d5	*1200*		*ug/Kg wet*	*1662*		*72*	*17-131*				*1*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0714 - SW3550 *(Continued)*											
LCS (B8L0714-BS1) (Continued)				*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 10:48*				
Surrogate: Nitrobenzene-d5	*1060*		*ug/Kg wet*	*1662*		*64*	*8-117*				*1*
Surrogate: 2-Fluorobiphenyl	*1140*		*ug/Kg wet*	*1662*		*68*	*15-124*				*1*
Surrogate: 2,4,6-Tribromophenol	*1520*		*ug/Kg wet*	*1662*		*92*	*26-120*				*1*
Surrogate: 4-Terphenyl-d14	*1750*		*ug/Kg wet*	*1662*		*105*	*42-143*				*1*
Matrix Spike (B8L0714-MS1)		**Source: 18L0509-39**		*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 12:53*				
1,2,4-Trichlorobenzene	995	47.5	ug/Kg dry	1188	ND	84	12-105				1
1,2-Dichlorobenzene	941	47.5	ug/Kg dry	1188	ND	79	17-92				1
1,3-Dichlorobenzene	947	47.5	ug/Kg dry	1188	ND	80	13-94				1
1,4-Dichlorobenzene	940	47.5	ug/Kg dry	1188	ND	79	15-93				1
2,4,5-Trichlorophenol	965	23.8	ug/Kg dry	1188	ND	81	28-137				1
2,4,6-Trichlorophenol	1130	23.8	ug/Kg dry	1188	ND	95	21-139				1
2,4-Dichlorophenol	1110	23.8	ug/Kg dry	1188	ND	93	12-93				1
2,4-Dimethylphenol	954	23.8	ug/Kg dry	1188	ND	80	12-97				1
2,4-Dinitrophenol	< 117	713	ug/Kg dry	1188	ND		10-130			S	1
2,4-Dinitrotoluene	749	143	ug/Kg dry	1188	ND	63	32-118				1
2,6-Dinitrotoluene	871	95.0	ug/Kg dry	1188	ND	73	32-115				1
2-Chloronaphthalene	997	23.8	ug/Kg dry	1188	ND	84	24-100				1
2-Chlorophenol	1030	23.8	ug/Kg dry	1188	ND	87	2-116				1
2-Methylphenol	989	11.9	ug/Kg dry	1188	ND	83	18-107				1
2-Nitrophenol	740	95.0	ug/Kg dry	1188	ND	62	12-141				1
3,3´-Dichlorobenzidine	572	95.0	ug/Kg dry	2376	ND	24	43-115			S	1
3 & 4-Methylphenol	975	47.5	ug/Kg dry	1188	ND	82	13-112				1
4,6-Dinitro-2-methylphenol	128	356	ug/Kg dry	1188	ND	11	12-117			S	1
4-Bromophenyl-phenylether	1150	35.6	ug/Kg dry	1188	ND	97	40-108				1
4-Chloro-3-methylphenol	1050	23.8	ug/Kg dry	1188	ND	89	7-132				1
4-Chloroaniline	456	35.6	ug/Kg dry	1188	ND	38	7-117				1
4-Chlorophenyl-phenylether	1020	35.6	ug/Kg dry	1188	ND	86	31-101				1
4-Nitrophenol	899	475	ug/Kg dry	1188	ND	76	22-118				1
Acenaphthene	989	23.8	ug/Kg dry	1188	13.7	82	24-101				1
Acenaphthylene	1300	23.8	ug/Kg dry	1188	350	80	29-101				1
Anthracene	1330	11.9	ug/Kg dry	1188	179	97	39-106				1
Benzidine	< 49.3	2770	ug/Kg dry	2376	ND		11-110			S	1
Benzo(a)anthracene	1870	11.9	ug/Kg dry	1188	656	103	26-122				1
Benzo(a)pyrene	2120	95.0	ug/Kg dry	1188	944	99	33-118				1
Benzo(b)fluoranthene	3190	95.0	ug/Kg dry	1188	1720	123	17-142				1
Benzo(g,h,i)perylene	886	47.5	ug/Kg dry	1188	379	43	23-108				1
Benzo(k)fluoranthene	2010	47.5	ug/Kg dry	1188	577	120	25-136				1
Bis(2-chloroethyl)ether	924	356	ug/Kg dry	1188	ND	78	16-102				1
Bis(2-chloroisopropyl)ether	892	475	ug/Kg dry	1188	ND	75	18-93				1
Bis(2-ethylhexyl)phthalate	1200	71.3	ug/Kg dry	1188	ND	101	46-106				1
Butyl benzyl phthalate	1290	71.3	ug/Kg dry	1188	ND	109	18-145				1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0714 - SW3550 *(Continued)*											
Matrix Spike (B8L0714-MS1) (Continued)		**Source: 18L0509-39**		*Prepared: 12/22/2018 12:33*		*Analyzed: 12/26/2018 12:53*					
Carbazole	1210	23.8	ug/Kg dry	1188	97.6	94	39-118				1
Chrysene	1750	23.8	ug/Kg dry	1188	778	82	30-112				1
Dibenzo(a,h)anthracene	517	95.0	ug/Kg dry	1188	105	35	17-131				1
Diethyl phthalate	1050	23.8	ug/Kg dry	1188	ND	88	35-109				1
Dimethyl phthalate	1010	11.9	ug/Kg dry	1188	ND	85	36-104				1
Di-n-butyl phthalate	1230	23.8	ug/Kg dry	1188	ND	103	23-134				1
Di-n-octyl phthalate	2500	95.0	ug/Kg dry	1188	ND	210	38-115			S	1
Fluoranthene	2660	23.8	ug/Kg dry	1188	1340	111	11-137				1
Fluorene	1070	23.8	ug/Kg dry	1188	28.3	88	29-106				1
Hexachlorobenzene	1100	23.8	ug/Kg dry	1188	ND	93	38-101				1
Hexachlorobutadiene	939	47.5	ug/Kg dry	1188	ND	79	4-109				1
Hexachlorocyclopentadiene	227	475	ug/Kg dry	1188	ND	19	3-93				1
Hexachloroethane	782	47.5	ug/Kg dry	1188	ND	66	13-89				1
Indeno(1,2,3-cd)pyrene	1070	95.0	ug/Kg dry	1188	469	51	40-157				1
Isophorone	977	143	ug/Kg dry	1188	ND	82	4-124				1
Naphthalene	1050	47.5	ug/Kg dry	1188	57.1	84	8-82			S	1
Nitrobenzene	941	47.5	ug/Kg dry	1188	ND	79	10-93				1
N-Nitrosodi-n-propylamine	943	71.3	ug/Kg dry	1188	ND	79	7-94				1
N-Nitrosodiphenylamine	1120	23.8	ug/Kg dry	1188	ND	94	32-116				1
Pentachlorophenol	985	356	ug/Kg dry	1188	ND	83	19-106				1
Phenanthrene	1690	23.8	ug/Kg dry	1188	601	92	17-118				1
Phenol	941	47.5	ug/Kg dry	1188	ND	79	3-125				1
Pyrene	2900	11.9	ug/Kg dry	1188	1310	134	15-133			S	1
Surrogate: 2-Fluorophenol	*1350*		*ug/Kg dry*	*1980*		*68*	*8-125*				*1*
Surrogate: Phenol-d5	*1510*		*ug/Kg dry*	*1980*		*76*	*17-131*				*1*
Surrogate: Nitrobenzene-d5	*1400*		*ug/Kg dry*	*1980*		*71*	*8-117*				*1*
Surrogate: 2-Fluorobiphenyl	*1470*		*ug/Kg dry*	*1980*		*74*	*15-124*				*1*
Surrogate: 2,4,6-Tribromophenol	*1730*		*ug/Kg dry*	*1980*		*88*	*26-120*				*1*
Surrogate: 4-Terphenyl-d14	*2330*		*ug/Kg dry*	*1980*		*118*	*42-143*				*1*
Matrix Spike Dup (B8L0714-MSD1)		**Source: 18L0509-39**		*Prepared: 12/22/2018 12:33*		*Analyzed: 12/26/2018 13:34*					
1,2,4-Trichlorobenzene	893	47.5	ug/Kg dry	1187	ND	75	12-105	11	35		1
1,2-Dichlorobenzene	864	47.5	ug/Kg dry	1187	ND	73	17-92	9	42		1
1,3-Dichlorobenzene	857	47.5	ug/Kg dry	1187	ND	72	13-94	10	43		1
1,4-Dichlorobenzene	856	47.5	ug/Kg dry	1187	ND	72	15-93	9	44		1
2,4,5-Trichlorophenol	891	23.7	ug/Kg dry	1187	ND	75	28-137	8	33		1
2,4,6-Trichlorophenol	1020	23.7	ug/Kg dry	1187	ND	86	21-139	10	34		1
2,4-Dichlorophenol	1020	23.7	ug/Kg dry	1187	ND	86	12-93	8	32		1
2,4-Dimethylphenol	794	23.7	ug/Kg dry	1187	ND	67	12-97	18	30		1
2,4-Dinitrophenol	< 117	712	ug/Kg dry	1187	ND		10-130		29	S	1
2,4-Dinitrotoluene	591	142	ug/Kg dry	1187	ND	50	32-118	24	36		1
2,6-Dinitrotoluene	714	94.9	ug/Kg dry	1187	ND	60	32-115	20	35		1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Batch: B8L0714 - SW3550 (Continued)

Matrix Spike Dup (B8L0714-MSD1) (Continued) **Source: 18L0509-39** *Prepared: 12/22/2018 12:33 Analyzed: 12/26/2018 13:34*

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
2-Chloronaphthalene	909	23.7	ug/Kg dry	1187	ND	77	24-100	9	29		1
2-Chlorophenol	952	23.7	ug/Kg dry	1187	ND	80	2-116	8	42		1
2-Methylphenol	878	11.9	ug/Kg dry	1187	ND	74	18-107	12	36		1
2-Nitrophenol	550	94.9	ug/Kg dry	1187	ND	46	12-141	29	37		1
3,3´-Dichlorobenzidine	699	94.9	ug/Kg dry	2374	ND	29	43-115	20	29	S	1
3 & 4-Methylphenol	874	47.5	ug/Kg dry	1187	ND	74	13-112	11	36		1
4,6-Dinitro-2-methylphenol	96.7	356	ug/Kg dry	1187	ND	8	12-117	28	32	S	1
4-Bromophenyl-phenylether	1070	35.6	ug/Kg dry	1187	ND	90	40-108	8	32		1
4-Chloro-3-methylphenol	981	23.7	ug/Kg dry	1187	ND	83	7-132	7	33		1
4-Chloroaniline	517	35.6	ug/Kg dry	1187	ND	44	7-117	12	30		1
4-Chlorophenyl-phenylether	939	35.6	ug/Kg dry	1187	ND	79	31-101	9	30		1
4-Nitrophenol	828	475	ug/Kg dry	1187	ND	70	22-118	8	35		1
Acenaphthene	902	23.7	ug/Kg dry	1187	13.7	75	24-101	9	30		1
Acenaphthylene	1160	23.7	ug/Kg dry	1187	350	69	29-101	11	30		1
Anthracene	1150	11.9	ug/Kg dry	1187	179	82	39-106	15	34		1
Benzidine	< 49.2	2770	ug/Kg dry	2374	ND		11-110		40	S	1
Benzo(a)anthracene	1520	11.9	ug/Kg dry	1187	656	73	26-122	21	33		1
Benzo(a)pyrene	1750	94.9	ug/Kg dry	1187	944	68	33-118	19	34		1
Benzo(b)fluoranthene	2670	94.9	ug/Kg dry	1187	1720	80	17-142	18	38		1
Benzo(g,h,i)perylene	746	47.5	ug/Kg dry	1187	379	31	23-108	17	33		1
Benzo(k)fluoranthene	1760	47.5	ug/Kg dry	1187	577	100	25-136	13	37		1
Bis(2-chloroethyl)ether	874	356	ug/Kg dry	1187	ND	74	16-102	6	45		1
Bis(2-chloroisopropyl)ether	872	475	ug/Kg dry	1187	ND	73	18-93	2	40		1
Bis(2-ethylhexyl)phthalate	1110	71.2	ug/Kg dry	1187	ND	93	46-106	8	38		1
Butyl benzyl phthalate	1190	71.2	ug/Kg dry	1187	ND	100	18-145	8	34		1
Carbazole	1150	23.7	ug/Kg dry	1187	97.6	88	39-118	6	33		1
Chrysene	1430	23.7	ug/Kg dry	1187	778	55	30-112	20	33		1
Dibenzo(a,h)anthracene	452	94.9	ug/Kg dry	1187	105	29	17-131	13	35		1
Diethyl phthalate	970	23.7	ug/Kg dry	1187	ND	82	35-109	7	32		1
Dimethyl phthalate	937	11.9	ug/Kg dry	1187	ND	79	36-104	7	30		1
Di-n-butyl phthalate	1150	23.7	ug/Kg dry	1187	ND	97	23-134	7	30		1
Di-n-octyl phthalate	2290	94.9	ug/Kg dry	1187	ND	193	38-115	9	34	S	1
Fluoranthene	2170	23.7	ug/Kg dry	1187	1340	69	11-137	21	34		1
Fluorene	988	23.7	ug/Kg dry	1187	28.3	81	29-106	8	31		1
Hexachlorobenzene	993	23.7	ug/Kg dry	1187	ND	84	38-101	10	26		1
Hexachlorobutadiene	864	47.5	ug/Kg dry	1187	ND	73	4-109	8	40		1
Hexachlorocyclopentadiene	199	475	ug/Kg dry	1187	ND	17	3-93	13	30		1
Hexachloroethane	695	47.5	ug/Kg dry	1187	ND	59	13-89	12	50		1
Indeno(1,2,3-cd)pyrene	895	94.9	ug/Kg dry	1187	469	36	40-157	18	33	S	1
Isophorone	913	142	ug/Kg dry	1187	ND	77	4-124	7	31		1
Naphthalene	936	47.5	ug/Kg dry	1187	57.1	74	8-82	12	35		1
Nitrobenzene	885	47.5	ug/Kg dry	1187	ND	75	10-93	6	38		1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B8L0714 - SW3550 *(Continued)*											
Matrix Spike Dup (B8L0714-MSD1) (Continued)		**Source: 18L0509-39**		*Prepared: 12/22/2018 12:33*			*Analyzed: 12/26/2018 13:34*				
N-Nitrosodi-n-propylamine	882	71.2	ug/Kg dry	1187	ND	74	7-94	7	34		1
N-Nitrosodiphenylamine	1050	23.7	ug/Kg dry	1187	ND	88	32-116	7	31		1
Pentachlorophenol	884	356	ug/Kg dry	1187	ND	74	19-106	11	29		1
Phenanthrene	1530	23.7	ug/Kg dry	1187	601	78	17-118	10	38		1
Phenol	893	47.5	ug/Kg dry	1187	ND	75	3-125	5	41		1
Pyrene	2330	11.9	ug/Kg dry	1187	1310	86	15-133	22	35		1
Surrogate: 2-Fluorophenol	*1290*		*ug/Kg dry*	*1978*		*65*	*8-125*				*1*
Surrogate: Phenol-d5	*1410*		*ug/Kg dry*	*1978*		*71*	*17-131*				*1*
Surrogate: Nitrobenzene-d5	*1330*		*ug/Kg dry*	*1978*		*67*	*8-117*				*1*
Surrogate: 2-Fluorobiphenyl	*1370*		*ug/Kg dry*	*1978*		*69*	*15-124*				*1*
Surrogate: 2,4,6-Tribromophenol	*1580*		*ug/Kg dry*	*1978*		*80*	*26-120*				*1*
Surrogate: 4-Terphenyl-d14	*2200*		*ug/Kg dry*	*1978*		*111*	*42-143*				*1*
Batch: B9A0180 - SW3550											
Blank (B9A0180-BLK1)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/08/2019 23:28*				
1-Methylnaphthalene	< 12.6	12.6	ug/Kg wet								1
2-Methylnaphthalene	< 12.6	12.6	ug/Kg wet								1
Acenaphthene	< 6.28	6.28	ug/Kg wet								1
Acenaphthylene	< 6.28	6.28	ug/Kg wet								1
Anthracene	< 3.14	3.14	ug/Kg wet								1
Benzo(a)anthracene	< 6.28	6.28	ug/Kg wet								1
Benzo(a)pyrene	< 12.6	12.6	ug/Kg wet								1
Benzo(b)fluoranthene	< 12.6	12.6	ug/Kg wet								1
Benzo(g,h,i)perylene	< 15.7	15.7	ug/Kg wet								1
Benzo(k)fluoranthene	< 6.28	6.28	ug/Kg wet								1
Chrysene	< 6.28	6.28	ug/Kg wet								1
Dibenzo(a,h)anthracene	< 31.4	31.4	ug/Kg wet								1
Fluoranthene	< 6.28	6.28	ug/Kg wet								1
Fluorene	< 6.28	6.28	ug/Kg wet								1
Indeno(1,2,3-cd)pyrene	< 6.28	6.28	ug/Kg wet								1
Naphthalene	< 15.7	15.7	ug/Kg wet								1
Phenanthrene	< 3.14	3.14	ug/Kg wet								1
Pyrene	< 12.6	12.6	ug/Kg wet								1
Surrogate: 2-Methylnaphthalene-d10	*1230*		*ug/Kg wet*	*1308*		*94*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1230*		*ug/Kg wet*	*1308*		*94*	*50-150*				*1*
LCS (B9A0180-BS1)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 00:05*				
1-Methylnaphthalene	1380	14.0	ug/Kg wet	1454		95	40-119				1
2-Methylnaphthalene	1390	14.0	ug/Kg wet	1454		96	38-122				1
Acenaphthene	1350	6.98	ug/Kg wet	1454		93	40-123				1
Acenaphthylene	1490	6.98	ug/Kg wet	1454		103	32-132				1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
LCS (B9A0180-BS1) (Continued)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 00:05*				
Anthracene	1470	3.49	ug/Kg wet	1454		101	47-123				1
Benzo(a)anthracene	1300	6.98	ug/Kg wet	1454		90	49-126				1
Benzo(a)pyrene	1470	14.0	ug/Kg wet	1454		101	45-129				1
Benzo(b)fluoranthene	1300	14.0	ug/Kg wet	1454		90	45-132				1
Benzo(g,h,i)perylene	1400	17.4	ug/Kg wet	1454		97	43-134				1
Benzo(k)fluoranthene	1430	6.98	ug/Kg wet	1454		99	47-132				1
Chrysene	1350	6.98	ug/Kg wet	1454		93	50-124				1
Dibenzo(a,h)anthracene	1280	34.9	ug/Kg wet	1454		88	45-134				1
Fluoranthene	1590	6.98	ug/Kg wet	1454		109	50-127				1
Fluorene	1510	6.98	ug/Kg wet	1454		104	43-125				1
Indeno(1,2,3-cd)pyrene	1250	6.98	ug/Kg wet	1454		86	45-133				1
Naphthalene	1300	17.4	ug/Kg wet	1454		90	35-123				1
Phenanthrene	1370	3.49	ug/Kg wet	1454		94	50-121				1
Pyrene	1430	14.0	ug/Kg wet	1454		98	47-127				1
Surrogate: 2-Methylnaphthalene-d10	*1350*		*ug/Kg wet*	*1454*		*93*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1380*		*ug/Kg wet*	*1454*		*95*	*50-150*				*1*
MRL Check (B9A0180-MRL1)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 00:42*				
1-Methylnaphthalene	< 2.55	16.0	ug/Kg wet	2.000			0-200				1
2-Methylnaphthalene	< 2.71	16.0	ug/Kg wet	2.000			0-200				1
Acenaphthene	2.73	8.00	ug/Kg wet	2.000		137	0-200				1
Acenaphthylene	2.10	8.00	ug/Kg wet	2.000		105	0-200				1
Anthracene	2.17	4.00	ug/Kg wet	2.000		108	0-200				1
Benzo(a)anthracene	1.60	8.00	ug/Kg wet	2.000		80	0-200				1
Benzo(a)pyrene	6.10	16.0	ug/Kg wet	2.000		305	0-200				1
Benzo(b)fluoranthene	5.43	16.0	ug/Kg wet	2.000		272	0-200				1
Benzo(g,h,i)perylene	5.20	20.0	ug/Kg wet	2.000		260	0-200				1
Benzo(k)fluoranthene	4.87	8.00	ug/Kg wet	2.000		243	0-200				1
Chrysene	3.27	8.00	ug/Kg wet	2.000		163	0-200				1
Dibenzo(a,h)anthracene	< 6.34	40.0	ug/Kg wet	2.000			0-200				1
Fluoranthene	4.67	8.00	ug/Kg wet	2.000		233	0-200				1
Fluorene	2.33	8.00	ug/Kg wet	2.000		117	0-200				1
Indeno(1,2,3-cd)pyrene	1.63	8.00	ug/Kg wet	2.000		82	0-200				1
Naphthalene	< 4.80	20.0	ug/Kg wet	2.000			0-200				1
Phenanthrene	2.77	4.00	ug/Kg wet	2.000		138	0-200				1
Pyrene	2.80	16.0	ug/Kg wet	2.000		140	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1620*		*ug/Kg wet*	*1667*		*97*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1640*		*ug/Kg wet*	*1667*		*99*	*50-150*				*1*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
MRL Check (B9A0180-MRL2)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 01:19*				
1-Methylnaphthalene	3.70	16.0	ug/Kg wet	4.000		92	0-200				1
2-Methylnaphthalene	3.90	16.0	ug/Kg wet	4.000		98	0-200				1
Acenaphthene	3.93	8.00	ug/Kg wet	4.000		98	0-200				1
Acenaphthylene	3.63	8.00	ug/Kg wet	4.000		91	0-200				1
Anthracene	3.20	4.00	ug/Kg wet	4.000		80	0-200				1
Benzo(a)anthracene	2.43	8.00	ug/Kg wet	4.000		61	0-200				1
Benzo(a)pyrene	6.97	16.0	ug/Kg wet	4.000		174	0-200				1
Benzo(b)fluoranthene	6.07	16.0	ug/Kg wet	4.000		152	0-200				1
Benzo(g,h,i)perylene	5.57	20.0	ug/Kg wet	4.000		139	0-200				1
Benzo(k)fluoranthene	5.00	8.00	ug/Kg wet	4.000		125	0-200				1
Chrysene	3.90	8.00	ug/Kg wet	4.000		98	0-200				1
Dibenzo(a,h)anthracene	6.70	40.0	ug/Kg wet	4.000		168	0-200				1
Fluoranthene	4.07	8.00	ug/Kg wet	4.000		102	0-200				1
Fluorene	3.40	8.00	ug/Kg wet	4.000		85	0-200				1
Indeno(1,2,3-cd)pyrene	2.40	8.00	ug/Kg wet	4.000		60	0-200				1
Naphthalene	< 4.80	20.0	ug/Kg wet	4.000			0-200				1
Phenanthrene	4.00	4.00	ug/Kg wet	4.000		100	0-200				1
Pyrene	3.97	16.0	ug/Kg wet	4.000		99	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1620*		*ug/Kg wet*	*1667*		*97*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1640*		*ug/Kg wet*	*1667*		*99*	*50-150*				*1*
MRL Check (B9A0180-MRL3)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 01:55*				
1-Methylnaphthalene	7.30	16.0	ug/Kg wet	8.000		91	0-200				1
2-Methylnaphthalene	7.43	16.0	ug/Kg wet	8.000		93	0-200				1
Acenaphthene	7.20	8.00	ug/Kg wet	8.000		90	0-200				1
Acenaphthylene	6.63	8.00	ug/Kg wet	8.000		83	0-200				1
Anthracene	6.00	4.00	ug/Kg wet	8.000		75	0-200				1
Benzo(a)anthracene	5.47	8.00	ug/Kg wet	8.000		68	0-200				1
Benzo(a)pyrene	9.50	16.0	ug/Kg wet	8.000		119	0-200				1
Benzo(b)fluoranthene	8.13	16.0	ug/Kg wet	8.000		102	0-200				1
Benzo(g,h,i)perylene	7.27	20.0	ug/Kg wet	8.000		91	0-200				1
Benzo(k)fluoranthene	7.20	8.00	ug/Kg wet	8.000		90	0-200				1
Chrysene	7.00	8.00	ug/Kg wet	8.000		88	0-200				1
Dibenzo(a,h)anthracene	8.40	40.0	ug/Kg wet	8.000		105	0-200				1
Fluoranthene	9.97	8.00	ug/Kg wet	8.000		125	0-200				1
Fluorene	6.40	8.00	ug/Kg wet	8.000		80	0-200				1
Indeno(1,2,3-cd)pyrene	6.03	8.00	ug/Kg wet	8.000		75	0-200				1
Naphthalene	7.53	20.0	ug/Kg wet	8.000		94	0-200				1
Phenanthrene	7.63	4.00	ug/Kg wet	8.000		95	0-200				1
Pyrene	7.07	16.0	ug/Kg wet	8.000		88	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1630*		*ug/Kg wet*	*1667*		*98*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1670*		*ug/Kg wet*	*1667*		*100*	*50-150*				*1*

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
MRL Check (B9A0180-MRL3) (Continued)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 01:55*				
MRL Check (B9A0180-MRL4)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 02:32*				
1-Methylnaphthalene	9.10	16.0	ug/Kg wet	10.00		91	0-200				1
2-Methylnaphthalene	9.80	16.0	ug/Kg wet	10.00		98	0-200				1
Acenaphthene	9.40	8.00	ug/Kg wet	10.00		94	0-200				1
Acenaphthylene	8.33	8.00	ug/Kg wet	10.00		83	0-200				1
Anthracene	7.77	4.00	ug/Kg wet	10.00		78	0-200				1
Benzo(a)anthracene	7.03	8.00	ug/Kg wet	10.00		70	0-200				1
Benzo(a)pyrene	11.1	16.0	ug/Kg wet	10.00		111	0-200				1
Benzo(b)fluoranthene	9.30	16.0	ug/Kg wet	10.00		93	0-200				1
Benzo(g,h,i)perylene	8.10	20.0	ug/Kg wet	10.00		81	0-200				1
Benzo(k)fluoranthene	8.20	8.00	ug/Kg wet	10.00		82	0-200				1
Chrysene	8.87	8.00	ug/Kg wet	10.00		89	0-200				1
Dibenzo(a,h)anthracene	9.07	40.0	ug/Kg wet	10.00		91	0-200				1
Fluoranthene	12.4	8.00	ug/Kg wet	10.00		124	0-200				1
Fluorene	7.83	8.00	ug/Kg wet	10.00		78	0-200				1
Indeno(1,2,3-cd)pyrene	7.50	8.00	ug/Kg wet	10.00		75	0-200				1
Naphthalene	9.60	20.0	ug/Kg wet	10.00		96	0-200				1
Phenanthrene	9.57	4.00	ug/Kg wet	10.00		96	0-200				1
Pyrene	8.73	16.0	ug/Kg wet	10.00		87	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1600*		*ug/Kg wet*	*1667*		*96*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1650*		*ug/Kg wet*	*1667*		*99*	*50-150*				*1*
MRL Check (B9A0180-MRL5)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 03:08*				
1-Methylnaphthalene	14.3	16.0	ug/Kg wet	16.00		90	0-200				1
2-Methylnaphthalene	15.1	16.0	ug/Kg wet	16.00		95	0-200				1
Acenaphthene	14.8	8.00	ug/Kg wet	16.00		92	0-200				1
Acenaphthylene	13.6	8.00	ug/Kg wet	16.00		85	0-200				1
Anthracene	12.6	4.00	ug/Kg wet	16.00		79	0-200				1
Benzo(a)anthracene	11.8	8.00	ug/Kg wet	16.00		74	0-200				1
Benzo(a)pyrene	15.6	16.0	ug/Kg wet	16.00		97	0-200				1
Benzo(b)fluoranthene	12.5	16.0	ug/Kg wet	16.00		78	0-200				1
Benzo(g,h,i)perylene	11.6	20.0	ug/Kg wet	16.00		72	0-200				1
Benzo(k)fluoranthene	10.9	8.00	ug/Kg wet	16.00		68	0-200				1
Chrysene	13.8	8.00	ug/Kg wet	16.00		86	0-200				1
Dibenzo(a,h)anthracene	11.6	40.0	ug/Kg wet	16.00		72	0-200				1
Fluoranthene	18.8	8.00	ug/Kg wet	16.00		118	0-200				1
Fluorene	12.6	8.00	ug/Kg wet	16.00		79	0-200				1
Indeno(1,2,3-cd)pyrene	12.9	8.00	ug/Kg wet	16.00		81	0-200				1
Naphthalene	15.1	20.0	ug/Kg wet	16.00		94	0-200				1
Phenanthrene	14.9	4.00	ug/Kg wet	16.00		93	0-200				1
Pyrene	14.4	16.0	ug/Kg wet	16.00		90	0-200				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
MRL Check (B9A0180-MRL5) (Continued)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 03:08*				
Surrogate: 2-Methylnaphthalene-d10	*1670*		*ug/Kg wet*	*1667*		*100*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1700*		*ug/Kg wet*	*1667*		*102*	*50-150*				*1*
MRL Check (B9A0180-MRL6)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 03:45*				
1-Methylnaphthalene	18.0	16.0	ug/Kg wet	20.00		90	0-200				1
2-Methylnaphthalene	18.8	16.0	ug/Kg wet	20.00		94	0-200				1
Acenaphthene	18.3	8.00	ug/Kg wet	20.00		92	0-200				1
Acenaphthylene	17.1	8.00	ug/Kg wet	20.00		86	0-200				1
Anthracene	15.0	4.00	ug/Kg wet	20.00		75	0-200				1
Benzo(a)anthracene	14.4	8.00	ug/Kg wet	20.00		72	0-200				1
Benzo(a)pyrene	18.5	16.0	ug/Kg wet	20.00		92	0-200				1
Benzo(b)fluoranthene	14.6	16.0	ug/Kg wet	20.00		73	0-200				1
Benzo(g,h,i)perylene	14.1	20.0	ug/Kg wet	20.00		70	0-200				1
Benzo(k)fluoranthene	13.0	8.00	ug/Kg wet	20.00		65	0-200				1
Chrysene	17.6	8.00	ug/Kg wet	20.00		88	0-200				1
Dibenzo(a,h)anthracene	12.9	40.0	ug/Kg wet	20.00		65	0-200				1
Fluoranthene	22.8	8.00	ug/Kg wet	20.00		114	0-200				1
Fluorene	15.7	8.00	ug/Kg wet	20.00		79	0-200				1
Indeno(1,2,3-cd)pyrene	17.0	8.00	ug/Kg wet	20.00		85	0-200				1
Naphthalene	18.7	20.0	ug/Kg wet	20.00		94	0-200				1
Phenanthrene	18.4	4.00	ug/Kg wet	20.00		92	0-200				1
Pyrene	17.4	16.0	ug/Kg wet	20.00		87	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1610*		*ug/Kg wet*	*1667*		*97*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1670*		*ug/Kg wet*	*1667*		*100*	*50-150*				*1*
MRL Check (B9A0180-MRL7)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 04:22*				
1-Methylnaphthalene	35.3	16.0	ug/Kg wet	40.00		88	0-200				1
2-Methylnaphthalene	36.9	16.0	ug/Kg wet	40.00		92	0-200				1
Acenaphthene	35.1	8.00	ug/Kg wet	40.00		88	0-200				1
Acenaphthylene	32.1	8.00	ug/Kg wet	40.00		80	0-200				1
Anthracene	30.5	4.00	ug/Kg wet	40.00		76	0-200				1
Benzo(a)anthracene	28.2	8.00	ug/Kg wet	40.00		71	0-200				1
Benzo(a)pyrene	33.3	16.0	ug/Kg wet	40.00		83	0-200				1
Benzo(b)fluoranthene	25.0	16.0	ug/Kg wet	40.00		62	0-200				1
Benzo(g,h,i)perylene	24.1	20.0	ug/Kg wet	40.00		60	0-200				1
Benzo(k)fluoranthene	22.8	8.00	ug/Kg wet	40.00		57	0-200				1
Chrysene	34.6	8.00	ug/Kg wet	40.00		86	0-200				1
Dibenzo(a,h)anthracene	20.8	40.0	ug/Kg wet	40.00		52	0-200				1
Fluoranthene	42.8	8.00	ug/Kg wet	40.00		107	0-200				1
Fluorene	31.2	8.00	ug/Kg wet	40.00		78	0-200				1
Indeno(1,2,3-cd)pyrene	31.1	8.00	ug/Kg wet	40.00		78	0-200				1
Naphthalene	36.0	20.0	ug/Kg wet	40.00		90	0-200				1

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
MRL Check (B9A0180-MRL7) (Continued)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 04:22*				
Phenanthrene	35.3	4.00	ug/Kg wet	40.00		88	0-200				1
Pyrene	33.4	16.0	ug/Kg wet	40.00		83	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1590*		*ug/Kg wet*	*1667*		*95*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1640*		*ug/Kg wet*	*1667*		*99*	*50-150*				*1*
MRL Check (B9A0180-MRL8)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 05:00*				
1-Methylnaphthalene	7.03	16.0	ug/Kg wet	6.667		106	0-200				1
2-Methylnaphthalene	7.50	16.0	ug/Kg wet	6.667		112	0-200				1
Acenaphthene	7.40	8.00	ug/Kg wet	6.667		111	0-200				1
Acenaphthylene	6.60	8.00	ug/Kg wet	6.667		99	0-200				1
Anthracene	5.87	4.00	ug/Kg wet	6.667		88	0-200				1
Benzo(a)anthracene	5.30	8.00	ug/Kg wet	6.667		80	0-200				1
Benzo(a)pyrene	9.90	16.0	ug/Kg wet	6.667		148	0-200				1
Benzo(b)fluoranthene	8.17	16.0	ug/Kg wet	6.667		122	0-200				1
Benzo(g,h,i)perylene	7.93	20.0	ug/Kg wet	6.667		119	0-200				1
Benzo(k)fluoranthene	6.83	8.00	ug/Kg wet	6.667		102	0-200				1
Chrysene	7.13	8.00	ug/Kg wet	6.667		107	0-200				1
Dibenzo(a,h)anthracene	8.23	40.0	ug/Kg wet	6.667		124	0-200				1
Fluoranthene	9.90	8.00	ug/Kg wet	6.667		148	0-200				1
Fluorene	6.03	8.00	ug/Kg wet	6.667		90	0-200				1
Indeno(1,2,3-cd)pyrene	6.37	8.00	ug/Kg wet	6.667		96	0-200				1
Naphthalene	7.40	20.0	ug/Kg wet	6.667		111	0-200				1
Phenanthrene	7.17	4.00	ug/Kg wet	6.667		108	0-200				1
Pyrene	7.00	16.0	ug/Kg wet	6.667		105	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1620*		*ug/Kg wet*	*1667*		*97*	*50-150*				*1*
Surrogate: Fluoranthene-d10	*1660*		*ug/Kg wet*	*1667*		*100*	*50-150*				*1*
MRL Check (B9A0180-MRL9)				*Prepared: 01/08/2019 11:12*			*Analyzed: 01/23/2019 11:50*				
Fluoranthene	8.97	8.00	ug/Kg wet	8.000		112	0-200				1
Surrogate: 2-Methylnaphthalene-d10	*1700*		*ug/Kg wet*	*1667*		*102*	*60-115*				*1*
Surrogate: Fluoranthene-d10	*1580*		*ug/Kg wet*	*1667*		*95*	*58-116*				*1*
Matrix Spike (B9A0180-MS1)		**Source: 18L0509-46RE1**		*Prepared: 01/08/2019 11:12*			*Analyzed: 01/09/2019 19:14*				
1-Methylnaphthalene	1860	34.7	ug/Kg dry	1808	207	92	50-150				2
2-Methylnaphthalene	1970	34.7	ug/Kg dry	1808	247	95	50-150				2
Acenaphthene	1540	17.4	ug/Kg dry	1808	29.8	83	50-150				2
Acenaphthylene	2550	17.4	ug/Kg dry	1808	655	105	50-150				2
Anthracene	2190	8.68	ug/Kg dry	1808	422	98	50-150				2
Benzo(a)anthracene	3620	17.4	ug/Kg dry	1808	1770	102	50-150				2
Benzo(a)pyrene	3880	34.7	ug/Kg dry	1808	2440	80	50-150				2
Benzo(b)fluoranthene	4660	34.7	ug/Kg dry	1808	2870	99	50-150				2
Benzo(g,h,i)perylene	2450	43.4	ug/Kg dry	1808	1210	68	50-150				2

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Solid

Semivolatile Organic Compounds by GC/MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0180 - SW3550 *(Continued)*											
Matrix Spike (B9A0180-MS1) (Continued)		**Source: 18L0509-46RE1**		*Prepared: 01/08/2019 11:12*		*Analyzed: 01/09/2019 19:14*					
Benzo(k)fluoranthene	1980	17.4	ug/Kg dry	1808	907	59	50-150				2
Chrysene	3040	17.4	ug/Kg dry	1808	1560	82	50-150				2
Dibenzo(a,h)anthracene	1520	86.8	ug/Kg dry	1808	322	66	50-150				2
Fluoranthene	4350	17.4	ug/Kg dry	1808	1810	140	50-150				2
Fluorene	1580	17.4	ug/Kg dry	1808	33.5	85	50-150				2
Indeno(1,2,3-cd)pyrene	3650	17.4	ug/Kg dry	1808	2300	75	50-150				2
Naphthalene	1700	43.4	ug/Kg dry	1808	171	85	50-150				2
Phenanthrene	2350	8.68	ug/Kg dry	1808	897	80	50-150				2
Pyrene	4080	34.7	ug/Kg dry	1808	2150	106	50-150				2
Surrogate: 2-Methylnaphthalene-d10	*1640*		*ug/Kg dry*	*1808*		*91*	*50-150*				*2*
Surrogate: Fluoranthene-d10	*1860*		*ug/Kg dry*	*1808*		*103*	*50-150*				*2*
Matrix Spike Dup (B9A0180-MSD1)		**Source: 18L0509-46RE1**		*Prepared: 01/08/2019 11:12*		*Analyzed: 01/09/2019 19:52*					
1-Methylnaphthalene	1690	31.9	ug/Kg dry	1662	207	89	50-150	10	30		2
2-Methylnaphthalene	1670	31.9	ug/Kg dry	1662	247	86	50-150	16	30		2
Acenaphthene	1350	16.0	ug/Kg dry	1662	29.8	80	50-150	13	30		2
Acenaphthylene	2100	16.0	ug/Kg dry	1662	655	87	50-150	19	30		2
Anthracene	1930	7.98	ug/Kg dry	1662	422	91	50-150	13	30		2
Benzo(a)anthracene	3160	16.0	ug/Kg dry	1662	1770	83	50-150	14	30		2
Benzo(a)pyrene	3430	31.9	ug/Kg dry	1662	2440	60	50-150	12	30		2
Benzo(b)fluoranthene	3830	31.9	ug/Kg dry	1662	2870	57	50-150	20	30		2
Benzo(g,h,i)perylene	1890	39.9	ug/Kg dry	1662	1210	41	50-150	25	30	S	2
Benzo(k)fluoranthene	1650	16.0	ug/Kg dry	1662	907	45	50-150	18	30	S	2
Chrysene	2620	16.0	ug/Kg dry	1662	1560	63	50-150	15	30		2
Dibenzo(a,h)anthracene	1550	79.8	ug/Kg dry	1662	322	74	50-150	1	30		2
Fluoranthene	3130	16.0	ug/Kg dry	1662	1810	79	50-150	33	30	P	2
Fluorene	1750	16.0	ug/Kg dry	1662	33.5	103	50-150	10	30		2
Indeno(1,2,3-cd)pyrene	3070	16.0	ug/Kg dry	1662	2300	46	50-150	17	30	S	2
Naphthalene	1530	39.9	ug/Kg dry	1662	171	82	50-150	11	30		2
Phenanthrene	2020	7.98	ug/Kg dry	1662	897	67	50-150	15	30		2
Pyrene	3410	31.9	ug/Kg dry	1662	2150	76	50-150	18	30		2
Surrogate: 2-Methylnaphthalene-d10	*1420*		*ug/Kg dry*	*1662*		*85*	*50-150*				*2*
Surrogate: Fluoranthene-d10	*1370*		*ug/Kg dry*	*1662*		*82*	*50-150*				*2*

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Water

Metals by ICP-MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0188 - SW3015											
TCLP Blank (B9A0188-BLK2)				*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 18:14*				
Chromium	< 0.00250	0.0250	mg/L								5
Iron	< 0.0500	0.125	mg/L								5
Lead	< 0.000400	0.0250	mg/L								5
Silver	< 0.000400	0.00250	mg/L								5
Thallium	< 0.000350	0.0250	mg/L								5
TCLP Blank (B9A0188-BLK3)				*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 19:09*				
Chromium	< 0.00250	0.0250	mg/L								5
Iron	< 0.0500	0.125	mg/L								5
Lead	< 0.000400	0.0250	mg/L								5
Silver	< 0.000400	0.00250	mg/L								5
Thallium	< 0.000350	0.0250	mg/L								5
LCS (B9A0188-BS1)				*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 18:10*				
Chromium	1.24	0.0250	mg/L	1.250		99.3	85.8-113				5
Iron	2.52	0.125	mg/L	2.500		101	90.9-107				5
Lead	1.25	0.0250	mg/L	1.250		99.9	88.7-114				5
Silver	0.134	0.00250	mg/L	0.1250		107	88.9-114				5
Thallium	1.21	0.0250	mg/L	1.250		96.8	82-116				5
Serial Dilution (B9A0188-DUP1)		**Source: 18L0509-64**		*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 18:46*				
Chromium	< 0.0125	0.125	mg/L		ND				10		25
Iron	< 0.250	0.625	mg/L		ND				10		25
Lead	< 0.00200	0.125	mg/L		ND				10		25
Silver	< 0.00200	0.0125	mg/L		ND				10		25
Thallium	< 0.00175	0.125	mg/L		ND				10		25
MRL Check (B9A0188-MRL1)				*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 18:12*				
Chromium	0.0380	0.0250	mg/L	0.03125		122	70-130				5
Iron	0.0909	0.125	mg/L	0.06250		146	70-130			S	5
Lead	0.0383	0.0250	mg/L	0.03125		123	70-130				5
Silver	0.00376	0.00250	mg/L	0.003125		120	70-130				5
Thallium	0.0366	0.0250	mg/L	0.03125		117	70-130				5
Matrix Spike (B9A0188-MS1)		**Source: 18L0509-64**		*Prepared: 01/08/2019 14:08*			*Analyzed: 01/08/2019 18:40*				
Chromium	1.05	0.0250	mg/L	1.250	0.00276	83.8	75-125				5
Iron	2.43	0.125	mg/L	2.500	ND	97.0	75-125				5
Lead	1.27	0.0250	mg/L	1.250	ND	102	75-125				5
Silver	0.110	0.00250	mg/L	0.1250	ND	88.0	75-125				5
Thallium	1.23	0.0250	mg/L	1.250	ND	98.0	75-125				5

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Water

Metals by ICP-MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0188 - SW3015 *(Continued)*											
Matrix Spike Dup (B9A0188-MSD1)		**Source: 18L0509-64**		*Prepared: 01/08/2019 14:08*		*Analyzed: 01/08/2019 18:42*					
Chromium	1.05	0.0250	mg/L	1.250	0.00276	83.5	75-125	0.357	20		5
Iron	2.40	0.125	mg/L	2.500	ND	96.1	75-125	0.900	20		5
Lead	1.27	0.0250	mg/L	1.250	ND	102	75-125	0.256	20		5
Silver	0.116	0.00250	mg/L	0.1250	ND	92.4	75-125	4.94	20		5
Thallium	1.22	0.0250	mg/L	1.250	ND	97.4	75-125	0.637	20		5
Post Spike (B9A0188-PS1)		**Source: 18L0509-64**		*Prepared: 01/08/2019 14:08*		*Analyzed: 01/08/2019 18:44*					
Chromium	0.285	0.0250	mg/L	0.3125	0.00276	90.2	80-120				1
Iron	1.64	0.125	mg/L	1.562	ND	105	80-120				1
Lead	0.278	0.0250	mg/L	0.3125	ND	88.8	80-120				1
Silver	0.298	0.00250	mg/L	0.3125	ND	95.4	80-120				1
Thallium	0.267	0.0250	mg/L	0.3125	ND	85.3	80-120				1
Batch: B9A0224 - SW3015											
Blank (B9A0224-BLK1)				*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:48*					
Manganese	< 0.0250	0.0250	mg/L								5
Blank (B9A0224-BLK2)				*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:53*					
Manganese	< 0.0250	0.0250	mg/L								5
LCS (B9A0224-BS1)				*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:49*					
Manganese	1.25	0.0250	mg/L	1.250		99.8	91.2-114				5
Serial Dilution (B9A0224-DUP1)		**Source: 18L0509-35**		*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 12:02*					
Manganese	0.0262	0.125	mg/L		0.0234			11.3	10	P	25
MRL Check (B9A0224-MRL1)				*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:51*					
Manganese	0.0337	0.0250	mg/L	0.03125		108	70-130				5
Matrix Spike (B9A0224-MS1)		**Source: 18L0509-35**		*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:56*					
Manganese	1.27	0.0250	mg/L	1.250	0.0234	99.7	75-125				5
Matrix Spike Dup (B9A0224-MSD1)		**Source: 18L0509-35**		*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 11:58*					
Manganese	1.28	0.0250	mg/L	1.250	0.0234	100	75-125	0.487	20		5
Post Spike (B9A0224-PS1)		**Source: 18L0509-35**		*Prepared: 01/09/2019 14:19*		*Analyzed: 01/10/2019 12:00*					
Manganese	0.352	0.0250	mg/L	0.3125	0.0234	105	80-120				1
Batch: B9A0271 - SW3015											
Blank (B9A0271-BLK1)				*Prepared: 01/10/2019 14:34*		*Analyzed: 01/11/2019 11:31*					

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Water

Metals by ICP-MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0271 - SW3015 *(Continued)*											
Blank (B9A0271-BLK1) (Continued)				*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 11:31*				
Chromium	< 0.0250	0.0250	mg/L								5
Manganese	< 0.0250	0.0250	mg/L								5
Silver	< 0.00250	0.00250	mg/L								5
Thallium	< 0.0250	0.0250	mg/L								5
TCLP Blank (B9A0271-BLK2)				*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 11:36*				
Chromium	< 0.00250	0.0250	mg/L								5
Manganese	< 0.00400	0.0250	mg/L								5
Silver	< 0.000400	0.00250	mg/L								5
Thallium	< 0.000350	0.0250	mg/L								5
LCS (B9A0271-BS1)				*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 11:33*				
Chromium	1.19	0.0250	mg/L	1.250		95.6	85.8-113				5
Manganese	1.21	0.0250	mg/L	1.250		97.0	91.2-114				5
Silver	0.120	0.00250	mg/L	0.1250		95.8	88.9-114				5
Thallium	1.23	0.0250	mg/L	1.250		98.5	82-116				5
Serial Dilution (B9A0271-DUP1)		**Source: 18L0638-09**		*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 12:06*				
Chromium	< 0.0125	0.125	mg/L		ND				10		25
Manganese	< 0.0200	0.125	mg/L		ND				10		25
Silver	< 0.00200	0.0125	mg/L		ND				10		25
Thallium	< 0.00175	0.125	mg/L		ND				10		25
MRL Check (B9A0271-MRL1)				*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 11:35*				
Chromium	0.0337	0.0250	mg/L	0.03125		108	70-130				5
Manganese	0.0321	0.0250	mg/L	0.03125		103	70-130				5
Silver	0.00310	0.00250	mg/L	0.003125		99.1	70-130				5
Thallium	0.0321	0.0250	mg/L	0.03125		103	70-130				5
Matrix Spike (B9A0271-MS1)		**Source: 18L0638-09**		*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 12:01*				
Chromium	1.09	0.0250	mg/L	1.250	0.00290	87.3	75-125				5
Manganese	1.22	0.0250	mg/L	1.250	ND	97.2	75-125				5
Silver	0.111	0.00250	mg/L	0.1250	ND	88.7	75-125				5
Thallium	1.33	0.0250	mg/L	1.250	ND	106	75-125				5
Matrix Spike Dup (B9A0271-MSD1)		**Source: 18L0638-09**		*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 12:03*				
Chromium	1.05	0.0250	mg/L	1.250	0.00290	83.6	75-125	4.32	20		5
Manganese	1.16	0.0250	mg/L	1.250	ND	93.1	75-125	4.37	20		5
Silver	0.104	0.00250	mg/L	0.1250	ND	83.0	75-125	6.62	20		5
Thallium	1.23	0.0250	mg/L	1.250	ND	98.3	75-125	7.84	20		5

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Water

Metals by ICP-MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0271 - SW3015 *(Continued)*											
Post Spike (B9A0271-PS1)		**Source: 18L0638-09**		*Prepared: 01/10/2019 14:34*			*Analyzed: 01/11/2019 12:05*				
Chromium	0.277	0.0250	mg/L	0.3125	0.00290	87.8	80-120				1
Manganese	0.315	0.0250	mg/L	0.3125	ND	101	80-120				1
Silver	0.263	0.00250	mg/L	0.3125	ND	84.2	80-120				1
Thallium	0.323	0.0250	mg/L	0.3125	ND	103	80-120				1
Batch: B9A0599 - SW3015											
Blank (B9A0599-BLK1)				*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:00*				
Iron	< 0.125	0.125	mg/L								5
LCS (B9A0599-BS1)				*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:02*				
Iron	2.41	0.125	mg/L	2.500		96.3	90.9-107				5
Serial Dilution (B9A0599-DUP1)		**Source: 18L0509-54**		*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:27*				
Iron	< 0.250	0.625	mg/L		ND				10		25
MRL Check (B9A0599-MRL1)				*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:03*				
Iron	0.0752	0.125	mg/L	0.06250		120	70-130				5
Matrix Spike (B9A0599-MS1)		**Source: 18L0509-54**		*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:22*				
Iron	2.67	0.125	mg/L	2.500	0.0585	104	75-125				5
Matrix Spike Dup (B9A0599-MSD1)		**Source: 18L0509-54**		*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:24*				
Iron	2.68	0.125	mg/L	2.500	0.0585	105	75-125	0.699	20		5
Post Spike (B9A0599-PS1)		**Source: 18L0509-54**		*Prepared: 01/21/2019 10:10*			*Analyzed: 01/21/2019 15:25*				
Iron	1.76	0.125	mg/L	1.562	0.0585	109	80-120				1
Batch: B9A0875 - SW3015											
Blank (B9A0875-BLK1)				*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:23*				
Iron	< 0.125	0.125	mg/L								5
Lead	< 0.0250	0.0250	mg/L								5
Silver	< 0.00250	0.00250	mg/L								5
Thallium	< 0.0250	0.0250	mg/L								5
TCLP Blank (B9A0875-BLK2)				*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:28*				
Iron	< 0.0500	0.125	mg/L								5
Lead	< 0.000400	0.0250	mg/L								5
Silver	< 0.000400	0.00250	mg/L								5
Thallium	< 0.000350	0.0250	mg/L								5

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Report Date: 01/30/2019
Matrix: Water

Metals by ICP-MS

(Continued)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0875 - SW3015 *(Continued)*											
LCS (B9A0875-BS1)				*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:25*				
Iron	2.51	0.125	mg/L	2.500		100	90.9-107				5
Lead	1.24	0.0250	mg/L	1.250		99.3	88.7-114				5
Silver	0.0893	0.00250	mg/L	0.1250		71.5	88.9-114			S	5
Thallium	1.28	0.0250	mg/L	1.250		103	82-116				5
LCS (B9A0875-BS2)				*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 12:40*				
Iron	2.59	0.125	mg/L	2.500		104	90.9-107				5
Lead	1.41	0.0250	mg/L	1.250		113	88.7-114				5
Silver	0.131	0.00250	mg/L	0.1250		105	88.9-114				5
Thallium	1.39	0.0250	mg/L	1.250		111	82-116				5
Serial Dilution (B9A0875-DUP1)		**Source: 19A0712-01**		*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:39*				
Iron	0.511	0.625	mg/L		ND				10		25
Lead	< 0.00200	0.125	mg/L		ND				10		25
Silver	< 0.00200	0.0125	mg/L		ND				10		25
Thallium	< 0.00175	0.125	mg/L		ND				10		25
MRL Check (B9A0875-MRL1)				*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:27*				
Iron	0.0694	0.125	mg/L	0.06250		111	70-130				5
Lead	0.0347	0.0250	mg/L	0.03125		111	70-130				5
Silver	0.00235	0.00250	mg/L	0.003125		75.3	70-130				5
Thallium	0.0355	0.0250	mg/L	0.03125		114	70-130				5
Matrix Spike (B9A0875-MS1)		**Source: 19A0712-01**		*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:34*				
Iron	2.99	0.125	mg/L	2.500	ND	120	75-125				5
Lead	1.35	0.0250	mg/L	1.250	0.000596	108	88-115				5
Silver	0.0836	0.00250	mg/L	0.1250	ND	66.9	85-116			S	5
Thallium	1.37	0.0250	mg/L	1.250	ND	110	75-125				5
Matrix Spike Dup (B9A0875-MSD1)		**Source: 19A0712-01**		*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:36*				
Iron	3.00	0.125	mg/L	2.500	ND	120	75-125	0.197	20		5
Lead	1.31	0.0250	mg/L	1.250	0.000596	105	88-115	2.78	20		5
Silver	0.0852	0.00250	mg/L	0.1250	ND	68.1	85-116	1.90	20	S	5
Thallium	1.32	0.0250	mg/L	1.250	ND	106	75-125	3.70	20		5
Post Spike (B9A0875-PS1)		**Source: 19A0712-01**		*Prepared: 01/28/2019 14:16*			*Analyzed: 01/29/2019 11:37*				
Iron	1.99	0.125	mg/L	1.562	ND	127	80-120			S	1
Lead	0.328	0.0250	mg/L	0.3125	0.000596	105	80-120				1
Silver	0.283	0.00250	mg/L	0.3125	ND	90.4	80-120				1
Thallium	0.340	0.0250	mg/L	0.3125	ND	109	80-120				1

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Certified Analyses included in this Report

Analyte	CAS #	Certifications
SM2540G in Solid		
Total Solids	Moist	WDNR,DoD
SW6010C in Solid		
Aluminum	7429-90-5	DoD,ISO,WDNR,ILEPA
Antimony	7440-36-0	DoD,ISO,WDNR,ILEPA
Arsenic	7440-38-2	DoD,ISO,AKDEC,WDNR,ILEPA
Barium	7440-39-3	DoD,ISO,AKDEC,WDNR,ILEPA
Beryllium	7440-41-7	DoD,ISO,WDNR,ILEPA
Cadmium	7440-43-9	DoD,ISO,AKDEC,WDNR,ILEPA
Calcium	7440-70-2	DoD,WDNR,ILEPA
Chromium	7440-47-3	DoD,ISO,AKDEC,WDNR,ILEPA
Cobalt	7440-48-4	DoD,ISO,WDNR,ILEPA
Copper	7440-50-8	DoD,ISO,WDNR,ILEPA
Iron	7439-89-6	DoD,ISO,WDNR,ILEPA
Lead	7439-92-1	DoD,ISO,AKDEC,WDNR,ILEPA
Magnesium	7439-95-4	DoD,ISO,WDNR,ILEPA
Manganese	7439-96-5	DoD,ISO,WDNR,ILEPA
Nickel	7440-02-0	DoD,ISO,AKDEC,WDNR,ILEPA
Potassium	7440-09-7	DoD,WDNR,ILEPA
Selenium	7782-49-2	DoD,ISO,WDNR,ILEPA
Silver	7440-22-4	DoD,ISO,WDNR,ILEPA
Sodium	7440-23-5	DoD,WDNR,ILEPA
Thallium	7440-28-0	DoD,WDNR,ILEPA
Vanadium	7440-62-2	DoD,ISO,AKDEC,WDNR,ILEPA
Zinc	7440-66-6	DoD,ISO,WDNR,ILEPA
SW6020A in Water		
Chromium, TCLP	7440-47-3	ISO,AKDEC,WDNR,DoD,ILEPA
Iron, TCLP	7439-89-6	ISO,WDNR,DoD,ILEPA
Lead, TCLP	7439-92-1	ISO,AKDEC,WDNR,DoD,ILEPA
Manganese, SPLP	7439-96-5	ISO,WDNR,DoD,ILEPA
Manganese, TCLP	7439-96-5	ISO,WDNR,DoD,ILEPA
Silver, TCLP	7440-22-4	ISO,WDNR,DoD,ILEPA
Thallium, TCLP	7440-28-0	ISO,WDNR,DoD,ILEPA
SW7471B in Solid		
Mercury	7439-97-6	ISO,DoD,WDNR,ILEPA
SW8260B in Solid		
1,1,1-Trichloroethane	71-55-6	AKDEC,WDNR,DoD,ILEPA
1,1,2,2-Tetrachloroethane	79-34-5	AKDEC,WDNR,DoD,ILEPA
1,1,2-Trichloroethane	79-00-5	AKDEC,WDNR,DoD,ILEPA
1,1-Dichloroethane	75-34-3	AKDEC,WDNR,DoD,ILEPA
1,1-Dichloroethene	75-35-4	AKDEC,WDNR,DoD,ILEPA
1,2-Dibromo-3-chloropropane	96-12-8	AKDEC,WDNR,DoD,ILEPA

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Certified Analyses included in this Report (Continued)

Analyte	CAS #	Certifications
SW8260B in Solid (Continued)		
1,2-Dibromoethane	106-93-4	AKDEC,WDNR,DoD,ILEPA
1,2-Dichloroethane	107-06-2	AKDEC,WDNR,DoD,ILEPA
1,2-Dichloropropane	78-87-5	AKDEC,WDNR,DoD,ILEPA
1-Butanol	71-36-3	WDNR
2-Butanone	78-93-3	WDNR,DoD,ILEPA
2-Hexanone	591-78-6	WDNR,DoD,ILEPA
4-Methyl-2-pentanone	108-10-1	WDNR,DoD,ILEPA
Acetone	67-64-1	WDNR,DoD,ILEPA
Acrylonitrile	107-13-1	WDNR,DoD,ILEPA
Benzene	71-43-2	WDNR,DoD,ILEPA
Benzene	71-43-2	WDNR,DoD,ILEPA
Bromodichloromethane	75-27-4	AKDEC,WDNR,DoD,ILEPA
Bromoform	75-25-2	AKDEC,WDNR,DoD,ILEPA
Bromomethane	74-83-9	AKDEC,WDNR,DoD,ILEPA
Carbon disulfide	75-15-0	WDNR,DoD,ILEPA
Carbon tetrachloride	56-23-5	AKDEC,WDNR,DoD,ILEPA
Chlorobenzene	108-90-7	AKDEC,WDNR,DoD,ILEPA
Chloroethane	75-00-3	WDNR,DoD,ILEPA
Chloroform	67-66-3	AKDEC,WDNR,DoD,ILEPA
Chloromethane	74-87-3	AKDEC,WDNR,DoD,ILEPA
cis-1,2-Dichloroethene	156-59-2	WDNR,DoD,ILEPA
Dibromochloromethane	124-48-1	AKDEC,WDNR,DoD,ILEPA
Ethylbenzene	100-41-4	WDNR,DoD,ILEPA
Ethylbenzene	100-41-4	WDNR,DoD,ILEPA
m,p-Xylene	179601-23-1	WDNR,DoD,ILEPA
Methyl tert-butyl ether	1634-04-4	WDNR,DoD,ILEPA
Methylene chloride	75-09-2	AKDEC,WDNR,DoD,ILEPA
o-Xylene	95-47-6	WDNR,DoD,ILEPA
Styrene	100-42-5	WDNR,DoD
Tetrachloroethene	127-18-4	WDNR,DoD,ILEPA
Toluene	108-88-3	AKDEC,WDNR,DoD,ILEPA
Toluene	108-88-3	AKDEC,WDNR,DoD,ILEPA
trans-1,2-Dichloroethene	156-60-5	AKDEC,WDNR,DoD,ILEPA
Trichloroethene	79-01-6	AKDEC,WDNR,DoD,ILEPA
Vinyl acetate	108-05-4	WDNR,DoD,ILEPA
Vinyl chloride	75-01-4	AKDEC,WDNR,DoD,ILEPA
Xylenes, Total	1330-20-7	WDNR,DoD,ILEPA
Xylenes, Total	1330-20-7	WDNR,DoD,ILEPA
1,3-Dichloropropene, Total	542-75-6	AKDEC,WDNR,DoD,ILEPA
SW8270D in Solid		
1,2,4-Trichlorobenzene	120-82-1	WDNR,DoD,ILEPA
1,2-Dichlorobenzene	95-50-1	WDNR,DoD,ILEPA

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Certified Analyses included in this Report (Continued)

Analyte	CAS #	Certifications
SW8270D in Solid (Continued)		
1,3-Dichlorobenzene	541-73-1	WDNR,DoD,ILEPA
1,4-Dichlorobenzene	106-46-7	WDNR,DoD,ILEPA
2,4,5-Trichlorophenol	95-95-4	WDNR,DoD,ILEPA
2,4,6-Trichlorophenol	88-06-2	WDNR,DoD,ILEPA
2,4-Dichlorophenol	120-83-2	WDNR,DoD,ILEPA
2,4-Dimethylphenol	105-67-9	WDNR,DoD,ILEPA
2,4-Dinitrophenol	51-28-5	WDNR,DoD,ILEPA
2,4-Dinitrotoluene	121-14-2	WDNR,DoD,ILEPA
2,6-Dinitrotoluene	606-20-2	WDNR,DoD,ILEPA
2-Chloronaphthalene	91-58-7	WDNR,DoD,ILEPA
2-Chlorophenol	95-57-8	WDNR,DoD,ILEPA
2-Methylphenol	95-48-7	WDNR,DoD,ILEPA
2-Nitrophenol	88-75-5	WDNR,DoD,ILEPA
3,3´-Dichlorobenzidine	91-94-1	WDNR,DoD,ILEPA
3 & 4-Methylphenol	84989-04-8	WDNR,DoD,ILEPA
4,6-Dinitro-2-methylphenol	534-52-1	WDNR,DoD,ILEPA
4-Bromophenyl-phenylether	101-55-3	WDNR,DoD,ILEPA
4-Chloro-3-methylphenol	59-50-7	WDNR,DoD,ILEPA
4-Chloroaniline	106-47-8	WDNR,DoD,ILEPA
4-Chlorophenyl-phenylether	7005-72-3	WDNR,DoD,ILEPA
4-Nitrophenol	100-02-7	WDNR,DoD,ILEPA
Acenaphthene	83-32-9	AKDEC,WDNR,DoD,ILEPA
Acenaphthylene	208-96-8	AKDEC,WDNR,DoD,ILEPA
Anthracene	120-12-7	AKDEC,WDNR,DoD,ILEPA
Benzidine	92-87-5	WDNR,DoD,ILEPA
Benzo(a)anthracene	56-55-3	AKDEC,WDNR,DoD,ILEPA
Benzo(a)pyrene	50-32-8	AKDEC,WDNR,DoD,ILEPA
Benzo(b)fluoranthene	205-99-2	AKDEC,WDNR,DoD,ILEPA
Benzo(g,h,i)perylene	191-24-2	AKDEC,WDNR,DoD,ILEPA
Benzo(k)fluoranthene	207-08-9	AKDEC,WDNR,DoD,ILEPA
Bis(2-chloroethyl)ether	111-44-4	WDNR,DoD,ILEPA
Bis(2-chloroisopropyl)ether	108-60-1	WDNR,DoD,ILEPA
Bis(2-ethylhexyl)phthalate	117-81-7	WDNR,DoD,ILEPA,ISO
Butyl benzyl phthalate	85-68-7	WDNR,DoD,ILEPA,ISO
Carbazole	86-74-8	WDNR,DoD,ILEPA
Chrysene	218-01-9	AKDEC,WDNR,DoD,ILEPA
Dibenzo(a,h)anthracene	53-70-3	AKDEC,WDNR,DoD,ILEPA
Diethyl phthalate	84-66-2	WDNR,DoD,ILEPA
Dimethyl phthalate	131-11-3	WDNR,DoD,ILEPA
Di-n-butyl phthalate	84-74-2	WDNR,DoD,ILEPA
Di-n-octyl phthalate	117-84-0	WDNR,DoD,ILEPA,ISO
Fluoranthene	206-44-0	AKDEC,WDNR,DoD,ILEPA
Fluorene	86-73-7	AKDEC,WDNR,DoD,ILEPA

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Certified Analyses included in this Report (Continued)

Analyte	CAS #	Certifications
SW8270D in Solid (Continued)		
Hexachlorobenzene	118-74-1	WDNR,DoD,ILEPA
Hexachlorobutadiene	87-68-3	WDNR,DoD,ILEPA
Hexachlorocyclopentadiene	77-47-4	WDNR,DoD,ILEPA
Hexachloroethane	67-72-1	WDNR,DoD,ILEPA
Indeno(1,2,3-cd)pyrene	193-39-5	AKDEC,WDNR,DoD,ILEPA
Isophorone	78-59-1	WDNR,DoD,ILEPA
Naphthalene	91-20-3	AKDEC,WDNR,DoD,ILEPA
Nitrobenzene	98-95-3	WDNR,DoD,ILEPA
N-Nitrosodi-n-propylamine	621-64-7	DoD,ILEPA
N-Nitrosodiphenylamine	86-30-6	WDNR,DoD,ILEPA
Pentachlorophenol	87-86-5	WDNR,DoD,ILEPA
Phenanthrene	85-01-8	AKDEC,WDNR,DoD,ILEPA
Phenol	108-95-2	WDNR,DoD,ILEPA
Pyrene	129-00-0	AKDEC,WDNR,DoD,ILEPA
SW9045C in Solid		
pH		DoD,ILEPA,WDNR

List of Certifications

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	04/30/2020
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2020
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2020
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	07/27/2019
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2020
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2019

Environmental Monitoring and Technologies, Inc.

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Qualifiers and Definitions

Item	Description
B	Analyte was present in the method blank.
H	Sample prepared and/ or analyzed past recommended holdtime.
P	The quality control sample %RPD is above the laboratory control limit.
S	The quality control sample recovery is outside of the laboratory control limits.
%Rec	Percent Recovery

ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

18L0509
PM: Eva Gaya
Huff & Huff, A subsidiary of GZA
TACO Listed Parameters 2018

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217993

Company: Huff + Huff
Address: 915 Harger Road
Oakbrook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Huff
Project ID / Location: Mattoon E. the trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNA	TAL total metals	BTEX	PH	HOLD						EMT WORKORDER # 18L0509
SB-1 0-1'	3	8oz	G	1	AHK	12/12/18	1054			1						X						01A
SB-1 1-3'			V	4			1055					X	X	X	X							02 A-D
SB-1 3-5'				1			1056									X						03A
SB-2 0-1'				1			1100									X						04A
SB-2 1-3'			V	4			1101					X	X	X								05A-D
SB-2 3-5'				1			1102									X						06A
SB-3 0-1'				1			1106									X						07A
SB-3 1-3'			V	4			1107					X	X	X								08A-D
SB-3 3-5'				1			1108									X						09A
SB-4 0-1'				1			1111									X						10A

Relinquished By:	Date: 12-14-18 Time: 08:45	Received By:	Date: 12-14-18 Time: 08:45	EMT USE ONLY Client Code:	☒ SAMPLE RECEIVED ON ICE ☐ TEMPERATURE
Relinquished By:	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon	4.8
Relinquished By:	Date: - - Time: :	Received For Lab By:	Date: 12-14-18 Time: 9:40	Jar Lot No.	EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

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FAX: 847-967-6735
www.emt.com

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217994

Company: Huff + Huff
Address: 915 Harger Road
Oak Brook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Kittler
Project ID / Location: Mattoon Bike trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNAs	TAL total Metals	BTEX	pH	HOLD						EMT USE ONLY
SB-4 1-3'	3	8oz	G V	4	AHK	12/12/18	1112					X	X	X	X							11A-D
SB-4 3-5'				1			1113									X						12A
SB-5 0-1'				1			1115									X						13A
SB-5 1-3'			V	4			1116					X	X	X								14A-D
SB-5 3-5'				1			1117									X						15A
SB-6 0-1'				1			1118									X						16A
SB-6 1-3'			V	4			1119					X	X	X								17A-D
SB-6 3-5'				1			1120									X						18A
SB-7 0-1'				1			1124									X						19A
SB-7 1-3'			V	4			1125					X	X	X								20A-D

EMT WORKORDER #1810509

Relinquished By:	Date: / Time:	Received By:	Date: / Time:	EMT USE ONLY
Adam Kittler	Date: 12-14-18 Time: 08:45	[signature]	Date: 12-14-18 Time: 08:45	Client Code:
[signature]	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon
Relinquished By:	Date: - - Time: :	Received For Lab By: Nicki Ryan	Date: 12-14-18 Time: 9:40	Jar Lot No.

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE
4.8

EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217995

Company: Huff + Huff
Address: 915 Harger Road
Oak brook

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Kittler
Project ID / Location: Mattoon Bike trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNAs	TAL Total metals	BTEX	pH	HOLD						EMT USE ONLY / EMT WORKORDER #18L0509
SB-7 3-5'	3	8oz	6	1	AHK	12/12/18	1126			1						X						21A
SB-8 0-1'	↓	↓	↓	1	↓	↓	1127			↓						X						22A
SB-8 1-3'	↓	↓	V	4	↓	↓	1128			↓		X	X	X								23A-D
SB-8 3-5'	↓	↓	↓	1	↓	↓	1129			↓						X						24A
SB-9 0-1'	↓	↓	↓	1	↓	↓	1130			↓						X						25A
SB-9 1-3'	↓	↓	V	4	↓	↓	1131			↓		X	X	X	X							26A-D
SB-9 3-5'	↓	↓	↓	1	↓	↓	1132			↓						X						27A
SB-10 0-1'	↓	↓	↓	1	↓	↓				↓						X						28A
SB-10 1-3'	↓	↓	V	4	↓	↓				↓		X	X	X								29A-D
SB-10 3-5'	↓	↓	↓	1	↓	↓				↓						X						30A

Relinquished By: [signature]	Date: 12-14-18 Time: 08:45	Received By: [signature]	Date: 12-14-18 Time: 08:45	EMT USE ONLY Client Code:
Relinquished By: [signature]	Date: 12-14-18 Time: ~~08:~~ 0940	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon
Relinquished By:	Date: - - Time: :	Received For Lab By: [signature]	Date: 12-14-18 Time: 9:40	Jar Lot No.

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE
4.8
EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
_____ day turnaround
☑ ROUTINE

Due Date: ____-____-____ COC #: 217996

Company: Huff + Huff
Address: 615 Horse Road
Oakbrook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Kittler
Project ID / Location: Mattoon Bike Trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNAs	TAL Total Metals	BTEX	pH	VOCs	SVOCs					EMT USE ONLY EMT WORKORDER # 1810509
SB-11 0-1'	3	8oz	6V	4	AMK	12/17/18	1138			2		X	X	X								31A-D
SB-12 0-1'							1142					X	X	X								32A-D
SB-13 0-1'							1145						X			X	X					33A-D
SB-14 0-1'							1149					X	X	X								34A-D
SB-15 0-1'							1153						X		X	X	X					35A-D
SB-16 0-1'							1158					X	X	X								36A-D
SB-17 0-1'							1202						X			X	X					37A-D
SB-18 0-1'							1205					X	X	X								38A-D
SB-19 0-1'							1207						X			X	X					39A-D
SB-20 0-1'							1210					X	X	X								40A-D

Relinquished By: [signature]	Date: 12-14-18 Time: 08:45	Received By: [signature]	Date: 12-14-18 Time: 08:45	EMT USE ONLY Client Code:
Relinquished By: [signature]	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon
Relinquished By:	Date: - - Time: :	Received For Lab By: Nicki Ry	Date: 12-14-18 Time: 9:40	Jar Lot No.

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE
4.8

EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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847-967-6666
FAX: 847-967-6735
www.emt.com

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217997

Company: Hulf + Hulf
Address: 915 Hanger Rd
Oak Brook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Kittler
Project ID / Location: Mattoon Bike Trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNA	TAL Total Metals	BTEX	PH	HOLD							EMT USE ONLY / EMT WORKORDER #1820509
SB-21 0-1'	3	8oz	GV	4	AHK	12/12/18	1216			2		X	X	X	X								41 A-D
SB-22 0-1'	↓	↓	↓	↓	↓	↓	1218			↓						X							42 A-D
SB-23 0-1'	↓	↓	↓	↓	↓	↓	1221			↓		X	X	X									43 A-D
SB-24 0-1'	↓	↓	↓	↓	↓	↓	1225			↓					X								44 A-D
SB-25 0-1'	↓	↓	↓	↓	↓	↓	1227			↓		X	X	X									45 A-D
SB-26 0-1'	↓	↓	↓	↓	↓	↓	1230			↓						X							46 A-D
SB-27 0-1'	↓	↓	↓	↓	↓	↓	1233			↓		X	X	X									47 A-D
SB-28 0-1'	↓	↓	↓	↓	↓	↓	1237			↓						X							48 A-D
SB-29 1-3'	↓	↓	↓	↓	↓	↓	1239			↓		X	X	X	X								49 A-D
SB-29 3-5'	↓	↓	↓	↓	↓	↓	1240			↓						X							50 A

Relinquished By:	Date: / Time:	Received By:	Date: / Time:	EMT USE ONLY
Adam Kittler	Date: 12-14-18 Time: 08:45	[signature]	Date: 12-14-18 Time: 08:45	Client Code:
[signature]	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon
Relinquished By:	Date: - - Time: :	Received For Lab By: Nicki Rye	Date: 12-14-18 Time: 9:40	Jar Lot No.

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE

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EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

847-967-6666
FAX: 847-967-6735
www.emt.com

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
_____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217998

Company: Huff + Huff
Address: 915 Harger Road
Oakbrook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Allison Kiff
Project ID / Location: Mattoon B.R. Fact

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNAS	TAL total Metals	BTEX	pH	VOCs	SVOCs	Metals					EMT WORKORDER #1810509
SB-30 1-3'	3	8oz	6	4	AHK	12/13/18	1242			1		X	X										S1A-D
SB-30 3-5'				1			1243											X					S2A
SB-31 1-3'			✓	4			1244					X	X	X									S3A-D
SB-31 3-5'				1			1245											X					S4A
SB-32 0-1'			✓	4			1247					X	X	X									S5A-D
SB-33 0-1'			✓				1251					X	X	X									S6A-D
SB-34 0-1'			✓				1254						X		X	X	X						S7A-D
SB-35 0-1'			✓				102					X	X		X								S8A-D
SB-36 0-1'			✓				108					X	X										S9A-D
SB-37 0-1'			✓				117					X	X		X								66A-D

Relinquished By: [signature]	Date: 12-14-18 Time: 08:45	Received By: [signature]	Date: 12-14-18 Time: 08:45	EMT USE ONLY Client Code:
Relinquished By: [signature]	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon
Relinquished By:	Date: - - Time: :	Received For Lab By: Nicole Ryan	Date: 12-14-18 Time: 9:40	Jar Lot No.

☒ SAMPLE RECEIVED ON ICE
☐ TEMPERATURE
4.8

EMT USE ONLY

EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.
8100 North Austin Avenue
Morton Grove, Illinois 60053-3203
847-967-6666
FAX: 847-967-6735
www.emt.com

Chain of Custody Record

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☒ ROUTINE

Due Date: ____-____-____ COC #: 217999

Company: Hutt + Hutt
Address: 815 Hunger Road
Oakbrook, IL

Phone #: (____) ____-____ Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Allen Kitter
Project ID / Location: Mattoon Bike Trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	PNA	TAL total metals	BTEX	pH	VOC	SVOC	HOLD				EMT USE ONLY
SB-38 0-1'	3	8oz	GJ	4	AHK	12/12/18	120			1		X	X									61A-D
SB-39 0-1'							138					X	X	X	X							62A-D
SB-40 0-1'							135					X	X	X								63A-D
SB-41 0-1'							149					X	X		X							64A-D
SB-42 0-1'							151					X	X									65A-D
SB-43 0-1'							202					X	X		X	X						66A-D
SB-44 0-1'							205					X	X			X						67A-D
SB-45 0-1'							211					X	X	X	X							68A-D
SB-46 0-1'							215					X	X	X								69A-D
SB-47 0-1'							218					X	X	X	X							70A-D

EMT WORKORDER #1810509

Relinquished By:	Date: 12-14-18 Time: 08:45	Received By:	Date: 12-14-18 Time: 08:45	EMT USE ONLY Client Code:	☒ SAMPLE RECEIVED ON ICE ☐ TEMPERATURE
Relinquished By:	Date: 12-14-18 Time: 09:40	Received By:	Date: - - Time: :	EMT Project I.D. Mattoon	4.8
Relinquished By:	Date: - - Time: :	Received For Lab By: Nicki Ry	Date: 12-14-18 Time: 9:40	Jar Lot No.	EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

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Sample Receipt Checklist

Work Order: 18L0509

Printed: 12/14/2018 10:13:27AM

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018

Date Due: 12/27/18 17:00 (7 day TAT)

Received By: Nicole Ryan
Logged In By: Nicole Ryan

Date Received: 12/14/18 09:40
Date Logged In: 12/14/18 10:08

Samples Received at:	4.8°C
How were samples received?	EMT
Custody Seals Present	No
Custody Seals Intact	NA
Sample Cont/Cooler Intact	Yes
COC Present/Complete	Yes
COC/Labels Agree	Yes
Proper Cont/Preservation checked	Yes
Sufficient Sample Volume	Yes
Samples Within Holdtime	Yes
Cooler Temp Within Limits	Yes
VOA Water Vials Received	No
VOA Water Vials/Zero Headspace	NA
PM or Client Contacted	No

COMMENTS

No sampled time for samples 28-30.

MR

12-14-18

Environmental Monitoring and Technologies, Inc.

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Analytical Report

Adam Kittler
Huff & Huff, A subsidiary of GZA
915 Harger Road, Suite 330
Oak Brook, IL 60523

January 17, 2019

Work Order: 19A0409

RE: TACO Listed Parameters 2018
Mattoon Bike Trail

Dear Adam Kittler:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

Sincerely,

Tim Witrzek For Eva Gaya
Federal Project Manager
847.967.6666
egaya@emt.com
Approved for release: 1/17/2019 10:11:24AM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674

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Environmental Monitoring and Technologies, Inc.

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-19A (0-1)	19A0409-01	Soil	01/11/19 09:10	01/11/19 12:25

Environmental Monitoring and Technologies, Inc.

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Case Narrative

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 19A0409

Date: 01/17/2019

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 19A0409
The samples were received on 01/11/19 12:25. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was:

Cooler	Temp C°
Default Cooler	6.0

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 19A0409

Client Sample ID: SB-19A (0-1)
Report Date: 01/17/2019
Collection Date: 01/11/2019 09:10
Matrix: Soil
Lab ID: 19A0409-01

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Lead	**117**	1.52		mg/Kg dry	01/15/19 18:46	B9A0383	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Lead, TCLP	< 0.00750	0.00750		mg/L	01/16/19 12:02	B9A0400	AG	5
Wet Chemistry								
Method: SM2540G								
Total Solids	**76.4**	0.100		% (Percent)	01/14/19 13:24	B9A0359	MKP	1

Environmental Monitoring and Technologies, Inc.

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Dates Report

Client: Huff & Huff, A subsidiary of GZA

Report Date: 01/17/2019

Project: TACO Listed Parameters 2018
Mattoon Bike Trail

Work Order: 19A0409

Sample ID	Client Sample ID	Collection	Matrix	Test Name	Leached Prep Date	Prep Date	Analysis Date	Batch ID	Sequence
19A0409-01	SB-19A (0-1)	01/11/19	Soil	Total Solids / Percent Moisture		01/14/19 12:41	01/14/19 13:24	B9A0359	
				Lead, Total ICP-AES		01/15/19 09:38	01/15/19 18:46	B9A0383	S9A0202
				Lead, TCLP ICP-MS	01/14/19 16:00	01/15/19 11:13	01/16/19 12:02	B9A0400	S9A0220

Environmental Monitoring and Technologies, Inc.

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Quality Control

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 19A0409

Report Date: 01/17/2019
Matrix: Solid

Metals by ICP-AES

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0383 - SW3050											
Blank (B9A0383-BLK1)				*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:26*				
Lead	< 2.50	2.50	mg/Kg wet								1
LCS (B9A0383-BS1)				*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:30*				
Lead	46.0	2.50	mg/Kg wet	50.00		92.1	80-104				1
Serial Dilution (B9A0383-DUP1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 19:21*				
Lead	141	7.60	mg/Kg dry		117			18.4	10	P	5
MRL Check (B9A0383-MRL1)				*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:34*				
Lead	2.72	2.50	mg/Kg wet	2.500		109	70-130				1
Matrix Spike (B9A0383-MS1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:50*				
Lead	121	1.54	mg/Kg dry	30.75	117	14.7	75-125			S	1
Matrix Spike Dup (B9A0383-MSD1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:55*				
Lead	152	1.54	mg/Kg dry	30.72	117	113	75-125	22.1	20	P	1
Post Spike (B9A0383-PS1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 19:16*				
Lead	133	1.69	mg/Kg dry	16.88	117	94.2	80-120				1
Reference (B9A0383-SRM1)				*Prepared: 01/15/2019 09:38*			*Analyzed: 01/15/2019 18:38*				
Lead	49.4	25.0	mg/Kg wet	51.93		95.1	50-150				10

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 19A0409

Report Date: 01/17/2019
Matrix: Solid

Wet Chemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0359											
Blank (B9A0359-BLK1)				*Prepared: 01/14/2019 12:41*			*Analyzed: 01/14/2019 13:40*				
Total Solids	< 0.100	0.100	%								1
LCS (B9A0359-BS1)				*Prepared: 01/14/2019 12:41*			*Analyzed: 01/14/2019 13:42*				
Total Solids	0.189	0.100	%	0.2025		93.3	80.2-112				1
Duplicate (B9A0359-DUP1)		**Source: 19A0399-08**		*Prepared: 01/14/2019 12:41*			*Analyzed: 01/14/2019 13:44*				
Total Solids	86.4	0.100	%		85.0			1.56	5		1
Duplicate (B9A0359-DUP2)		**Source: 19A0443-05**		*Prepared: 01/14/2019 12:41*			*Analyzed: 01/14/2019 13:46*				
Total Solids	83.2	0.100	%		83.1			0.112	5		1

Environmental Monitoring and Technologies, Inc.

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Quality Control

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 19A0409

Report Date: 01/17/2019
Matrix: Water

Metals by ICP-MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	DF
Batch: B9A0400 - SW3015											
Blank (B9A0400-BLK1)				*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 11:57*				
Lead	< 0.0250	0.0250	mg/L								5
LCS (B9A0400-BS1)				*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 11:59*				
Lead	1.19	0.0250	mg/L	1.250		95.6	88.7-114				5
Serial Dilution (B9A0400-DUP1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 12:17*				
Lead	< 0.00200	0.125	mg/L		ND				10		25
MRL Check (B9A0400-MRL1)				*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 12:00*				
Lead	0.0361	0.0250	mg/L	0.03125		115	70-130				5
Matrix Spike (B9A0400-MS1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 12:04*				
Lead	1.21	0.0250	mg/L	1.250	0.000404	96.5	75-125				5
Matrix Spike Dup (B9A0400-MSD1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 12:06*				
Lead	1.18	0.0250	mg/L	1.250	0.000404	94.6	75-125	2.03	20		5
Post Spike (B9A0400-PS1)		**Source: 19A0409-01**		*Prepared: 01/15/2019 11:13*			*Analyzed: 01/16/2019 12:08*				
Lead	0.336	0.0250	mg/L	0.3125	0.000404	107	80-120				1

Environmental Monitoring and Technologies, Inc.

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Certified Analyses included in this Report

Analyte	CAS #	Certifications
SM2540G in Solid		
Total Solids	Moist	WDNR,DoD
SW6010C in Solid		
Lead	7439-92-1	DoD,ISO,AKDEC,WDNR,ILEPA
SW6020A in Water		
Lead, TCLP	7439-92-1	ISO,AKDEC,WDNR,DoD,ILEPA

List of Certifications

Code	Description	Number	Expires
AKDEC	State of Alaska, Dept. Environmental Conservation	UST-105	04/30/2020
CPSC	US Consumer Product Safety Commission, Accredited by PJLA Lab No. 1050	L14-56	04/30/2020
DoD	Department of Defense, Accredited by PJLA	L14-55	04/30/2020
ILEPA	State of Illinois, NELAP Accredited Lab No. 100256	003674	07/27/2019
ISO	ISO/IEC 17025, Accredited by PJLA	L14-56	04/30/2020
WDNR	State of Wisconsin Dept of Natural Resources	999888890	08/31/2019

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Qualifiers and Definitions

Item	Description
P	The quality control sample %RPD is above the laboratory control limit.
S	The quality control sample recovery is outside of the laboratory control limits.
%Rec	Percent Recovery

ENVIRONMENTAL MONITORING AND TECHNOLOGIES, INC.

8100 North Austin Avenue
Morton Grove, Illinois 60053-3203

19A0409
PM: Eva Gaya
Huff & Huff, A subsidiary of GZA
TACO Listed Parameters 2018

Custody Record

6735
m

TURNARAOUND TIME:
☐ RUSH
____ day turnaround
☐ ROUTINE

Due Date: ____-____-____ COC #: 211652

Company: Huff + Huff
Address: 915 Harger Road
Oak Brook, IL 60523

Phone #: (630) 684-9600 Fax #: (____) ____-____
P.O. #: ____ Proj. #: ____-____
Client Contact: Adam Kittler
Project ID / Location: Mattoon Dike Trail

Sample Type:
1. Waste Water 4. Sludge 7. Groundwater (filtered)
2. Drinking Water 5. Oil 8. Other
3. Soil 6. Groundwater ____

Container Type:
P - Plastic V - VOC Vial O - Other
G - Glass B - Tedlar Bag ____

Preservative:
1. None 4. NaOH 7. Zn Ace
2. H_2SO_4 5. HCl 8. Other
3. HNO_3 6. MeOH ____

Analyses

Sample I.D.	Sample Type	Container Size	Container Type	Container No.	Sampling By	Sampling Date	Sampling Time	pH	Temp.	Preservation Field	Preservation Lab	Total Lead	Tclp Lead	Hold									EMT USE ONLY / EMT WORKORDER #19A0409
SB-19A (0-1)	S	8oz	6	1	[illegible]	1/11/19	9:10			1		X	X										01A
SB-19A (1-2)	S	8oz	6	1	[illegible]	1/11/19	9:12			1				X									02A

Relinquished By:	Date: 1-11-18 Time: 12:25	Received By:	Date: - - Time: :	EMT USE ONLY Client Code:	☒ SAMPLE RECEIVED ON ICE ☐ TEMPERATURE
Relinquished By:	Date: - - Time: :	Received By:	Date: - - Time: :	EMT Project I.D.	
Relinquished By:	Date: - - Time: :	Received For Lab By: [signature]	Date: 1-11-19 Time: 12:25	Jar Lot No.	6.0 EMT SAMPLE RETURN POLICY ON BACK

SPECIAL INSTRUCTIONS:

Sample Receipt Checklist

Work Order: 19A0409

Printed: 1/14/2019 7:45:06AM

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018

Date Due: 01/18/19 17:00 (5 day TAT)

Received By: Keith Wesseling
Logged In By: Nicole Ryan

Date Received: 01/11/19 12:25
Date Logged In: 01/11/19 12:38

Samples Received at:	6°C
How were samples received?	Client
Custody Seals Present	No
Custody Seals Intact	NA
Sample Cont/Cooler Intact	Yes
COC Present/Complete	Yes
COC/Labels Agree	Yes
Proper Cont/Preservation checked	Yes
Sufficient Sample Volume	Yes
Samples Within Holdtime	Yes
Cooler Temp Within Limits	Yes
VOA Water Vials Received	No
VOA Water Vials/Zero Headspace	NA
PM or Client Contacted	No

COMMENTS

NR

1-11-19

APPENDIX E

LPC-663 CCDD DOCUMENTATION

Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Mattoon Bike Trail Extension Office Phone Number, if available: 217-549-0939

Physical Site Location (address, inclduding number and street):

Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston (see attached report)

City: Mattoon State: IL Zip Code: 61938

County: Coles Township: Mattoon

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 39.48444 (Decimal Degrees) Longitude: -88.36953 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☐ Map Interpolation ☐ Photo Interpolation ☒ Survey ☐ Other

ISGS Public Land Survey System. Lat/long above refer to the approximate center of the Project Area

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	City of Mattoon	Name:	City of Mattoon
Street Address:	208 N 19th Street	Street Address:	208 N 19th Street
PO Box:		PO Box:	
City:	Mattoon State: IL	City:	Mattoon State: IL
Zip Code:	61938 Phone: 217-549-0939	Zip Code:	61938 Phone: 217-549-0939
Contact:	Dean Barber	Contact:	Dean Barber
Email, if available:	barberd@mattoonillinois.org	Email, if available:	barberd@mattoonillinois.org

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Mattoon Bike Trail Extension

Latitude: 39.48444 Longitude: -88.36953

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Refer to Figure 4-1 in the Final PSI Report and borings located at SB-4 (3-5), SB-5 (3-5), SB-30 (3-5), and SB-31 (3-5).

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Refer to Tables 3-2 through 3-10 in the Final PSI Report for results summary and Environmental Monitoring and Technologies, Inc. report #18L0509. Site specific table of results are attached to this form.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Huff & Huff, Inc.

Street Address: 915 Harger Rd Suite 330

City: Oak Brook State: IL Zip Code: 60523

Phone: (630) 684-9100

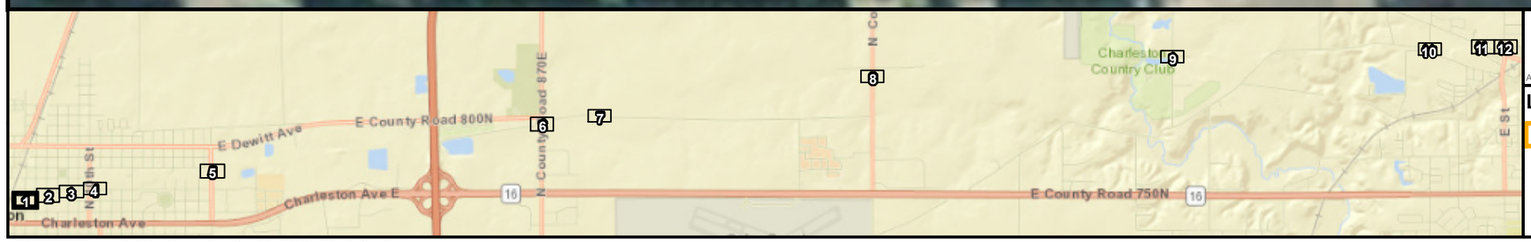
Jeremy J. Reynolds, P.G.
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

2/18/19
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS

P.E. or L.P.G. Seal:



0 50 100 200
Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

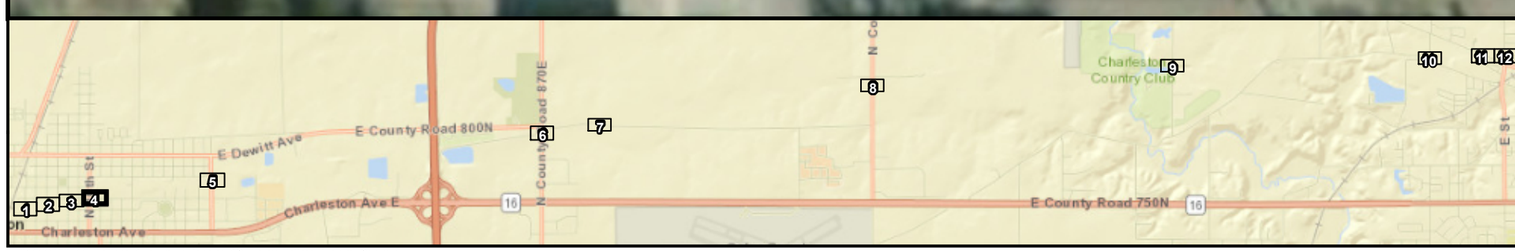
- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 1 of 12

J:\81022053\03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

SB-29
SB-30
SB-31
SB-32
SB-33
SB-28
10th St
Richmond Ave
9th St



0 50 100 200
Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth	Soil Classification	
0-1'	a(1)	a(5)
0-3'	a(3)	Unrestricted
3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 4 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

TABLE 3-5
PNA SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Sample ID	*Maximum Allowable Concentration* [1]				**SB-4**	**SB-5**	**SB-30**	**SB-31**
Sample Depth	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	3-5	3-5	3-5	3-5
Constituents	----------*mg/kg*----------							
Acenaphthene	*570*	*570*	*570*	*570*	<0.00862	<0.00756	<0.00978	<0.00919
Acenaphthylene	*85*	*85*	*85*	*85*	<0.00862	<0.00756	<0.00978	0.0134
Anthracene	*12,000*	*12,000*	*12,000*	*12,000*	<0.00431	<0.00378	0.0173	0.0165
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	<0.00862	<0.00756	0.0513	0.0708
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	<0.0172	<0.0151	0.0575	0.0727
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	<0.0172	<0.0151	0.0819	0.0902
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	<0.00862	<0.00756	0.0258	0.024
Benzo(g,h,i)perylene	*2,300*	*2,300*	*2,300*	*2,300*	<0.0216	<0.0189	0.0901	0.0568
Chrysene	*88*	*88*	*88*	*88*	<0.00862	<0.00756	0.0441	0.0588
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	<0.0431	<0.0378	<0.0489	<0.046
Fluoranthene	*3,100*	*3,100*	*3,100*	*3,100*	<0.00862	<0.00756	0.0746	0.0706
Fluorene	*560*	*560*	*560*	*560*	<0.00862	<0.00756	<0.00978	<0.00919
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	<0.00862	<0.00756	0.165	0.129
Naphthalene	*1.8*	*1.8*	*1.8*	*1.8*	<0.0216	<0.0189	<0.0245	0.128
Phenanthrene	*210*	*210*	*210*	*210*	<0.00431	0.0098	0.115	0.261
Pyrene	*2,300*	*2,300*	*2,300*	*2,300*	<0.0172	<0.0151	0.0664	0.0866

[1] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-9

RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-4**	**SB-5**	**SB-30**	**SB-31**
Depth, ft	*Concentration* [a/]	3-5	3-5	3-5	3-5
Constituent	----------*mg/kg*----------				
Antimony	5	<1.56	<1.39	<1.56	<1.55
Arsenic	11.3/13	<11.3	<11.3	<11.3	<11.3
Barium	1,500	112	52.9	163	65.3
Beryllium	22	<0.156	<0.139	<0.156	<0.155
Cadmium	5.2	<0.5	<0.5	1.06	1.28
Calcium	--	4650	22300	4180	10400
Chromium, total	21	17.6	<13	18.1	<13
Cobalt	20	4.63	5.21	10.7	5.93
Copper	2,900	34.9	27.6	42.3	84.2
Iron	15,000/15,900	**19500**	8230	**29700**	**28100**
Lead	107	21.7	12	21.4	81.7
Magnesium	325,000	4020	6010	3610	4220
Manganese	630/636	70.9	306	590	156
Mercury	0.1	<0.073	<0.065	<0.072	0.083
Nickel	100	12.3	12	31.7	14.6
Potassium	--	1980	831	1220	441
Selenium	1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	<4.4	<4.4	<4.4	<4.4
Sodium	--	128	97.8	97.6	168
Thallium	2.6	<3.5	<2.2	<4.2	<3.2
Vanadium	550	33.7	17.8	25.4	19.3
Zinc	5,100	40.1	31.7	77.8	80.8

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-10
TCLP/SPLP METALS SOIL RESULTS COMPARED TO THE MACs FOR

Soil Boring	*Maximum Allowable*	**SB-4**	**SB-30**	**SB-31**
Depth, ft	*Concentration* [a/]	3-5'	3-5'	3-5'
Constituent	----------*mg/L*----------			
SPLP Manganese	0.15	--	--	--
TCLP Chromium	0.1	--	--	--
TCLP Iron	5	<0.125	<0.125	<0.125
TCLP Lead	0.0075	--	--	--
TCLP Manganese	0.15	--	--	--
TCLP Silver	0.05	--	--	--
TCLP Thallium	0.002	--	--	--

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated

Environmental Monitoring and Technologies, Inc.

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Analytical Report

Adam Kittler
Huff & Huff, A subsidiary of GZA
915 Harger Road, Suite 330
Oak Brook, IL 60523

January 30, 2019

Work Order: 18L0509

RE: TACO Listed Parameters 2018
Mattoon Bike Trail

Dear Adam Kittler:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

This is a revised report, that supersedes all previous reports. Please see case narrative for an explanation of revision.

Sincerely,

Tim Witrzek
Federal Program Manager
847.967.6666
twitrzek@emt.com
Approved for release: 1/30/2019 8:29:13AM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674

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Environmental Monitoring and Technologies, Inc.

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 1-3'	18L0509-02	Soil	12/12/18 10:55	12/14/18 09:40
SB-2 1-3'	18L0509-05	Soil	12/12/18 11:01	12/14/18 09:40
SB-3 1-3'	18L0509-08	Soil	12/12/18 11:07	12/14/18 09:40
SB-4 1-3'	18L0509-11	Soil	12/12/18 11:12	12/14/18 09:40
SB-4 3-5'	18L0509-12	Soil	12/12/18 11:13	12/14/18 09:40
SB-5 1-3'	18L0509-14	Soil	12/12/18 11:16	12/14/18 09:40
SB-5 3-5'	18L0509-15	Soil	12/12/18 11:17	12/14/18 09:40
SB-6 1-3'	18L0509-17	Soil	12/12/18 11:19	12/14/18 09:40
SB-6 3-5'	18L0509-18	Soil	12/12/18 11:20	12/14/18 09:40
SB-7 1-3'	18L0509-20	Soil	12/12/18 11:25	12/14/18 09:40
SB-7 3-5'	18L0509-21	Soil	12/12/18 11:26	12/14/18 09:40
SB-8 1-3'	18L0509-23	Soil	12/12/18 11:28	12/14/18 09:40
SB-8 3-5'	18L0509-24	Soil	12/12/18 11:29	12/14/18 09:40
SB-9 1-3'	18L0509-26	Soil	12/12/18 11:31	12/14/18 09:40
SB-9 3-5'	18L0509-27	Soil	12/12/18 11:32	12/14/18 09:40
SB-10 1-3'	18L0509-29	Soil	12/12/18 00:00	12/14/18 09:40
SB-10 3-5'	18L0509-30	Soil	12/12/18 00:00	12/14/18 09:40
SB-11 0-1'	18L0509-31	Soil	12/12/18 11:38	12/14/18 09:40
SB-12 0-1'	18L0509-32	Soil	12/12/18 11:42	12/14/18 09:40
SB-13 0-1'	18L0509-33	Soil	12/12/18 11:45	12/14/18 09:40
SB-14 0-1'	18L0509-34	Soil	12/12/18 11:49	12/14/18 09:40
SB-15 0-1'	18L0509-35	Soil	12/12/18 11:53	12/14/18 09:40
SB-16 0-1'	18L0509-36	Soil	12/12/18 11:58	12/14/18 09:40
SB-17 0-1'	18L0509-37	Soil	12/12/18 12:02	12/14/18 09:40
SB-18 0-1'	18L0509-38	Soil	12/12/18 12:05	12/14/18 09:40
SB-19 0-1'	18L0509-39	Soil	12/12/18 12:07	12/14/18 09:40
SB-20 0-1'	18L0509-40	Soil	12/12/18 12:10	12/14/18 09:40
SB-21 0-1'	18L0509-41	Soil	12/12/18 12:16	12/14/18 09:40
SB-22 0-1'	18L0509-42	Soil	12/12/18 12:18	12/14/18 09:40
SB-23 0-1'	18L0509-43	Soil	12/12/18 12:21	12/14/18 09:40
SB-24 0-1'	18L0509-44	Soil	12/12/18 12:25	12/14/18 09:40
SB-25 0-1'	18L0509-45	Soil	12/12/18 12:27	12/14/18 09:40
SB-26 0-1'	18L0509-46	Soil	12/12/18 12:30	12/14/18 09:40
SB-27 0-1'	18L0509-47	Soil	12/12/18 12:33	12/14/18 09:40
SB-28 0-1'	18L0509-48	Soil	12/12/18 12:37	12/14/18 09:40
SB-29 1-3'	18L0509-49	Soil	12/12/18 12:39	12/14/18 09:40
SB-29 3-5'	18L0509-50	Soil	12/12/18 12:40	12/14/18 09:40
SB-30 1-3'	18L0509-51	Soil	12/12/18 12:42	12/14/18 09:40
SB-30 3-5'	18L0509-52	Soil	12/12/18 12:43	12/14/18 09:40
SB-31 1-3'	18L0509-53	Soil	12/12/18 12:44	12/14/18 09:40
SB-31 3-5'	18L0509-54	Soil	12/12/18 12:45	12/14/18 09:40
SB-32 0-1'	18L0509-55	Soil	12/12/18 12:47	12/14/18 09:40
SB-33 0-1'	18L0509-56	Soil	12/12/18 12:51	12/14/18 09:40
SB-34 0-1'	18L0509-57	Soil	12/12/18 12:54	12/14/18 09:40
SB-35 0-1'	18L0509-58	Soil	12/12/18 13:02	12/14/18 09:40
SB-36 0-1'	18L0509-59	Soil	12/12/18 13:08	12/14/18 09:40
SB-37 0-1'	18L0509-60	Soil	12/12/18 13:17	12/14/18 09:40
SB-38 0-1'	18L0509-61	Soil	12/12/18 13:20	12/14/18 09:40
SB-39 0-1'	18L0509-62	Soil	12/12/18 13:38	12/14/18 09:40
SB-40 0-1'	18L0509-63	Soil	12/12/18 13:35	12/14/18 09:40

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SB-41 0-1'	18L0509-64	Soil	12/12/18 13:49	12/14/18 09:40
SB-42 0-1'	18L0509-65	Soil	12/12/18 13:51	12/14/18 09:40
SB-43 0-1'	18L0509-66	Soil	12/12/18 14:02	12/14/18 09:40
SB-44 0-1'	18L0509-67	Soil	12/12/18 14:05	12/14/18 09:40
SB-45 0-1'	18L0509-68	Soil	12/12/18 14:11	12/14/18 09:40
SB-46 0-1'	18L0509-69	Soil	12/12/18 14:15	12/14/18 09:40
SB-47 0-1'	18L0509-70	Soil	12/12/18 14:18	12/14/18 09:40

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Case Narrative

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Date: 01/30/2019

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 18L0509
The samples were received on 12/14/18 09:40. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was:

Cooler	Temp C°
Default Cooler	4.8

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

On 1/4/19 client added addtional analyses TCLP, SPLP and Sim PNAs to several samples. Client is aware that Sim PNA samples are passed hold time.

On 1/16/19 client added TCLP Fe analysis to several samples.

On 1/22/19 client added additional TCLP analysis to two samples.

6010 Total Metals:
B8L0552-BS1: The LCS had multiple analytes below the laboratory control limit, but all are within 15% of the target value. The bracketing CCV recoveries in the run are within the acceptance limits.

6010_Ca, Fe, and K:
There were trace detection of these analytes in the blank, but the levels of the analytes in the samples was well above 10% of the blank level. The levels detected in the blank are not significant for the level found in the samples.

The Batch B8L0552 QC for the MS, MSD, DUP, and PS had many outliers, most likely due to the sample matrices combined with some of the high levels for some of the target analytes.

B9A0160: Elevated limit for Tl due to biases caused by spectral overlap from high concentrations of interfering elements .

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8270_PNA_SIM

Samples 20 and 23, the surrogate spike compound, fluoranthene-d10 recovered outside control criteria due to matrix.

Sample 56 was utilized for matrix spike / matrix spike (MS/MSD) duplicate analysis. Due to matrix and relatively high concentration of analytes in the sample, several MS/MSD compounds were outside control criteria.

8270D_SVOC

Sample 39 was utilized for matrix spike / matrix spike duplicate analysis. Due to sample matrix some compounds recovered outside control criteria.

The internal standard perylene-d12 recovered outside control criteria for samples 33, 35 (2X dilution reported), 37, 39 and 57 at 45%, 37%, 40%, 42%,and 32%, respectfully. Control criteria for the internal standards are 50% to 200%. Those with recoveries above 40% were reported to maintain the detection limits for the associated analytes. Samples 35 and 57 were run initially at a 1X dilution and repeated at a 2Xwhich was then reported.

The analytes associated with this internal standard would be:

benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene.

8260B_VOC_5035_LOW

The surrogate spike compound, 1,2-dichloroethane-d4, for sample 66 recovered outside control criteria due to sample matrix.

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-4 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:13
Matrix: Soil
Lab ID: 18L0509-12

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**16200**	778		mg/Kg dry	01/08/19 17:41	B9A0160	KJ1	100
Antimony	< 1.56	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Barium	**112**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Beryllium	< 0.156	0.156		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Calcium	**4650**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Chromium	**17.6**	13.0		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Cobalt	**4.63**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Copper	**34.9**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Iron	**19500**	311		mg/Kg dry	01/08/19 17:41	B9A0160	KJ1	100
Lead	**21.7**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Magnesium	**4020**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Manganese	**70.9**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Nickel	**12.3**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Potassium	**1980**	77.8		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:24	B9A0160	KJ1	10
Sodium	**128**	7.78		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Thallium	< 3.50	3.50		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Vanadium	**33.7**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Zinc	**40.1**	1.56		mg/Kg dry	01/08/19 21:09	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:05	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.073	0.073		mg/Kg dry	01/08/19 12:26	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.4**	0.100	H	% (Percent)	01/08/19 08:20	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
2-Methylnaphthalene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Acenaphthene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Acenaphthylene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Anthracene	< 4.31	4.31	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Benzo(a)anthracene	< 8.62	8.62	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1
Benzo(a)pyrene	< 17.2	17.2	H	ug/Kg dry	01/09/19 07:33	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-4 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:13
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-12 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(b)fluoranthene	< 17.2	17.2	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Benzo(g,h,i)perylene	< 21.6	21.6	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Benzo(k)fluoranthene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Chrysene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 43.1	43.1	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Fluoranthene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Fluorene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	< 8.62	8.62	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Naphthalene	< 21.6	21.6	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Phenanthrene	< 4.31	4.31	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Pyrene	< 17.2	17.2	H	ug/Kg dry		01/09/19 07:33	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 07:33*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 85%*	*Limits: 50-150*	*01/09/19 07:33*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-5 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:17
Matrix: Soil
Lab ID: 18L0509-15

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5230**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Antimony	< 1.39	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Barium	**52.9**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Beryllium	< 0.139	0.139		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Calcium	**22300**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cobalt	**5.21**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Copper	**27.6**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Iron	**8230**	278		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Lead	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Magnesium	**6010**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Manganese	**306**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Nickel	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Potassium	**831**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:28	B9A0160	KJ1	10
Sodium	**97.8**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Vanadium	**17.8**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Zinc	**31.7**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.065	0.065		mg/Kg dry	01/08/19 12:28	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.7**	0.100	H	% (Percent)	01/08/19 08:22	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
2-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthylene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Anthracene	< 3.78	3.78	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)anthracene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)pyrene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(b)fluoranthene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(g,h,i)perylene	< 18.9	18.9	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(k)fluoranthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Chrysene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 37.8	37.8	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-5 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:17
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-15 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Fluorene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Naphthalene	< 18.9	18.9	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Phenanthrene	**9.80**	3.78	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Pyrene	< 15.1	15.1	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 91%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-30 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:43
Matrix: Soil
Lab ID: 18L0509-52

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**16500**	781		mg/Kg dry	01/08/19 18:46	B9A0160	KJ1	100
Antimony	< 1.56	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Barium	**163**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Beryllium	< 0.156	0.156		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Cadmium	**1.06**	0.500		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Calcium	**4180**	78.1		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Chromium	**18.1**	13.0		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Cobalt	**10.7**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Copper	**42.3**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Iron	**29700**	312		mg/Kg dry	01/08/19 18:46	B9A0160	KJ1	100
Lead	**21.4**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Magnesium	**3610**	78.1		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Manganese	**590**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Nickel	**31.7**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Potassium	**1220**	7.81		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:28	B9A0160	KJ1	10
Sodium	**97.6**	7.81		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Thallium	< 4.20	4.20		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Vanadium	**25.4**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Zinc	**77.8**	1.56		mg/Kg dry	01/08/19 22:17	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:12	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.072	0.072		mg/Kg dry	01/08/19 13:02	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**78.9**	0.100	H	% (Percent)	01/08/19 08:44	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**27.8**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
2-Methylnaphthalene	**26.3**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Acenaphthene	< 9.78	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Acenaphthylene	< 9.78	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Anthracene	**17.3**	4.89	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(a)anthracene	**51.3**	9.78	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(a)pyrene	**57.5**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1
Benzo(b)fluoranthene	**81.9**	19.6	H	ug/Kg dry	01/09/19 17:23	B9A0180	LP	1

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-30 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:43
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-52 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**90.1**	24.5	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Benzo(k)fluoranthene	**25.8**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Chrysene	**44.1**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 48.9	48.9	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Fluoranthene	**74.6**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Fluorene	< 9.78	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**165**	9.78	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Naphthalene	< 24.5	24.5	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Phenanthrene	**115**	4.89	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Pyrene	**66.4**	19.6	H	ug/Kg dry		01/09/19 17:23	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 96%*	*Limits: 50-150*	*01/09/19 17:23*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 79%*	*Limits: 50-150*	*01/09/19 17:23*	*B9A0180*	*LP*	*1*

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-31 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:45
Matrix: Soil
Lab ID: 18L0509-54

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4360**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Antimony	< 1.55	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Barium	**65.3**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Beryllium	< 0.155	0.155		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Cadmium	**1.28**	0.500		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Calcium	**10400**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Cobalt	**5.93**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Copper	**84.2**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Iron	**28100**	310		mg/Kg dry	01/08/19 19:07	B9A0160	KJ1	100
Lead	**81.7**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Magnesium	**4220**	77.4		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Manganese	**156**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Nickel	**14.6**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Potassium	**441**	7.74		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:32	B9A0160	KJ1	10
Sodium	**168**	7.74		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Thallium	< 3.20	3.20		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Vanadium	**19.3**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Zinc	**80.8**	1.55		mg/Kg dry	01/08/19 22:21	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:14	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.083**	0.072		mg/Kg dry	01/08/19 13:05	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**79.3**	0.100	H	% (Percent)	01/08/19 08:46	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**192**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
2-Methylnaphthalene	**279**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Acenaphthene	< 9.19	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Acenaphthylene	**13.4**	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Anthracene	**16.5**	4.60	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(a)anthracene	**70.8**	9.19	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(a)pyrene	**72.7**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1
Benzo(b)fluoranthene	**90.2**	18.4	H	ug/Kg dry	01/09/19 18:00	B9A0180	LP	1

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-31 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:45
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-54 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**56.8**	23.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Benzo(k)fluoranthene	**24.0**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Chrysene	**58.8**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 46.0	46.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Fluoranthene	**70.6**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Fluorene	< 9.19	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**129**	9.19	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Naphthalene	**128**	23.0	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Phenanthrene	**261**	4.60	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Pyrene	**86.6**	18.4	H	ug/Kg dry		01/09/19 18:00	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 89%*	*Limits: 50-150*	*01/09/19 18:00*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 77%*	*Limits: 50-150*	*01/09/19 18:00*	*B9A0180*	*LP*	*1*

Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Mattoon Bike Trail Extension Office Phone Number, if available: 217-549-0939

Physical Site Location (address, inclduding number and street):

Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston (see attached report)

City: Mattoon State: IL Zip Code: 61938

County: Coles Township: Mattoon

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 39.48444 (Decimal Degrees) Longitude: -88.36953 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☐ Map Interpolation ☐ Photo Interpolation ☒ Survey ☐ Other

ISGS Public Land Survey System. Lat/long above refer to the approximate center of the Project Area

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	City of Mattoon	Name:	City of Mattoon
Street Address:	208 N 19th Street	Street Address:	208 N 19th Street
PO Box:		PO Box:	
City:	Mattoon State: IL	City:	Mattoon State: IL
Zip Code:	61938 Phone: 217-549-0939	Zip Code:	61938 Phone: 217-549-0939
Contact:	Dean Barber	Contact:	Dean Barber
Email, if available:	barberd@mattoonillinois.org	Email, if available:	barberd@mattoonillinois.org

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Mattoon Bike Trail Extension

Latitude: 39.48444 Longitude: -88.36953

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Refer to Figure 4-1 in the Final PSI Report and borings SB-1 (0-5), SB-2 (0-5), SB-3 (0-5), SB-6 (3-5), SB-7 (3-5), SB-10 (3-5), SB-13 (0-1), SB-14 (0-1), SB-15 (0-1), SB-17 (0-1), SB-20 (0-1), SB-21 (0-1), SB-28 (0-1), SB-34 (0-1), SB-35 (0-1), SB-36 (0-1), SB-37 (0-1), SB-39 (0-1), SB-41 (0-1)

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Refer to Tables 3-2 through 3-10 in the Final PSI Report for results summary and Environmental Monitoring and Technologies, Inc. report #18L0509. Site specific table of results are attached to this form.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Huff & Huff, Inc.

Street Address: 915 Harger Rd Suite 330

City: Oak Brook State: IL Zip Code: 60523

Phone: (630) 684-9100

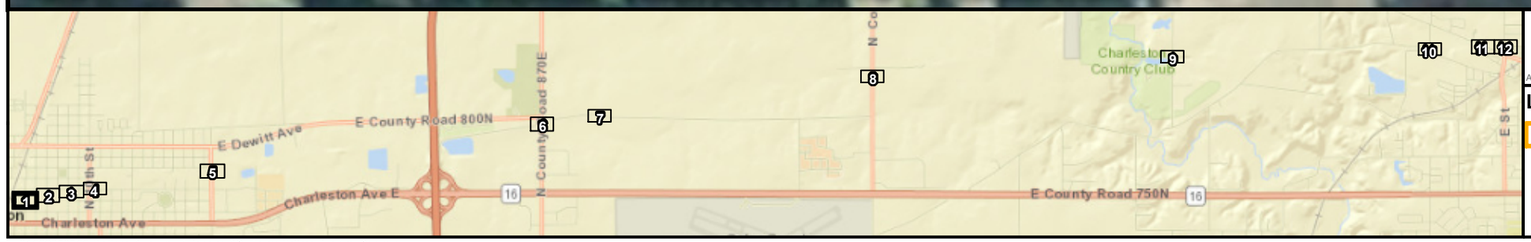
Jeremy J. Reynolds, P.G.
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

2/18/19
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS
3/19

P.E. or L.P.G. Seal:



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 1 of 12

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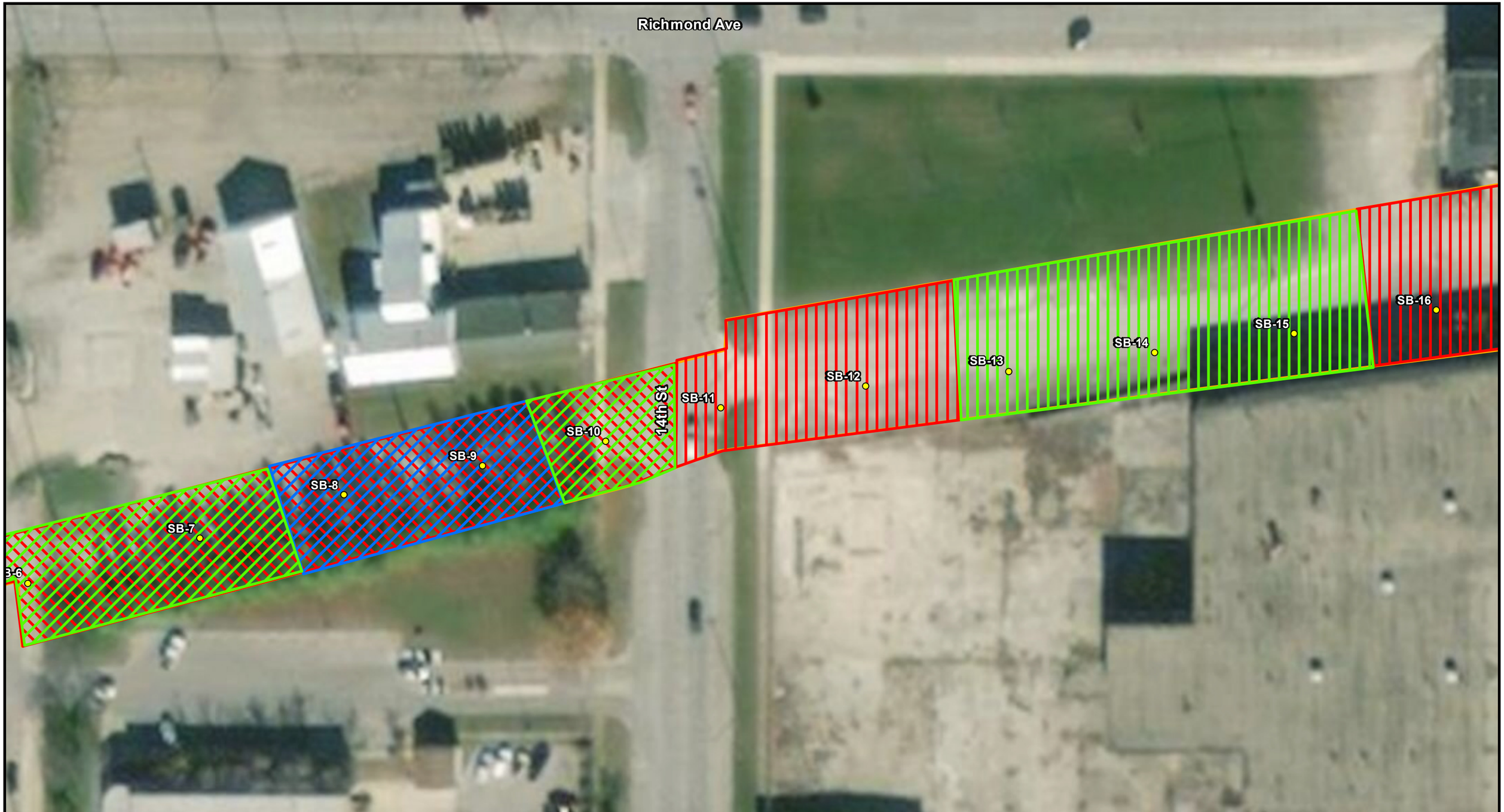

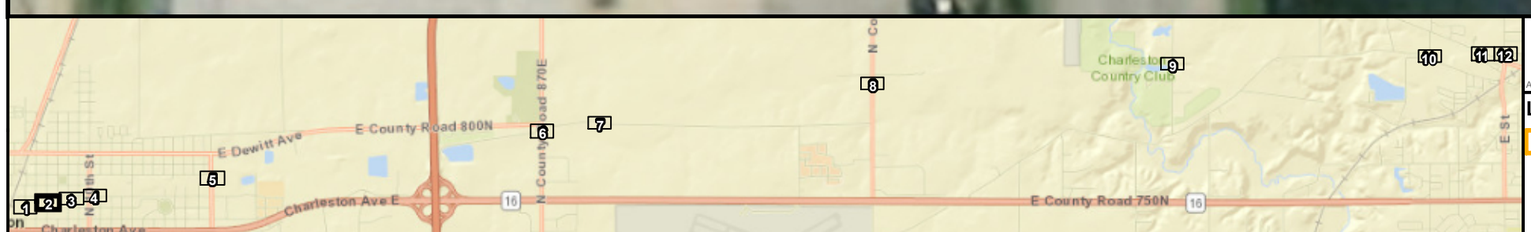

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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 2 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

Richmond Ave

12Th St

11Th St

SB-17

SB-18

SB-19

SB-20

SB-21

SB-22

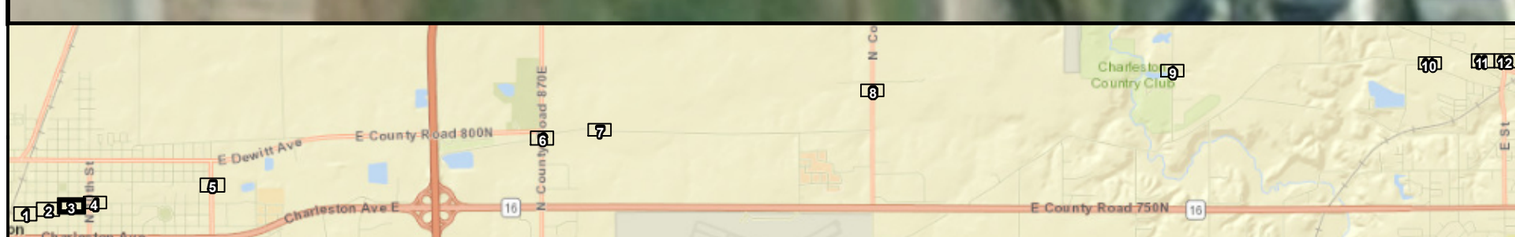
SB-23

SB-24

SB-25

SB-26

SB-27



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

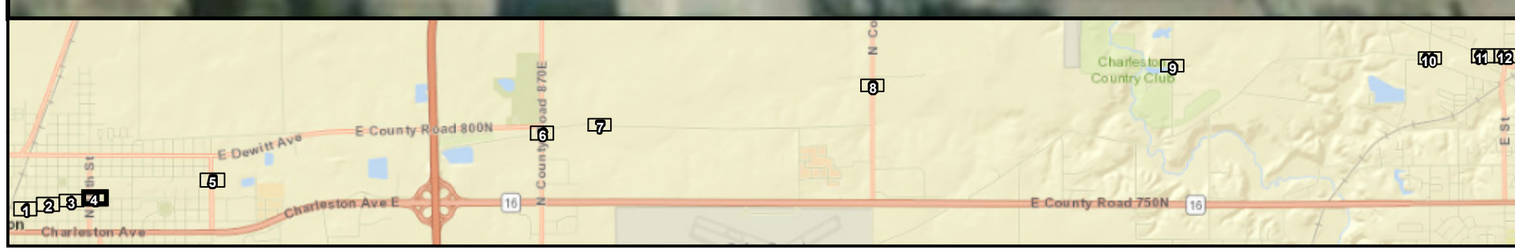
Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 3 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

SB-29
SB-30
SB-31
SB-32
SB-33
SB-28
10th St
Richmond Ave
9th St



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Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth	Soil Classification	
0-1'	a(1)	a(5)
0-3'	a(3)	Unrestricted
3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 4 of 12

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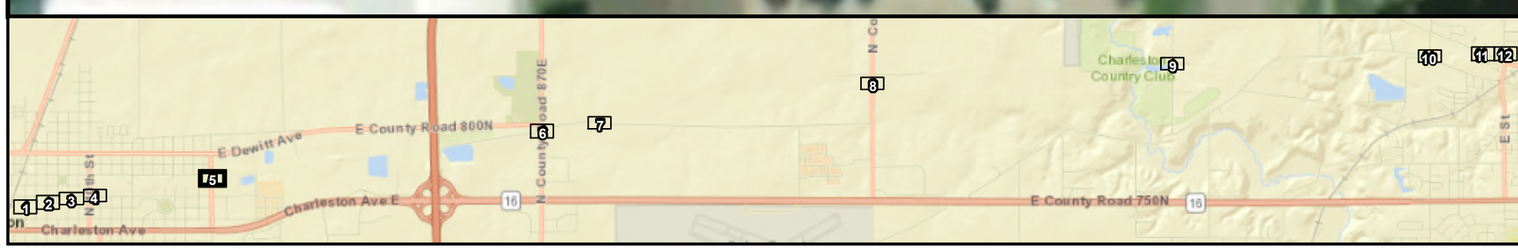

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Aerial Source: ESRI Online World Imagery

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 5 of 12

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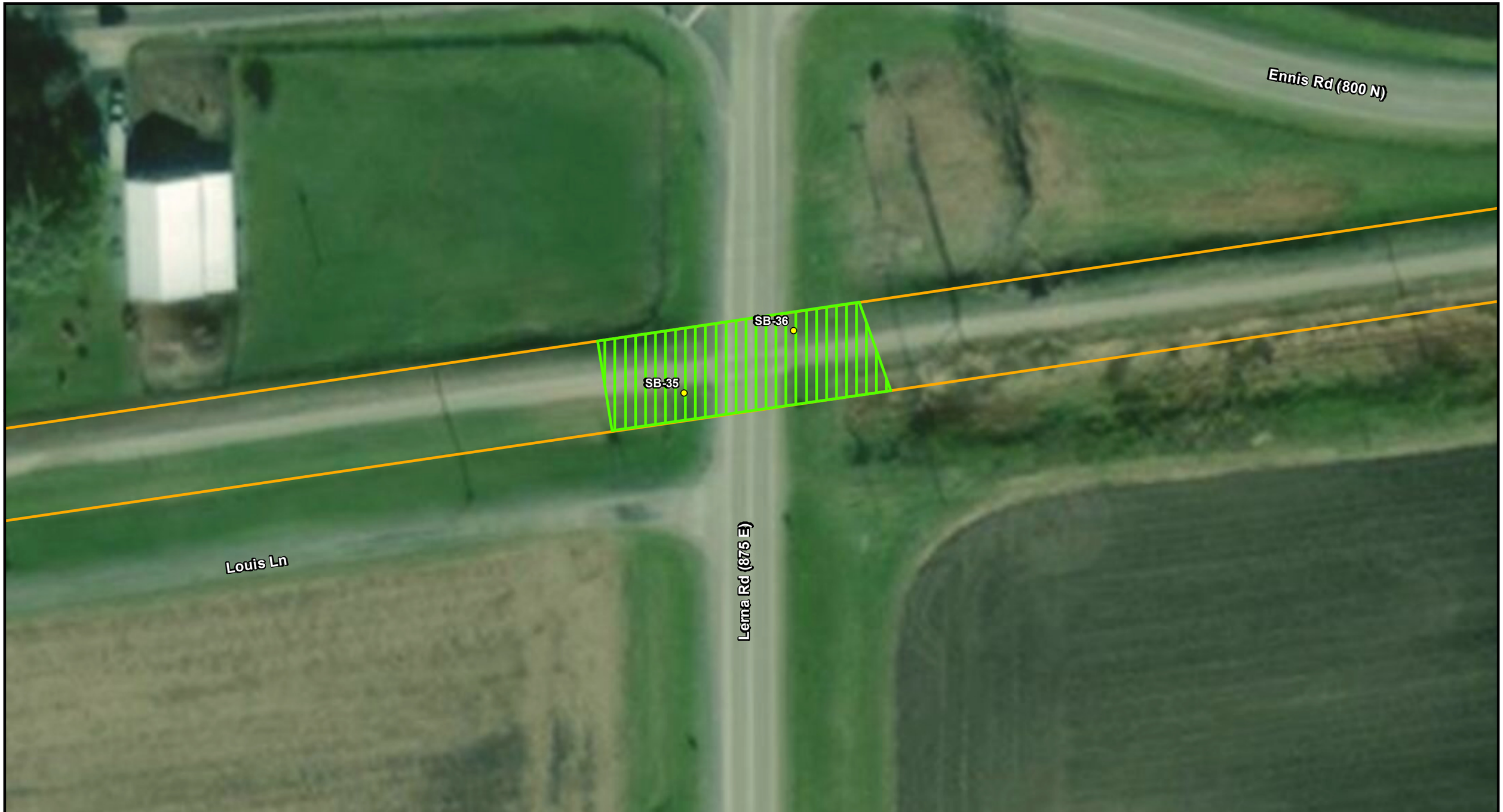

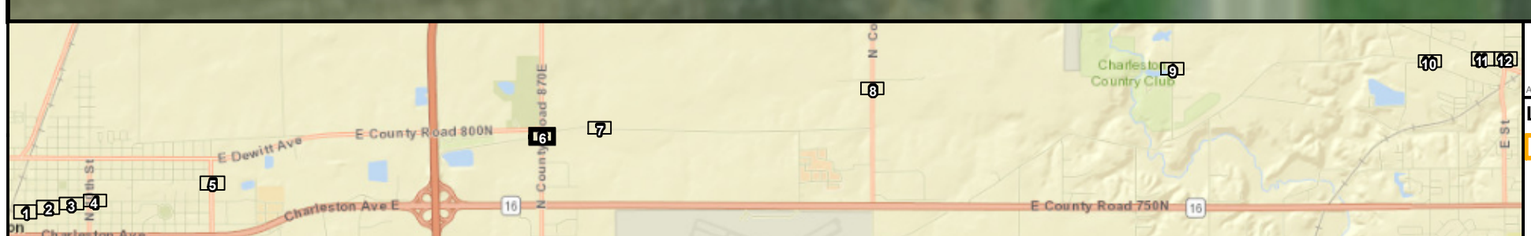

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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 6 of 12

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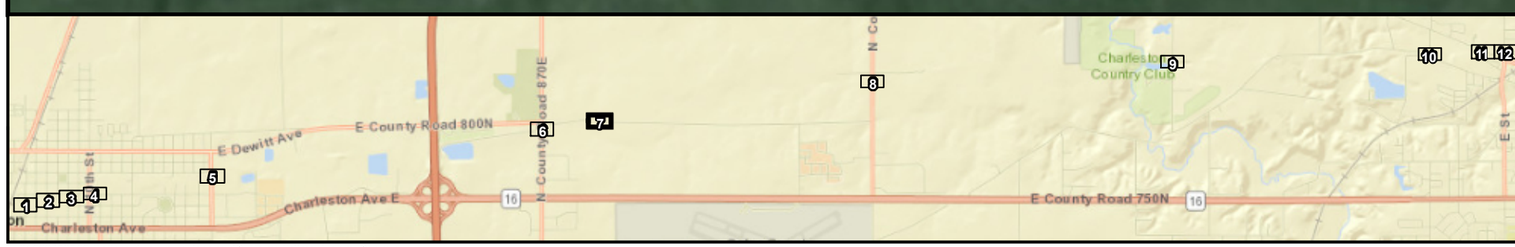
SB-37

SB-38

Ennis Rd (800 N)



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Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

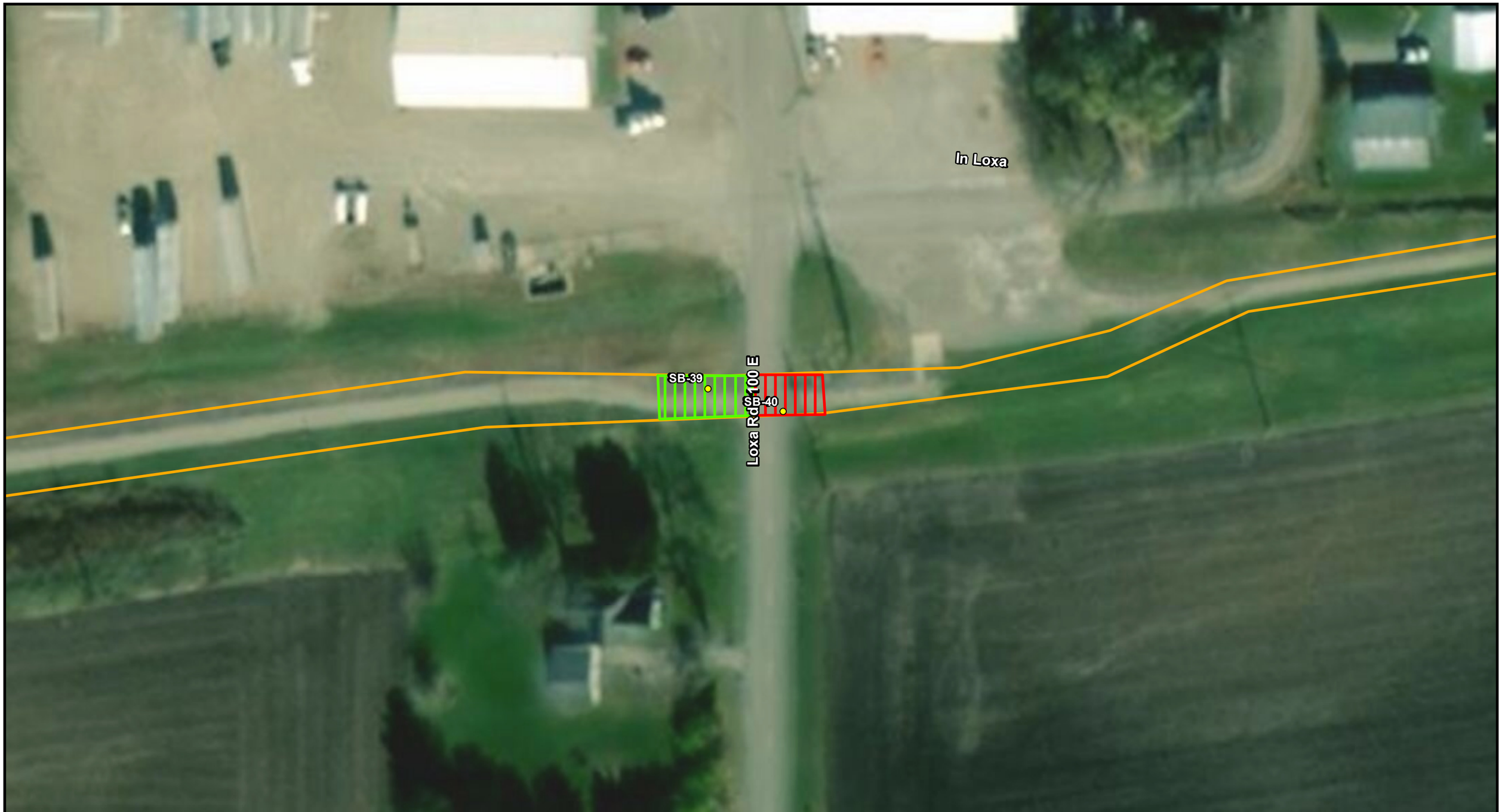
Soil Classification

- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 7 of 12

J:\81022053\03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd



0 50 100 200
Feet

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(3)
- a(4)
- a(5)
- Unrestricted

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 8 of 12

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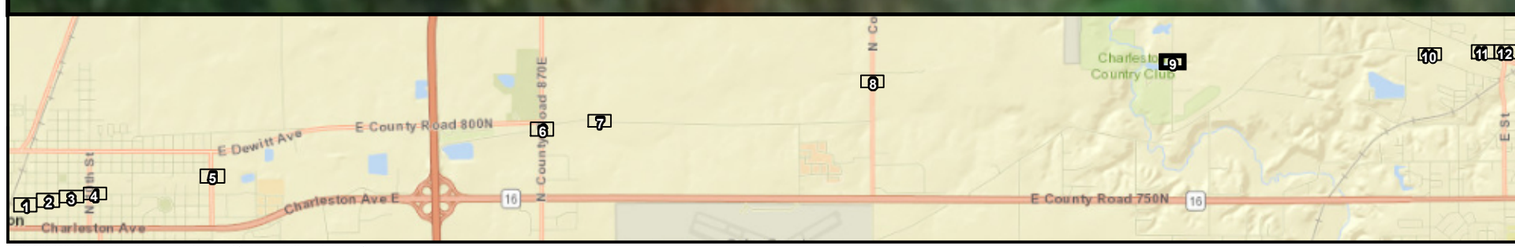
1325 E

SB-41

SB-42

Country Crub Rd



0 50 100 200

Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 9 of 12

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TABLE 3-3
VOC (& BTEX) SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-13**	**SB-14**	**SB-15**	**SB-17**	**SB-20**	**SB-21**	**SB-34**	**SB-39**
Depth, ft	*Concentration* [a/]	1-3	1-3	1-3	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent	----------	----------	----------	----------	----------	----------	*mg/kg*	----------	----------	----------	----------	----------
Acetone	*25*	--	--	--	<0.0684	--	<0.0665	<0.0744	--	--	<0.0714	--
Benzene	*0.03*	<0.03	<0.03	<0.03	<0.00195	<0.03	<0.0019	<0.00213	<0.03	<0.03	<0.00204	<0.03
Bromodichloromethane	*0.6*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Bromoform	*0.8*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
Bromomethane	*0.2*	--	--	--	<0.0195	--	<0.019	<0.0213	--	--	<0.0204	--
Carbon disulfide	*9*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
Carbon tetrachloride	*0.07*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Chlorobenzene	*1*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Chlorodibromomethane	*0.4*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Chloroform	*0.3*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
cis-1,3-Dichloropropene	*0.005*	--	--	--	<0.002	--	<0.002	<0.002	--	--	<0.002	--
trans-1,3-Dichloropropene	*0.005*	--	--	--	<0.0004	--	<0.0004	<0.0004	--	--	<0.0004	--
1,1-Dichloroethane	*23*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
1,2-Dichloroethane	*0.02*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
1,1-Dichloroethene	*0.06*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
cis-1,2-Dichloroethene	*0.4*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
trans-1,2-Dichloroethene	*0.7*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
1,2-Dichloropropane	*0.03*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Ethylbenzene	*13*	<0.225	<0.232	<0.199	<0.00782	<0.202	<0.0076	<0.00851	<0.257	<0.221	<0.00816	<0.208
Methyl-tert-butylether (MTBE)	*0.32*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Methylene chloride	*0.02*	--	--	--	<0.00782	--	<0.0076	<0.00851	--	--	<0.00816	--
Styrene	*4*	--	--	--	<0.00782	--	<0.0076	<0.00851	--	--	<0.00816	--
Tetrachloroethene	*0.06*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
Toluene	*12*	<0.112	<0.116	<0.0996	<0.00195	<0.101	<0.0019	<0.00213	<0.128	<0.111	<0.00204	<0.104
1,1,1-Trichloroethane	*2*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
1,1,2-Trichloroethane	*0.02*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Trichloroethene	*0.06*	--	--	--	<0.00195	--	<0.0019	<0.00213	--	--	<0.00204	--
Vinyl acetate	*10*	--	--	--	<0.0195	--	<0.019	<0.0213	--	--	<0.0204	--
Vinyl chloride	*0.01*	--	--	--	<0.00391	--	<0.0038	<0.00425	--	--	<0.00408	--
Xylene, Total	*5.6*	<0.674	<0.696	<0.597	<0.0117	<0.607	<0.0114	<0.0128	<0.771	<0.664	<0.0122	<0.625

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

TABLE 3-5
PNA SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Sample ID	*Maximum Allowable Concentration* [1]				**SB-1**	**SB-2**	**SB-3**	**SB-6**	**SB-7**	**SB-10**	**SB-14**	**SB-20**	**SB-21**	**SB-28**	**SB-35**	**SB-36**	**SB-37**	**SB-39**	**SB-41**
Sample Depth	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	1-3	1-3	1-3	3-5	3-5	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituents	*mg/kg*																		
Acenaphthene	*570*	*570*	*570*	*570*	<0.00829	<0.00925	<0.00908	<0.00877	0.0399	0.024	<0.0824	<0.00979	<0.00965	<0.00855	<0.0085	<0.00952	<0.00972	0.0145	0.00963
Acenaphthylene	*85*	*85*	*85*	*85*	0.0498	0.077	0.127	0.0175	0.0174	0.0324	<0.0824	0.226	0.054	0.0348	0.0184	0.0208	0.0412	0.255	0.00971
Anthracene	*12,000*	*12,000*	*12,000*	*12,000*	0.0405	0.0399	0.0917	0.0205	0.0874	0.0669	0.0659	0.153	0.0686	0.0261	0.015	0.0126	0.0283	0.157	0.029
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	0.0778	0.141	0.216	0.123	0.3	0.321	0.216	0.57	0.208	0.115	0.0749	0.0431	0.12	0.551	0.165
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**0.123**	**0.172**	**0.255**	**0.162**	**0.347**	**0.403**	**0.372**	**0.634**	**0.198**	**0.154**	**0.195**	**0.106**	**0.246**	**0.704**	**0.199**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	0.119	0.183	0.278	0.151	0.318	0.341	0.345	0.784	0.195	0.161	0.192	0.1	0.262	0.835	0.202
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	0.0607	0.0704	0.114	0.0565	0.113	0.13	0.131	0.228	0.0565	0.0459	0.0373	0.0239	0.0496	0.279	0.0745
Benzo(g,h,i)perylene	*2,300*	*2,300*	*2,300*	*2,300*	0.101	0.0957	0.179	0.083	0.165	0.135	0.212	0.402	0.0994	0.0728	0.132	0.0754	0.106	0.423	0.106
Chrysene	*88*	*88*	*88*	*88*	0.0817	0.132	0.21	0.11	0.221	0.223	0.158	0.523	0.166	0.0916	0.0756	0.039	0.112	0.55	0.154
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	<0.0414	<0.0463	<0.0454	<0.0438	<0.0497	0.045	<0.412	**0.107**	<0.0482	<0.0427	<0.0425	<0.0476	<0.0486	**0.0999**	<0.0455
Fluoranthene	*3,100*	*3,100*	*3,100*	*3,100*	0.119	0.193	0.275	0.185	0.334	0.37	0.275	0.653	0.216	0.132	0.0892	0.0475	0.145	0.672	0.298
Fluorene	*560*	*560*	*560*	*560*	<0.00829	<0.00925	0.014	<0.00877	0.0515	0.0432	<0.0824	0.0248	0.0221	<0.00855	<0.0085	<0.00952	<0.00972	0.0208	<0.0091
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	0.123	0.141	0.216	0.175	0.371	0.345	0.357	0.58	0.146	0.184	0.206	0.115	0.243	0.597	0.148
Naphthalene	*1.8*	*1.8*	*1.8*	*1.8*	0.0365	0.0276	0.0471	0.0336	0.05	<0.0224	<0.206	0.36	0.557	0.0897	<0.0213	<0.0238	0.0596	0.0887	<0.0227
Phenanthrene	*210*	*210*	*210*	*210*	0.102	0.11	0.191	0.166	0.715	0.23	0.152	0.977	0.742	0.193	0.0244	0.0181	0.14	0.474	0.111
Pyrene	*2,300*	*2,300*	*2,300*	*2,300*	0.108	0.176	0.285	0.194	0.335	0.293	0.272	0.703	0.255	0.141	0.0898	0.0522	0.173	0.712	0.241

[1] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-7
SVOC SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable Concentration* [1]				**SB-13**	**SB-15**	**SB-17**	**SB-34**
Depth, ft	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	0-1	0-1	0-1	0-1
Constituent	----------*mg/kg*----------							
Acenaphthene	*570*	*570*	*570*	*570*	<0.0943	<0.0922	<0.0232	<0.0829
Anthracene	*12000*	*12000*	*12000*	*12000*	0.0518	<0.0461	0.0371	0.0912
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	0.199	0.177	0.146	0.487
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**0.254**	**0.154**	**0.196**	**0.597**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	0.409	0.389	0.402	1.17
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	<0.189	<0.369	0.133	<0.664
bis(2-Chloroethyl)ether	*0.66*	*0.66*	*0.66*	*0.66*	<0.66	<0.66	<0.348	<0.66
bis(2-Ethylhexyl)phthalate	*46*	*46*	*46*	*46*	<0.283	<0.276	<0.0696	<0.249
Butyl benzyl phthalate	*930*	*930*	*930*	*930*	<0.283	<0.276	<0.0696	<0.249
Carbazole	*0.6*	*0.6*	*0.6*	*0.6*	<0.0943	<0.0922	<0.0232	<0.0829
4-Chloroaniline	*0.7*	*0.7*	*0.7*	*0.7*	<0.141	<0.138	<0.0348	<0.124
2-Chlorophenol	*1.5*	*1.5*	*1.5*	*1.5*	<0.0943	<0.0922	<0.0232	<0.0829
Chrysene	*88*	*88*	*88*	*88*	0.242	0.195	0.18	0.6
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	<0.09	<0.09	<0.09	<0.09
1,2-Dichlorobenzene	*17*	*17*	*17*	*17*	<0.189	<0.184	<0.0464	<0.166
1,4-Dichlorobenzene	*2*	*2*	*2*	*2*	<0.189	<0.184	<0.0464	<0.166
2,4-Dichlorophenol	*0.48*	*0.48*	*0.48*	*0.48*	<0.0943	<0.0922	<0.0232	<0.0829
Diethyl phthalate	*470*	*470*	*470*	*470*	<0.0943	<0.0922	<0.0232	<0.0829
2,4-Dimethylphenol	*9*	*9*	*9*	*9*	<0.0943	<0.0922	<0.0232	<0.0829
Di-n-butyl phthalate	*2300*	*2300*	*2300*	*2300*	<0.0943	<0.0922	<0.0232	<0.0829
2,4-Dinitrophenol	*3.3*	*3.3*	*3.3*	*3.3*	<0.465	<0.454	<0.2	<0.409
2,4-Dinitrotoluene	*0.25*	*0.25*	*0.25*	*0.25*	<0.25	<0.25	<0.139	<0.25
2,6-Dinitrotoluene	*0.26*	*0.26*	*0.26*	*0.26*	<0.26	<0.26	<0.0928	<0.26
Di-n-octylphthalate	*1600*	*1600*	*1600*	*1600*	<0.377	<0.737	<0.0928	<1.33
Fluoranthene	*3100*	*3100*	*3100*	*3100*	0.409	0.349	0.286	1.21
Fluorene	*560*	*560*	*560*	*560*	<0.0943	<0.0922	<0.0232	<0.0829
Hexachlorobenzene	*0.4*	*0.4*	*0.4*	*0.4*	<0.0943	<0.0922	<0.0232	<0.0829
Hexachlorocyclopentadiene	*1.1*	*1.1*	*1.1*	*1.1*	<1.89	<1.84	<0.464	<1.66
Hexachloroethane	*0.5*	*0.5*	*0.5*	*0.5*	<0.189	<0.184	<0.0464	<0.166
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	<0.377	<0.737	<0.0928	<0.9
Isophorone	*8*	*8*	*8*	*8*	<0.566	<0.553	<0.139	<0.498
Naphthalene	*1.8*	*1.8*	*1.8*	*2*	<0.189	<0.184	<0.0464	<0.166
Nitrobenzene	*0.26*	*0.26*	*0.26*	*0.26*	<0.1	<0.1	<0.0464	<0.1
n-Nitrosodi-n-propylamine	*0.0018*	*0.0018*	*0.0018*	*0.0018*	<0.0442	<0.0432	<0.0109	<0.0389
n-Nitrosodiphenylamine	*1*	*1*	*1*	*1*	<0.0943	<0.0922	<0.0232	<0.0829
Pentachlorophenol	*0.02*	*0.02*	*0.02*	*0.02*	<0.254	<0.248	<0.0624	<0.223
Phenol	*100*	*100*	*100*	*100*	<0.189	<0.184	<0.0464	<0.166
Pyrene	*2300*	*2300*	*2300*	*2300*	0.363	0.374	0.278	1.36
1,2,4-Trichlorobenzene	*5*	*5*	*5*	*5*	<0.189	<0.184	<0.0464	<0.166
2,4,5-Trichlorophenol	*26*	*26*	*26*	*26*	<0.0943	<0.0922	<0.0232	<0.0829
2,4,6-Trichlorophenol	*0.66*	*0.66*	*0.66*	*0.66*	<0.0943	<0.0922	<0.0232	<0.0829

[1]Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2]Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-9
RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-6**	**SB-7**	**SB-10**	**SB-13**	**SB-14**	**SB-15**	**SB-17**	**SB-20**	**SB-21**	**SB-28**	**SB-34**	**SB-35**	**SB-36**	**SB-37**	**SB-39**	**SB-41**
Depth, ft	*Concentration* [a/]	1-3	1-3	1-3	3-5	3-5	3-5	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Constituent		----------	----------	----------	----------	----------	----------	----------	----------	*mg/kg*	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
Antimony	5	<1.39	<1.38	<1.41	<1.53	<1.66	<1.61	<1.43	<1.3	<1.33	<1.31	<1.48	<1.41	<1.46	<1.26	<1.31	<1.41	<1.48	<1.5	<1.35
Arsenic	11.3/13	8.02	7.84	9.93	<11.3	<11.3	<11.3	9.81	7.99	8.82	9.01	**12.7**	8.87	<11.3	4.72	2.91	9.63	7.53	8.36	7.42
Barium	1,500	43.6	42	50.6	114	66.8	112	130	123	37.9	38.4	139	81.5	72.1	46.4	43.1	138	94.3	155	90.2
Beryllium	22	<0.56	<0.56	<0.563	<0.153	<0.166	<0.161	<0.572	<0.56	<0.133	<0.56	<0.591	<0.141	<0.146	<0.126	<0.131	<0.564	<0.148	<0.15	<0.135
Cadmium	5.2	0.695	0.632	0.794	0.94	<0.5	0.627	0.437	0.299	0.471	0.574	1.77	0.846	1.04	0.389	0.314	0.443	0.497	0.515	0.63
Calcium	--	45700	35300	41600	7170	928	4080	22500	94100	144000	93200	21800	7790	14300	137000	206000	32300	25900	10500	53400
Chromium, total	21	11.1	6.1	15.1	<13	<13	13.5	10.4	5.58	**24.3**	3.06	9.33	**42**	<13	18.5	12.5	12.8	**33.9**	**35.3**	**34.9**
Cobalt	20	5.54	4.86	6.04	6.04	<1.66	10.7	6.48	2.9	2.95	2.08	5.49	7.44	6.58	1.77	1.32	8.22	4.95	6.22	6.02
Copper	2,900	94.7	69.6	84.3	72.8	67.4	53.1	27.9	25.6	13.3	77.5	264	51.4	57.9	12.4	7.78	21.1	24.8	22.1	21
Iron	15,000/15,900	**27800**	**24600**	**37900**	**20200**	8450	**24000**	11700	12000	12400	15000	**32800**	**26900**	**24300**	12900	9740	**23200**	**16500**	11500	**18700**
Lead	107	73.8	69.1	**116**	61.3	66.7	32.7	78.6	32.5	38.1	44	**184**	55.3	69.3	15.9	13.4	22.6	19.3	18.1	81.4
Magnesium	325,000	19900	13800	9480	2430	258	2830	9410	17000	34600	34800	4440	2690	8270	14900	10300	2960	3250	2670	9190
Manganese	630/636	453	248	275	596	9.38	614	448	464	**675**	404	349	304	409	**760**	**719**	**706**	282	**678**	623
Mercury	0.1	**0.392**	**0.204**	**0.177**	**0.24**	**0.608**	**0.269**	<0.067	<0.064	<0.068	0.081	**0.477**	0.088	<0.071	<0.062	<0.064	<0.067	<0.07	**0.109**	<0.07
Nickel	100	14.2	11.5	13.8	15.7	4.92	17.5	11.6	10.3	11.4	7.19	13.9	18.7	16.5	7.44	5.72	14.3	11.7	12.4	13
Potassium	--	519	418	655	1280	758	1350	1990	896	1020	568	957	1070	813	536	510	1020	1550	1970	1150
Selenium	1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**35.6**	<4.4	**4.82**	**44.5**	<4.4	**30**	**18**	<4.4	**31.9**	**37.3**	**31.5**
Sodium	--	204	320	337	130	267	67.9	1060	258	289	344	438	215	193	91.2	224	81.7	108	89.8	69.6
Thallium	2.6	**2.84**	2.2	**2.78**	<4.2	<1.4	<3.9	2.13	1.82	1.99	1.71	**3.22**	**2.7**	<3.9	2.22	2.37	**3.55**	2.27	**3.4**	**2.66**
Vanadium	550	18.7	14.8	27.6	18.9	13.1	24	20.8	12.6	9.89	7.63	24.7	24	18.4	9.11	4.22	28.3	23.2	27.4	18
Zinc	5,100	69.2	55.4	66.5	113	11.7	46.7	82.6	48.7	45	67.5	269	79	74.3	30.6	15.9	45.9	51.6	58.3	88.7

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

-- Constituent for which sample was not analyzed, or for which no Remedial Objective exists.

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-10
TCLP/SPLP METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-1**	**SB-2**	**SB-3**	**SB-6**	**SB-10**	**SB-15**	**SB-20**	**SB-21**	**SB-28**	**SB-35**	**SB-36**	**SB-37**	**SB-39**	**SB-41**
Depth, ft	*Concentration* [a/]	1-3'	1-3'	1-3'	3-5'	3-5'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'	0-1'
Constituent	*mg/L*														
SPLP Manganese	0.15	--	--	--	--	--	<0.025	--	--	--	0.0378	0.0291	--	--	--
TCLP Chromium	0.1	--	--	--	--	--	<0.025	--	<0.025	--	--	--	<0.025	<0.025	<0.025
TCLP Iron	5	<0.125	<0.125	<0.125	<0.125	4.74	--	--	<0.125	<0.125	--	<0.125	<0.125	--	<0.125
TCLP Lead	0.0075	--	--	<0.0075	--	--	--	<0.0075	--	--	--	--	--	--	--
TCLP Manganese	0.15	--	--	--	--	--	--	--	--	--	--	--	--	<0.025	--
TCLP Silver	0.05	--	--	--	--	--	<0.0025	--	<0.0025	--	--	--	<0.0025	<0.0025	<0.0025
TCLP Thallium	0.002	<0.002	--	<0.002	--	--	--	--	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

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Analytical Report

Adam Kittler
Huff & Huff, A subsidiary of GZA
915 Harger Road, Suite 330
Oak Brook, IL 60523

January 30, 2019

Work Order: 18L0509

RE: TACO Listed Parameters 2018
Mattoon Bike Trail

Dear Adam Kittler:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

This is a revised report, that supersedes all previous reports. Please see case narrative for an explanation of revision.

Sincerely,

Tim Witrzek
Federal Program Manager
847.967.6666
twitrzek@emt.com
Approved for release: 1/30/2019 8:29:13AM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 1-3'	18L0509-02	Soil	12/12/18 10:55	12/14/18 09:40
SB-2 1-3'	18L0509-05	Soil	12/12/18 11:01	12/14/18 09:40
SB-3 1-3'	18L0509-08	Soil	12/12/18 11:07	12/14/18 09:40
SB-4 1-3'	18L0509-11	Soil	12/12/18 11:12	12/14/18 09:40
SB-4 3-5'	18L0509-12	Soil	12/12/18 11:13	12/14/18 09:40
SB-5 1-3'	18L0509-14	Soil	12/12/18 11:16	12/14/18 09:40
SB-5 3-5'	18L0509-15	Soil	12/12/18 11:17	12/14/18 09:40
SB-6 1-3'	18L0509-17	Soil	12/12/18 11:19	12/14/18 09:40
SB-6 3-5'	18L0509-18	Soil	12/12/18 11:20	12/14/18 09:40
SB-7 1-3'	18L0509-20	Soil	12/12/18 11:25	12/14/18 09:40
SB-7 3-5'	18L0509-21	Soil	12/12/18 11:26	12/14/18 09:40
SB-8 1-3'	18L0509-23	Soil	12/12/18 11:28	12/14/18 09:40
SB-8 3-5'	18L0509-24	Soil	12/12/18 11:29	12/14/18 09:40
SB-9 1-3'	18L0509-26	Soil	12/12/18 11:31	12/14/18 09:40
SB-9 3-5'	18L0509-27	Soil	12/12/18 11:32	12/14/18 09:40
SB-10 1-3'	18L0509-29	Soil	12/12/18 00:00	12/14/18 09:40
SB-10 3-5'	18L0509-30	Soil	12/12/18 00:00	12/14/18 09:40
SB-11 0-1'	18L0509-31	Soil	12/12/18 11:38	12/14/18 09:40
SB-12 0-1'	18L0509-32	Soil	12/12/18 11:42	12/14/18 09:40
SB-13 0-1'	18L0509-33	Soil	12/12/18 11:45	12/14/18 09:40
SB-14 0-1'	18L0509-34	Soil	12/12/18 11:49	12/14/18 09:40
SB-15 0-1'	18L0509-35	Soil	12/12/18 11:53	12/14/18 09:40
SB-16 0-1'	18L0509-36	Soil	12/12/18 11:58	12/14/18 09:40
SB-17 0-1'	18L0509-37	Soil	12/12/18 12:02	12/14/18 09:40
SB-18 0-1'	18L0509-38	Soil	12/12/18 12:05	12/14/18 09:40
SB-19 0-1'	18L0509-39	Soil	12/12/18 12:07	12/14/18 09:40
SB-20 0-1'	18L0509-40	Soil	12/12/18 12:10	12/14/18 09:40
SB-21 0-1'	18L0509-41	Soil	12/12/18 12:16	12/14/18 09:40
SB-22 0-1'	18L0509-42	Soil	12/12/18 12:18	12/14/18 09:40
SB-23 0-1'	18L0509-43	Soil	12/12/18 12:21	12/14/18 09:40
SB-24 0-1'	18L0509-44	Soil	12/12/18 12:25	12/14/18 09:40
SB-25 0-1'	18L0509-45	Soil	12/12/18 12:27	12/14/18 09:40
SB-26 0-1'	18L0509-46	Soil	12/12/18 12:30	12/14/18 09:40
SB-27 0-1'	18L0509-47	Soil	12/12/18 12:33	12/14/18 09:40
SB-28 0-1'	18L0509-48	Soil	12/12/18 12:37	12/14/18 09:40
SB-29 1-3'	18L0509-49	Soil	12/12/18 12:39	12/14/18 09:40
SB-29 3-5'	18L0509-50	Soil	12/12/18 12:40	12/14/18 09:40
SB-30 1-3'	18L0509-51	Soil	12/12/18 12:42	12/14/18 09:40
SB-30 3-5'	18L0509-52	Soil	12/12/18 12:43	12/14/18 09:40
SB-31 1-3'	18L0509-53	Soil	12/12/18 12:44	12/14/18 09:40
SB-31 3-5'	18L0509-54	Soil	12/12/18 12:45	12/14/18 09:40
SB-32 0-1'	18L0509-55	Soil	12/12/18 12:47	12/14/18 09:40
SB-33 0-1'	18L0509-56	Soil	12/12/18 12:51	12/14/18 09:40
SB-34 0-1'	18L0509-57	Soil	12/12/18 12:54	12/14/18 09:40
SB-35 0-1'	18L0509-58	Soil	12/12/18 13:02	12/14/18 09:40
SB-36 0-1'	18L0509-59	Soil	12/12/18 13:08	12/14/18 09:40
SB-37 0-1'	18L0509-60	Soil	12/12/18 13:17	12/14/18 09:40
SB-38 0-1'	18L0509-61	Soil	12/12/18 13:20	12/14/18 09:40
SB-39 0-1'	18L0509-62	Soil	12/12/18 13:38	12/14/18 09:40
SB-40 0-1'	18L0509-63	Soil	12/12/18 13:35	12/14/18 09:40

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SB-41 0-1'	18L0509-64	Soil	12/12/18 13:49	12/14/18 09:40
SB-42 0-1'	18L0509-65	Soil	12/12/18 13:51	12/14/18 09:40
SB-43 0-1'	18L0509-66	Soil	12/12/18 14:02	12/14/18 09:40
SB-44 0-1'	18L0509-67	Soil	12/12/18 14:05	12/14/18 09:40
SB-45 0-1'	18L0509-68	Soil	12/12/18 14:11	12/14/18 09:40
SB-46 0-1'	18L0509-69	Soil	12/12/18 14:15	12/14/18 09:40
SB-47 0-1'	18L0509-70	Soil	12/12/18 14:18	12/14/18 09:40

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Case Narrative

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Date: 01/30/2019

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 18L0509
The samples were received on 12/14/18 09:40. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was:

Cooler	Temp C°
Default Cooler	4.8

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

On 1/4/19 client added addtional analyses TCLP, SPLP and Sim PNAs to several samples. Client is aware that Sim PNA samples are passed hold time.

On 1/16/19 client added TCLP Fe analysis to several samples.

On 1/22/19 client added additional TCLP analysis to two samples.

6010 Total Metals:
B8L0552-BS1: The LCS had multiple analytes below the laboratory control limit, but all are within 15% of the target value. The bracketing CCV recoveries in the run are within the acceptance limits.

6010_Ca, Fe, and K:
There were trace detection of these analytes in the blank, but the levels of the analytes in the samples was well above 10% of the blank level. The levels detected in the blank are not significant for the level found in the samples.

The Batch B8L0552 QC for the MS, MSD, DUP, and PS had many outliers, most likely due to the sample matrices combined with some of the high levels for some of the target analytes.

B9A0160: Elevated limit for Tl due to biases caused by spectral overlap from high concentrations of interfering elements .

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8270_PNA_SIM

Samples 20 and 23, the surrogate spike compound, fluoranthene-d10 recovered outside control criteria due to matrix.

Sample 56 was utilized for matrix spike / matrix spike (MS/MSD) duplicate analysis. Due to matrix and relatively high concentration of analytes in the sample, several MS/MSD compounds were outside control criteria.

8270D_SVOC

Sample 39 was utilized for matrix spike / matrix spike duplicate analysis. Due to sample matrix some compounds recovered outside control criteria.

The internal standard perylene-d12 recovered outside control criteria for samples 33, 35 (2X dilution reported), 37, 39 and 57 at 45%, 37%, 40%, 42%,and 32%, respectfully. Control criteria for the internal standards are 50% to 200%. Those with recoveries above 40% were reported to maintain the detection limits for the associated analytes. Samples 35 and 57 were run initially at a 1X dilution and repeated at a 2Xwhich was then reported.

The analytes associated with this internal standard would be:

benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene.

8260B_VOC_5035_LOW

The surrogate spike compound, 1,2-dichloroethane-d4, for sample 66 recovered outside control criteria due to sample matrix.

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Client Sample Results

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-1 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 10:55
Matrix: Soil
Lab ID: 18L0509-02

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5230**	69.5		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Arsenic	**8.02**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Barium	**43.6**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Cadmium	**0.695**	0.139		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Calcium	**45700**	695		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Chromium	**11.1**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Cobalt	**5.54**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Copper	**94.7**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Iron	**27800**	278		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Lead	**73.8**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Magnesium	**19900**	695		mg/Kg dry	12/18/18 14:59	B8L0514	KJ1	100
Manganese	**453**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Nickel	**14.2**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Potassium	**519**	6.95		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:44	B8L0514	KJ1	10
Sodium	**204**	6.95		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Thallium	**2.84**	0.367		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Vanadium	**18.7**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Zinc	**69.2**	1.39		mg/Kg dry	12/18/18 16:29	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:16	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:16	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.392**	0.063		mg/Kg dry	12/19/18 10:57	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.9**	0.100		% (Percent)	12/15/18 06:50	B8L0496	MKP	1
Method: SW9045C								
pH	**7.77**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Ethylbenzene	< 225	225		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Toluene	< 112	112		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50
Xylenes, Total	< 674	674		ug/Kg dry	12/18/18 05:07	B8L0740	JL	50

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-1 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 10:55
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-02 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: Fluorobenzene				*Recovery: 99%*	*Limits: 91-106*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 119%*	*Limits: 85-119*	*12/18/18 05:07*	*B8L0740*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**58.0**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
2-Methylnaphthalene	**67.9**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Acenaphthene	< 8.29	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Acenaphthylene	**49.8**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Anthracene	**40.5**	4.14		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(a)anthracene	**77.8**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(a)pyrene	**123**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(b)fluoranthene	**119**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(g,h,i)perylene	**101**	20.7		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Benzo(k)fluoranthene	**60.7**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Chrysene	**81.7**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 41.4	41.4		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Fluoranthene	**119**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Fluorene	< 8.29	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**123**	8.29		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Naphthalene	**36.5**	20.7		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Phenanthrene	**102**	4.14		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Pyrene	**108**	16.6		ug/Kg dry		12/22/18 01:21	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 61%*	*Limits: 50-150*	*12/22/18 01:21*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 52%*	*Limits: 50-150*	*12/22/18 01:21*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-2 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:01
Matrix: Soil
Lab ID: 18L0509-05

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5240**	69.0		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Antimony	< 1.38	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Arsenic	**7.84**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Barium	**42.0**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Cadmium	**0.632**	0.138		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Calcium	**35300**	690		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Chromium	**6.10**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Cobalt	**4.86**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Copper	**69.6**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Iron	**24600**	276		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Lead	**69.1**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Magnesium	**13800**	690		mg/Kg dry	12/18/18 15:03	B8L0514	KJ1	100
Manganese	**248**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Nickel	**11.5**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Potassium	**418**	6.90		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:48	B8L0514	KJ1	10
Sodium	**320**	6.90		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Thallium	**2.20**	0.365		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Vanadium	**14.8**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Zinc	**55.4**	1.38		mg/Kg dry	12/18/18 16:33	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:17	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.204**	0.065		mg/Kg dry	12/19/18 11:00	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.1**	0.100		% (Percent)	12/15/18 06:52	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Ethylbenzene	< 232	232		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Toluene	< 116	116		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Xylenes, Total	< 696	696		ug/Kg dry	12/18/18 05:39	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%* *Limits: 91-106*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 87%* *Limits: 71-112*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 105%* *Limits: 85-119*	*12/18/18 05:39*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-2 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:01
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-05 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**63.8**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
2-Methylnaphthalene	**71.5**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Acenaphthene	< 9.25	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Acenaphthylene	**77.0**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Anthracene	**39.9**	4.63		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(a)anthracene	**141**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(a)pyrene	**172**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(b)fluoranthene	**183**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(g,h,i)perylene	**95.7**	23.1		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Benzo(k)fluoranthene	**70.4**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Chrysene	**132**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 46.3	46.3		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Fluoranthene	**193**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Fluorene	< 9.25	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**141**	9.25		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Naphthalene	**27.6**	23.1		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Phenanthrene	**110**	4.63		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Pyrene	**176**	18.5		ug/Kg dry		12/22/18 01:57	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 67%*	*Limits: 50-150*	*12/22/18 01:57*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 56%*	*Limits: 50-150*	*12/22/18 01:57*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-3 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:07
Matrix: Soil
Lab ID: 18L0509-08

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**6260**	70.4		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Arsenic	**9.93**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Barium	**50.6**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Beryllium	< 0.563	0.563		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Cadmium	**0.794**	0.141		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Calcium	**41600**	704		mg/Kg dry	12/18/18 15:24	B8L0514	KJ1	100
Chromium	**15.1**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Cobalt	**6.04**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Copper	**84.3**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Iron	**37900**	282		mg/Kg dry	12/18/18 15:24	B8L0514	KJ1	100
Lead	**116**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Magnesium	**9480**	70.4		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Manganese	**275**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Nickel	**13.8**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Potassium	**655**	7.04		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 15:52	B8L0514	KJ1	10
Sodium	**337**	7.04		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Thallium	**2.78**	0.372		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Vanadium	**27.6**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Zinc	**66.5**	1.41		mg/Kg dry	12/18/18 16:38	B8L0514	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:19	B9A0188	AG	5
Lead, TCLP	< 0.00750	0.00750		mg/L	01/08/19 18:19	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:19	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.177**	0.066		mg/Kg dry	12/19/18 11:02	B8L0599	TB2	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**87.9**	0.100		% (Percent)	12/15/18 06:54	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Ethylbenzene	< 199	199		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Toluene	< 99.6	99.6		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Xylenes, Total	< 597	597		ug/Kg dry	12/18/18 06:11	B8L0740	JL	50
Surrogate: Fluorobenzene				*Recovery: 92%* *Limits: 91-106*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-3 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:07
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-08 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: Toluene-d8				*Recovery: 85%*	*Limits: 71-112*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 100%*	*Limits: 85-119*	*12/18/18 06:11*	*B8L0740*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**88.1**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
2-Methylnaphthalene	**91.8**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Acenaphthene	< 9.08	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Acenaphthylene	**127**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Anthracene	**91.7**	4.54		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(a)anthracene	**216**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(a)pyrene	**255**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(b)fluoranthene	**278**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(g,h,i)perylene	**179**	22.7		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Benzo(k)fluoranthene	**114**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Chrysene	**210**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Dibenzo(a,h)anthracene	< 45.4	45.4		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Fluoranthene	**275**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Fluorene	**14.0**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Indeno(1,2,3-cd)pyrene	**216**	9.08		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Naphthalene	**47.1**	22.7		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Phenanthrene	**191**	4.54		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Pyrene	**285**	18.2		ug/Kg dry		12/22/18 02:34	B8L0562	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 69%*	*Limits: 50-150*	*12/22/18 02:34*	*B8L0562*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 56%*	*Limits: 50-150*	*12/22/18 02:34*	*B8L0562*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-6 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:20
Matrix: Soil
Lab ID: 18L0509-18

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**12100**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Antimony	< 1.53	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Barium	**114**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Beryllium	< 0.153	0.153		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Cadmium	**0.940**	0.500		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Calcium	**7170**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Cobalt	**6.04**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Copper	**72.8**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Iron	**20200**	306		mg/Kg dry	01/08/19 17:49	B9A0160	KJ1	100
Lead	**61.3**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Magnesium	**2430**	76.6		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Manganese	**596**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Nickel	**15.7**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Potassium	**1280**	7.66		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:32	B9A0160	KJ1	10
Sodium	**130**	7.66		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Thallium	< 4.20	4.20		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Vanadium	**18.9**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Zinc	**113**	1.53		mg/Kg dry	01/08/19 21:18	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:07	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.240**	0.071		mg/Kg dry	01/08/19 12:30	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**81.5**	0.100	H	% (Percent)	01/08/19 08:24	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**73.7**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
2-Methylnaphthalene	**80.3**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Acenaphthene	< 8.77	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Acenaphthylene	**17.5**	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Anthracene	**20.5**	4.38	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(a)anthracene	**123**	8.77	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(a)pyrene	**162**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1
Benzo(b)fluoranthene	**151**	17.5	H	ug/Kg dry	01/09/19 08:48	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-6 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:20
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-18 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**83.0**	21.9	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Benzo(k)fluoranthene	**56.5**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Chrysene	**110**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 43.8	43.8	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Fluoranthene	**185**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Fluorene	< 8.77	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**175**	8.77	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Naphthalene	**33.6**	21.9	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Phenanthrene	**166**	4.38	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Pyrene	**194**	17.5	H	ug/Kg dry		01/09/19 08:48	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 08:48*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 08:48*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-7 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:26
Matrix: Soil
Lab ID: 18L0509-21

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2220**	83.2		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Antimony	< 1.66	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Barium	**66.8**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Beryllium	< 0.166	0.166		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Calcium	**928**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Cobalt	< 1.66	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Copper	**67.4**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Iron	**8450**	33.3		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Lead	**66.7**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Magnesium	**258**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Manganese	**9.38**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Nickel	**4.92**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Potassium	**758**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:36	B9A0160	KJ1	10
Sodium	**267**	8.32		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Thallium	< 1.40	1.40		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Vanadium	**13.1**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Zinc	**11.7**	1.66		mg/Kg dry	01/08/19 21:22	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.608**	0.074		mg/Kg dry	01/08/19 12:32	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**73.4**	0.100	H	% (Percent)	01/08/19 08:26	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**102**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
2-Methylnaphthalene	**82.6**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Acenaphthene	**39.9**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Acenaphthylene	**17.4**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Anthracene	**87.4**	4.97	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(a)anthracene	**300**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(a)pyrene	**347**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(b)fluoranthene	**318**	19.9	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(g,h,i)perylene	**165**	24.8	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Benzo(k)fluoranthene	**113**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Chrysene	**221**	9.93	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 49.7	49.7	H	ug/Kg dry	01/09/19 09:27	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-7 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:26
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-21 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**334**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Fluorene	**51.5**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**371**	9.93	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Naphthalene	**50.0**	24.8	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Phenanthrene	**715**	4.97	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Pyrene	**335**	19.9	H	ug/Kg dry		01/09/19 09:27	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 95%*	*Limits: 50-150*	*01/09/19 09:27*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 81%*	*Limits: 50-150*	*01/09/19 09:27*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-10 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 00:00
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-30

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**13900**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Antimony	< 1.61	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Barium	**112**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Beryllium	< 0.161	0.161		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Cadmium	**0.627**	0.500		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Calcium	**4080**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Chromium	**13.5**	13.0		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Cobalt	**10.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Copper	**53.1**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Iron	**24000**	321		mg/Kg dry	01/08/19 18:22	B9A0160	KJ1	100
Lead	**32.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Magnesium	**2830**	80.4		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Manganese	**614**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Nickel	**17.5**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Potassium	**1350**	8.04		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:04	B9A0160	KJ1	10
Sodium	**67.9**	8.04		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Thallium	< 3.90	3.90		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Vanadium	**24.0**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Zinc	**46.7**	1.61		mg/Kg dry	01/08/19 21:34	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	**4.74**	0.125		mg/L	01/21/19 15:09	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.269**	0.076		mg/Kg dry	01/08/19 12:47	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**77.1**	0.100	H	% (Percent)	01/08/19 08:32	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**29.3**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
2-Methylnaphthalene	**27.6**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Acenaphthene	**24.0**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Acenaphthylene	**32.4**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Anthracene	**66.9**	4.48	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(a)anthracene	**321**	8.95	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(a)pyrene	**403**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1
Benzo(b)fluoranthene	**341**	17.9	H	ug/Kg dry	01/09/19 14:14	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-10 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 00:00
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-30 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**135**	22.4	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Benzo(k)fluoranthene	**130**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Chrysene	**223**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Dibenzo(a,h)anthracene	**45.0**	44.8	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Fluoranthene	**370**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Fluorene	**43.2**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**345**	8.95	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Naphthalene	< 22.4	22.4	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Phenanthrene	**230**	4.48	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Pyrene	**293**	17.9	H	ug/Kg dry		01/09/19 14:14	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 93%*	*Limits: 50-150*	*01/09/19 14:14*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 94%*	*Limits: 50-150*	*01/09/19 14:14*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-13 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:45
Matrix: Soil
Lab ID: 18L0509-33 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,2-Dichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,3-Dichlorobenzene	< 27.6	27.6		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
1,4-Dichlorobenzene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dichlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dimethylphenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dinitrophenol	< 465	465		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Chloronaphthalene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Chlorophenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Methylphenol	< 47.1	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
2-Nitrophenol	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
3 & 4-Methylphenol	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1410	1410		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chloroaniline	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 141	141		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
4-Nitrophenol	< 1890	1890		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Acenaphthene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Acenaphthylene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Anthracene	**51.8**	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzidine	< 195	195		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(a)anthracene	**199**	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(a)pyrene	**254**	90.0		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(b)fluoranthene	**409**	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(g,h,i)perylene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Benzo(k)fluoranthene	< 189	189		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1890	1890		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 283	283		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Butyl benzyl phthalate	< 283	283		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Carbazole	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Chrysene	**242**	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Diethyl phthalate	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Dimethyl phthalate	< 47.1	47.1		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Di-n-butyl phthalate	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Di-n-octyl phthalate	< 377	377		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Fluoranthene	**409**	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Fluorene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1
Hexachlorobenzene	< 94.3	94.3		ug/Kg dry	12/26/18 11:29	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-13 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:45
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-33 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1890	1890		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Hexachloroethane	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 377	377		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Isophorone	< 566	566		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Naphthalene	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 44.2	44.2		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 94.3	94.3		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Pentachlorophenol	< 254	254		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Phenanthrene	**166**	94.3		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Phenol	< 189	189		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Pyrene	**363**	47.1		ug/Kg dry		12/26/18 11:29	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 74%*	*Limits: 8-125*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 79%*	*Limits: 17-131*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 80%*	*Limits: 8-117*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 80%*	*Limits: 15-124*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 77%*	*Limits: 26-120*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 97%*	*Limits: 42-143*	*12/26/18 11:29*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-14 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:49
Matrix: Soil
Lab ID: 18L0509-34

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7350**	64.9		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Antimony	< 1.30	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Arsenic	**7.99**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Barium	**123**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Cadmium	**0.299**	0.130		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Calcium	**94100**	649	B	mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Chromium	**5.58**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Cobalt	**2.90**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Copper	**25.6**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Iron	**12000**	260		mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Lead	**32.5**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Magnesium	**17000**	649		mg/Kg dry	12/18/18 19:39	B8L0552	KJ1	100
Manganese	**464**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Nickel	**10.3**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Potassium	**896**	6.49	B	mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:30	B8L0552	KJ1	10
Sodium	**258**	6.49		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Thallium	**1.82**	0.343		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Vanadium	**12.6**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Zinc	**48.7**	1.30		mg/Kg dry	12/18/18 23:39	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 13:42	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**93.8**	0.100		% (Percent)	12/15/18 07:16	B8L0496	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Ethylbenzene	< 202	202		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Toluene	< 101	101		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Xylenes, Total	< 607	607		ug/Kg dry	12/18/18 22:00	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%* *Limits: 91-106*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%* *Limits: 71-112*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 92%* *Limits: 85-119*	*12/18/18 22:00*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-14 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:49
Matrix: Soil
Lab ID: 18L0509-34 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 165	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
2-Methylnaphthalene	< 165	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Acenaphthene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Acenaphthylene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Anthracene	**65.9**	41.2		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(a)anthracene	**216**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(a)pyrene	**372**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(b)fluoranthene	**345**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(g,h,i)perylene	**212**	206		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Benzo(k)fluoranthene	**131**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Chrysene	**158**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Dibenzo(a,h)anthracene	< 412	412		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Fluoranthene	**275**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Fluorene	< 82.4	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Indeno(1,2,3-cd)pyrene	**357**	82.4		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Naphthalene	< 206	206		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Phenanthrene	**152**	41.2		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Pyrene	**272**	165		ug/Kg dry		12/27/18 04:51	B8L0673	LP	10
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 04:51*	*B8L0673*	*LP*	*10*
Surrogate: Fluoranthene-d10				*Recovery: 98%*	*Limits: 50-150*	*12/27/18 04:51*	*B8L0673*	*LP*	*10*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-15 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:53
Matrix: Soil
Lab ID: 18L0509-35

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5610**	66.6		mg/Kg dry	12/19/18 22:15	B8L0622	KJ1	10
Antimony	< 1.33	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Arsenic	**8.82**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Barium	**37.9**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Beryllium	< 0.133	0.133		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Cadmium	**0.471**	0.133		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Calcium	**144000**	6660		mg/Kg dry	12/20/18 22:58	B8L0622	KJ1	1000
Chromium	**24.3**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Cobalt	**2.95**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Copper	**13.3**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Iron	**12400**	266	B	mg/Kg dry	12/19/18 21:02	B8L0622	KJ1	100
Lead	**38.1**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Magnesium	**34600**	666		mg/Kg dry	12/19/18 21:02	B8L0622	KJ1	100
Manganese	**675**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Nickel	**11.4**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Potassium	**1020**	6.66		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Silver	**35.6**	4.40		mg/Kg dry	12/19/18 22:15	B8L0622	KJ1	10
Sodium	**289**	6.66		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Thallium	**1.99**	0.351		mg/Kg dry	12/20/18 23:14	B8L0622	KJ1	1
Vanadium	**9.89**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Zinc	**45.0**	1.33		mg/Kg dry	12/20/18 00:02	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:21	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:21	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	< 0.0250	0.0250		mg/L	01/10/19 11:55	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.068	0.068		mg/Kg dry	12/26/18 13:45	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.7**	0.100		% (Percent)	12/15/18 08:05	B8L0498	MKP	1
Method: SW9045C								
pH	**8.68**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-15 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:53
Matrix: Soil
Lab ID: 18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1,2-Trichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1-Dichloroethane	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,1-Dichloroethene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dichloroethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,2-Dichloropropane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1-Butanol	< 190	190		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
2-Butanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
2-Hexanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
4-Methyl-2-pentanone	< 26.6	26.6		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Acetone	< 66.5	66.5		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Acrylonitrile	< 0.931	0.931		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Benzene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromodichloromethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromoform	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Bromomethane	< 19.0	19.0		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Carbon disulfide	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Carbon tetrachloride	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chlorobenzene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloroethane	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloroform	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Chloromethane	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
cis-1,2-Dichloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Dibromochloromethane	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Ethylbenzene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
m,p-Xylene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Methyl tert-butyl ether	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Methylene chloride	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
o-Xylene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Styrene	< 7.60	7.60		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Tetrachloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Toluene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
trans-1,2-Dichloroethene	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Trichloroethene	< 1.90	1.90		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Vinyl acetate	< 19.0	19.0		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Vinyl chloride	< 3.80	3.80		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Xylenes, Total	< 11.4	11.4		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry	12/21/18 08:40	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 122%*	*Limits: 88-136*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 126%*	*Limits: 71-136*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 94%*	*Limits: 81-114*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%*	*Limits: 85-116*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-15 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:53
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
Surrogate: 4-Bromofluorobenzene				*Recovery: 107%*	*Limits: 79-119*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 116%*	*Limits: 90-142*	*12/21/18 08:40*	*B8L0747*	*JL*	*1*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D / SW3550									
1,2,4-Trichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,2-Dichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,3-Dichlorobenzene	< 27.0	27.0		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
1,4-Dichlorobenzene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dichlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dimethylphenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dinitrophenol	< 454	454		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Chloronaphthalene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Chlorophenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Methylphenol	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
2-Nitrophenol	< 369	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 369	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
3 & 4-Methylphenol	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1380	1380		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chloroaniline	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 138	138		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
4-Nitrophenol	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Acenaphthene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Acenaphthylene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Anthracene	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzidine	< 191	191		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(a)anthracene	**177**	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(a)pyrene	**154**	90.0		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(b)fluoranthene	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(b)fluoranthene	**389**	369		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(g,h,i)perylene	< 369	369		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Benzo(g,h,i)perylene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Benzo(k)fluoranthene	< 369	369		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 276	276		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Butyl benzyl phthalate	< 276	276		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Carbazole	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Chrysene	**195**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-15 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:53
Matrix: Soil
Lab ID: 18L0509-35 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Diethyl phthalate	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Dimethyl phthalate	< 46.1	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Di-n-butyl phthalate	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Di-n-octyl phthalate	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Fluoranthene	**349**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Fluorene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorobenzene	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorobutadiene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1840	1840		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Hexachloroethane	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 737	737		ug/Kg dry		12/26/18 20:52	B8L0714	CP1	2
Isophorone	< 553	553		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Naphthalene	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 43.2	43.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 92.2	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Pentachlorophenol	< 248	248		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Phenanthrene	**144**	92.2		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Phenol	< 184	184		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Pyrene	**374**	46.1		ug/Kg dry		12/26/18 14:57	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 76%*	*Limits: 8-125*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 85%*	*Limits: 17-131*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 76%*	*Limits: 8-117*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 85%*	*Limits: 15-124*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 82%*	*Limits: 26-120*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 118%*	*Limits: 42-143*	*12/26/18 14:57*	*B8L0714*	*CP1*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-17 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:02
Matrix: Soil
Lab ID: 18L0509-37

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3900**	65.5		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Antimony	< 1.31	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Arsenic	**9.01**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Barium	**38.4**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Cadmium	**0.574**	0.131		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Calcium	**93200**	655	B	mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Chromium	**3.06**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Cobalt	**2.08**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Copper	**77.5**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Iron	**15000**	262		mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Lead	**44.0**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Magnesium	**34800**	655		mg/Kg dry	12/18/18 19:47	B8L0552	KJ1	100
Manganese	**404**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Nickel	**7.19**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Potassium	**568**	6.55	B	mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 21:38	B8L0552	KJ1	10
Sodium	**344**	6.55		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Thallium	**1.71**	0.346		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Vanadium	**7.63**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Zinc	**67.5**	1.31		mg/Kg dry	12/19/18 00:05	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.081**	0.067		mg/Kg dry	12/26/18 13:50	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.3**	0.100		% (Percent)	12/15/18 08:09	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1,2-Trichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1-Dichloroethane	< 4.25	4.25		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,1-Dichloroethene	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dichloroethane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1,2-Dichloropropane	< 2.13	2.13		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
1-Butanol	< 213	213		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
2-Butanone	< 29.8	29.8		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1
2-Hexanone	< 29.8	29.8		ug/Kg dry	12/21/18 09:12	B8L0747	JL	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-17 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:02
Matrix: Soil
Lab ID: 18L0509-37 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
4-Methyl-2-pentanone	< 29.8	29.8		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Acetone	< 74.4	74.4		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Acrylonitrile	< 1.04	1.04		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Benzene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromodichloromethane	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromoform	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Bromomethane	< 21.3	21.3		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Carbon disulfide	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Carbon tetrachloride	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chlorobenzene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloroethane	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloroform	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Chloromethane	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
cis-1,2-Dichloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Dibromochloromethane	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Ethylbenzene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
m,p-Xylene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Methyl tert-butyl ether	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Methylene chloride	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
o-Xylene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Styrene	< 8.51	8.51		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Tetrachloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Toluene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
trans-1,2-Dichloroethene	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Trichloroethene	< 2.13	2.13		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Vinyl acetate	< 21.3	21.3		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Vinyl chloride	< 4.25	4.25		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Xylenes, Total	< 12.8	12.8		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 09:12	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 124%*	*Limits: 88-136*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 128%*	*Limits: 71-136*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 94%*	*Limits: 81-114*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 87%*	*Limits: 85-116*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 98%*	*Limits: 79-119*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 112%*	*Limits: 90-142*	*12/21/18 09:12*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-17 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:02
Matrix: Soil
Lab ID: 18L0509-37 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,2-Dichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,3-Dichlorobenzene	< 20.0	20.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
1,4-Dichlorobenzene	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dichlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dimethylphenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dinitrophenol	< 200	200		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,4-Dinitrotoluene	< 139	139		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2,6-Dinitrotoluene	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Chloronaphthalene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Chlorophenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Methylphenol	< 11.6	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
2-Nitrophenol	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
3 & 4-Methylphenol	< 46.4	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 348	348		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chloroaniline	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 34.8	34.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
4-Nitrophenol	< 464	464		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Acenaphthene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Acenaphthylene	**64.1**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Anthracene	**37.1**	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzidine	< 48.1	48.1		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(a)anthracene	**146**	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(a)pyrene	**196**	90.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(b)fluoranthene	**402**	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(g,h,i)perylene	**72.2**	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Benzo(k)fluoranthene	**133**	46.4		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-chloroethyl)ether	< 348	348		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 464	464		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 69.6	69.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Butyl benzyl phthalate	< 69.6	69.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Carbazole	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Chrysene	**180**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Diethyl phthalate	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Dimethyl phthalate	< 11.6	11.6		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Di-n-butyl phthalate	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Di-n-octyl phthalate	< 92.8	92.8		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Fluoranthene	**286**	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Fluorene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1
Hexachlorobenzene	< 23.2	23.2		ug/Kg dry	12/26/18 14:15	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-20 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:10
Matrix: Soil
Lab ID: 18L0509-40

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**10600**	73.9		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Arsenic	**12.7**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Barium	**139**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Beryllium	< 0.591	0.591		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Cadmium	**1.77**	0.148		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Calcium	**21800**	739	B	mg/Kg dry	12/18/18 20:16	B8L0552	KJ1	100
Chromium	**9.33**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Cobalt	**5.49**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Copper	**264**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Iron	**32800**	296		mg/Kg dry	12/18/18 20:16	B8L0552	KJ1	100
Lead	**184**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Magnesium	**4440**	73.9		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Manganese	**349**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Nickel	**13.9**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Potassium	**957**	7.39	B	mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Silver	**4.82**	4.40		mg/Kg dry	12/18/18 22:07	B8L0552	KJ1	10
Sodium	**438**	7.39		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Thallium	**3.22**	0.390		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Vanadium	**24.7**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Zinc	**269**	1.48		mg/Kg dry	12/19/18 00:19	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Lead, TCLP	< 0.00750	0.00750		mg/L	01/08/19 18:24	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.477**	0.070		mg/Kg dry	12/26/18 13:57	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**80.7**	0.100		% (Percent)	12/15/18 08:15	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Ethylbenzene	< 257	257		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Toluene	< 128	128		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Xylenes, Total	< 771	771		ug/Kg dry	12/18/18 23:38	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 96%* *Limits: 91-106*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 85%* *Limits: 71-112*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 102%* *Limits: 85-119*	*12/18/18 23:38*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-20 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:10
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-40 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**717**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
2-Methylnaphthalene	**787**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Acenaphthene	< 9.79	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Acenaphthylene	**226**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Anthracene	**153**	4.89		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(a)anthracene	**570**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(a)pyrene	**634**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(b)fluoranthene	**784**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(g,h,i)perylene	**402**	24.5		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Benzo(k)fluoranthene	**228**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Chrysene	**523**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Dibenzo(a,h)anthracene	**107**	48.9		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Fluoranthene	**653**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Fluorene	**24.8**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**580**	9.79		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Naphthalene	**360**	24.5		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Phenanthrene	**977**	4.89		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Pyrene	**703**	19.6		ug/Kg dry		12/22/18 20:25	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/22/18 20:25*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/22/18 20:25*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-21 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:16
Matrix: Soil
Lab ID: 18L0509-41

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**9520**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Arsenic	**8.87**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Barium	**81.5**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Beryllium	< 0.141	0.141		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Cadmium	**0.846**	0.141		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Calcium	**7790**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Chromium	**42.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Cobalt	**7.44**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Copper	**51.4**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Iron	**26900**	281	B	mg/Kg dry	12/19/18 21:06	B8L0622	KJ1	100
Lead	**55.3**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Magnesium	**2690**	70.3		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Manganese	**304**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Nickel	**18.7**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Potassium	**1070**	7.03		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Silver	**44.5**	4.40		mg/Kg dry	12/19/18 22:19	B8L0622	KJ1	10
Sodium	**215**	7.03		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Thallium	**2.70**	0.371		mg/Kg dry	12/20/18 23:19	B8L0622	KJ1	1
Vanadium	**24.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Zinc	**79.0**	1.41		mg/Kg dry	12/20/18 00:06	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:30	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:30	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:30	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:30	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.088**	0.072		mg/Kg dry	12/26/18 14:00	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.2**	0.100		% (Percent)	12/15/18 08:17	B8L0498	MKP	1
Method: SW9045C								
pH	**8.08**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-21 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:16
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-41 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Ethylbenzene	< 221	221		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Toluene	< 111	111		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Xylenes, Total	< 664	664		ug/Kg dry		12/19/18 00:10	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%*	*Limits: 91-106*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 97%*	*Limits: 85-119*	*12/19/18 00:10*	*B8L0744*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**885**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
2-Methylnaphthalene	**1130**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Acenaphthene	< 9.65	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Acenaphthylene	**54.0**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Anthracene	**68.6**	4.82		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(a)anthracene	**208**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(a)pyrene	**198**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(b)fluoranthene	**195**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(g,h,i)perylene	**99.4**	24.1		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Benzo(k)fluoranthene	**56.5**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Chrysene	**166**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 48.2	48.2		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Fluoranthene	**216**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Fluorene	**22.1**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**146**	9.65		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Naphthalene	**557**	24.1		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Phenanthrene	**742**	4.82		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Pyrene	**255**	19.3		ug/Kg dry		12/22/18 21:03	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 21:03*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 96%*	*Limits: 50-150*	*12/22/18 21:03*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-28 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:37
Matrix: Soil
Lab ID: 18L0509-48

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**10200**	73.0		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Antimony	< 1.46	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Barium	**72.1**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Beryllium	< 0.146	0.146		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Cadmium	**1.04**	0.500		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Calcium	**14300**	730		mg/Kg dry	01/08/19 18:38	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Cobalt	**6.58**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Copper	**57.9**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Iron	**24300**	292		mg/Kg dry	01/08/19 18:38	B9A0160	KJ1	100
Lead	**69.3**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Magnesium	**8270**	73.0		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Manganese	**409**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Nickel	**16.5**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Potassium	**813**	7.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 20:20	B9A0160	KJ1	10
Sodium	**193**	7.30		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Thallium	< 3.90	3.90		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Vanadium	**18.4**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Zinc	**74.3**	1.46		mg/Kg dry	01/08/19 22:08	B9A0160	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/21/19 15:11	B9A0599	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.071	0.071		mg/Kg dry	01/08/19 12:57	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.5**	0.100	H	% (Percent)	01/08/19 08:40	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**198**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
2-Methylnaphthalene	**226**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Acenaphthene	< 8.55	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Acenaphthylene	**34.8**	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Anthracene	**26.1**	4.27	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(a)anthracene	**115**	8.55	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(a)pyrene	**154**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1
Benzo(b)fluoranthene	**161**	17.1	H	ug/Kg dry	01/09/19 16:09	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-28 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:37
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-48 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Benzo(g,h,i)perylene	**72.8**	21.4	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Benzo(k)fluoranthene	**45.9**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Chrysene	**91.6**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 42.7	42.7	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Fluoranthene	**132**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Fluorene	< 8.55	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**184**	8.55	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Naphthalene	**89.7**	21.4	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Phenanthrene	**193**	4.27	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Pyrene	**141**	17.1	H	ug/Kg dry		01/09/19 16:09	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 16:09*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 84%*	*Limits: 50-150*	*01/09/19 16:09*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2860**	63.2		mg/Kg dry	12/19/18 22:27	B8L0622	KJ1	10
Antimony	< 1.26	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Arsenic	**4.72**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Barium	**46.4**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Beryllium	< 0.126	0.126		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Cadmium	**0.389**	0.126		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Calcium	**137000**	6320		mg/Kg dry	12/20/18 23:02	B8L0622	KJ1	1000
Chromium	**18.5**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Cobalt	**1.77**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Copper	**12.4**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Iron	**12900**	253	B	mg/Kg dry	12/19/18 21:14	B8L0622	KJ1	100
Lead	**15.9**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Magnesium	**14900**	632		mg/Kg dry	12/19/18 21:14	B8L0622	KJ1	100
Manganese	**760**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Nickel	**7.44**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Potassium	**536**	6.32		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Silver	**30.0**	4.40		mg/Kg dry	12/19/18 22:27	B8L0622	KJ1	10
Sodium	**91.2**	6.32		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Thallium	**2.22**	0.334		mg/Kg dry	12/20/18 23:27	B8L0622	KJ1	1
Vanadium	**9.11**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Zinc	**30.6**	1.26		mg/Kg dry	12/20/18 00:15	B8L0622	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.062	0.062		mg/Kg dry	12/26/18 15:00	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**96.3**	0.100		% (Percent)	12/15/18 08:35	B8L0498	MKP	1
Method: SW9045C								
pH	**8.41**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
1,1,1-Trichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1,2,2-Tetrachloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1,2-Trichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1-Dichloroethane	< 4.08	4.08		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,1-Dichloroethene	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dibromo-3-chloropropane	< 2.00	2.00		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dibromoethane	< 0.400	0.400		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dichloroethane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1
1,2-Dichloropropane	< 2.04	2.04		ug/Kg dry	12/21/18 10:17	B8L0747	JL	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS (Continued)									
Method: SW8260B / SW5035 (Continued)									
1-Butanol	< 204	204		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
2-Butanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
2-Hexanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
4-Methyl-2-pentanone	< 28.6	28.6		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Acetone	< 71.4	71.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Acrylonitrile	< 1.00	1.00		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Benzene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromodichloromethane	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromoform	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Bromomethane	< 20.4	20.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Carbon disulfide	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Carbon tetrachloride	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chlorobenzene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloroethane	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloroform	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Chloromethane	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
cis-1,2-Dichloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Dibromochloromethane	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Ethylbenzene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
m,p-Xylene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Methyl tert-butyl ether	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Methylene chloride	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
o-Xylene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Styrene	< 8.16	8.16		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Tetrachloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Toluene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
trans-1,2-Dichloroethene	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Trichloroethene	< 2.04	2.04		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Vinyl acetate	< 20.4	20.4		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Vinyl chloride	< 4.08	4.08		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Xylenes, Total	< 12.2	12.2		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
1,3-Dichloropropene, Total	< 4.00	4.00		ug/Kg dry		12/21/18 10:17	B8L0747	JL	1
Surrogate: Dibromofluoromethane				*Recovery: 123%*	*Limits: 88-136*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichloroethane-d4				*Recovery: 118%*	*Limits: 71-136*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: Fluorobenzene				*Recovery: 97%*	*Limits: 81-114*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: Toluene-d8				*Recovery: 88%*	*Limits: 85-116*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 4-Bromofluorobenzene				*Recovery: 96%*	*Limits: 79-119*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*
Surrogate: 1,2-Dichlorobenzene-d4				*Recovery: 110%*	*Limits: 90-142*	*12/21/18 10:17*	*B8L0747*	*JL*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-34 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:54
Matrix: Soil
Lab ID: 18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D / SW3550								
1,2,4-Trichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,2-Dichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,3-Dichlorobenzene	< 24.3	24.3		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
1,4-Dichlorobenzene	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4,5-Trichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4,6-Trichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dichlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dimethylphenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dinitrophenol	< 409	409		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,4-Dinitrotoluene	< 250	250		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2,6-Dinitrotoluene	< 260	260		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Chloronaphthalene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Chlorophenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Methylphenol	< 41.5	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
2-Nitrophenol	< 332	332		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
3,3´-Dichlorobenzidine	< 332	332		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
3 & 4-Methylphenol	< 166	166		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4,6-Dinitro-2-methylphenol	< 1240	1240		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Bromophenyl-phenylether	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chloro-3-methylphenol	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chloroaniline	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Chlorophenyl-phenylether	< 124	124		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
4-Nitrophenol	< 1660	1660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Acenaphthene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Acenaphthylene	**95.4**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Anthracene	**91.2**	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzidine	< 172	172		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzo(a)anthracene	**487**	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Benzo(a)pyrene	**597**	102		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(b)fluoranthene	**1170**	900		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(g,h,i)perylene	< 664	664		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Benzo(k)fluoranthene	< 664	664		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Bis(2-chloroethyl)ether	< 660	660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Bis(2-chloroisopropyl)ether	< 1660	1660		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Bis(2-ethylhexyl)phthalate	< 249	249		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Butyl benzyl phthalate	< 249	249		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Carbazole	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Chrysene	**600**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Dibenzo(a,h)anthracene	< 90.0	90.0		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Diethyl phthalate	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Dimethyl phthalate	< 41.5	41.5		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Di-n-butyl phthalate	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Di-n-octyl phthalate	< 1330	1330		ug/Kg dry	12/26/18 21:29	B8L0714	CP1	4
Fluoranthene	**1210**	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Fluorene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1
Hexachlorobenzene	< 82.9	82.9		ug/Kg dry	12/26/18 15:38	B8L0714	CP1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-34 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:54
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-57 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D / SW3550 (Continued)									
Hexachlorobutadiene	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Hexachlorocyclopentadiene	< 1660	1660		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Hexachloroethane	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Indeno(1,2,3-cd)pyrene	< 900	900		ug/Kg dry		12/26/18 21:29	B8L0714	CP1	4
Isophorone	< 498	498		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Naphthalene	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Nitrobenzene	< 100	100		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
N-Nitrosodi-n-propylamine	< 38.9	38.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
N-Nitrosodiphenylamine	< 82.9	82.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Pentachlorophenol	< 223	223		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Phenanthrene	**401**	82.9		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Phenol	< 166	166		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Pyrene	**1360**	41.5		ug/Kg dry		12/26/18 15:38	B8L0714	CP1	1
Surrogate: 2-Fluorophenol				*Recovery: 89%*	*Limits: 8-125*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: Phenol-d5				*Recovery: 94%*	*Limits: 17-131*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: Nitrobenzene-d5				*Recovery: 86%*	*Limits: 8-117*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 2-Fluorobiphenyl				*Recovery: 95%*	*Limits: 15-124*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 2,4,6-Tribromophenol				*Recovery: 95%*	*Limits: 26-120*	*12/26/18 15:38*	*B8L0714*	*CP1*	*1*
Surrogate: 4-Terphenyl-d14				*Recovery: 132%*	*Limits: 42-143*	*12/26/18 21:29*	*B8L0714*	*CP1*	*4*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-35 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:02
Matrix: Soil
Lab ID: 18L0509-58

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**2220**	65.3		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Antimony	< 1.31	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Arsenic	**2.91**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Barium	**43.1**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Beryllium	< 0.131	0.131		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Cadmium	**0.314**	0.131		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Calcium	**206000**	6530		mg/Kg dry	12/20/18 23:06	B8L0622	KJ1	1000
Chromium	**12.5**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Cobalt	**1.32**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Copper	**7.78**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Iron	**9740**	26.1	B	mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Lead	**13.4**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Magnesium	**10300**	65.3		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Manganese	**719**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Nickel	**5.72**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Potassium	**510**	6.53		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Silver	**18.0**	4.40		mg/Kg dry	12/19/18 22:48	B8L0622	KJ1	10
Sodium	**224**	6.53		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Thallium	**2.37**	0.345		mg/Kg dry	12/20/18 23:48	B8L0622	KJ1	1
Vanadium	**4.22**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Zinc	**15.9**	1.31		mg/Kg dry	12/20/18 00:19	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:33	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	**0.0378**	0.0250		mg/L	01/10/19 12:03	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 15:02	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**92.6**	0.100		% (Percent)	12/15/18 08:37	B8L0498	MKP	1
Method: SW9045C								
pH	**8.91**			pH Units	12/19/18 06:43	B8L0596	PK1	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 17.0	17.0		ug/Kg dry	12/26/18 23:56	B8L0673	LP	1
2-Methylnaphthalene	< 17.0	17.0		ug/Kg dry	12/26/18 23:56	B8L0673	LP	1

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-35 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:02
Matrix: Soil
Lab ID: 18L0509-58 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Acenaphthene	< 8.50	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Acenaphthylene	**18.4**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Anthracene	**15.0**	4.25		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(a)anthracene	**74.9**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(a)pyrene	**195**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(b)fluoranthene	**192**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(g,h,i)perylene	**132**	21.3		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Benzo(k)fluoranthene	**37.3**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Chrysene	**75.6**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 42.5	42.5		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Fluoranthene	**89.2**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Fluorene	< 8.50	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**206**	8.50		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Naphthalene	< 21.3	21.3		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Phenanthrene	**24.4**	4.25		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Pyrene	**89.8**	17.0		ug/Kg dry		12/26/18 23:56	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 101%*	*Limits: 50-150*	*12/26/18 23:56*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/26/18 23:56*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-36 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:08
Matrix: Soil
Lab ID: 18L0509-59

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11400**	70.5		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Antimony	< 1.41	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Arsenic	**9.63**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Barium	**138**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Beryllium	< 0.564	0.564		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Cadmium	**0.443**	0.141		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Calcium	**32300**	705	B	mg/Kg dry	12/18/18 20:49	B8L0552	KJ1	100
Chromium	**12.8**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Cobalt	**8.22**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Copper	**21.1**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Iron	**23200**	282		mg/Kg dry	12/18/18 20:49	B8L0552	KJ1	100
Lead	**22.6**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Magnesium	**2960**	70.5		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Manganese	**706**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Nickel	**14.3**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Potassium	**1020**	70.5	B	mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:40	B8L0552	KJ1	10
Sodium	**81.7**	7.05		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Thallium	**3.55**	0.372		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Vanadium	**28.3**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Zinc	**45.9**	1.41		mg/Kg dry	12/19/18 01:12	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:35	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:35	B9A0188	AG	5
Method: SW6020A / SW3015 / SW1312								
Manganese, SPLP	**0.0291**	0.0250		mg/L	01/10/19 12:11	B9A0224	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.067	0.067		mg/Kg dry	12/27/18 12:42	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**85.5**	0.100		% (Percent)	12/15/18 08:39	B8L0498	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 19.0	19.0		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
2-Methylnaphthalene	< 19.0	19.0		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
Acenaphthene	< 9.52	9.52		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1
Acenaphthylene	**20.8**	9.52		ug/Kg dry	12/27/18 00:33	B8L0673	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-36 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:08
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-59 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Anthracene	**12.6**	4.76		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(a)anthracene	**43.1**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(a)pyrene	**106**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(b)fluoranthene	**100**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(g,h,i)perylene	**75.4**	23.8		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Benzo(k)fluoranthene	**23.9**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Chrysene	**39.0**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 47.6	47.6		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Fluoranthene	**47.5**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Fluorene	< 9.52	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**115**	9.52		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Naphthalene	< 23.8	23.8		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Phenanthrene	**18.1**	4.76		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Pyrene	**52.2**	19.0		ug/Kg dry		12/27/18 00:33	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/27/18 00:33*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 00:33*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-37 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:17
Matrix: Soil
Lab ID: 18L0509-60

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**11200**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Antimony	< 1.48	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Arsenic	**7.53**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Barium	**94.3**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Beryllium	< 0.148	0.148		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Cadmium	**0.497**	0.148		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Calcium	**25900**	739		mg/Kg dry	12/19/18 21:22	B8L0622	KJ1	100
Chromium	**33.9**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Cobalt	**4.95**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Copper	**24.8**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Iron	**16500**	296	B	mg/Kg dry	12/19/18 21:22	B8L0622	KJ1	100
Lead	**19.3**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Magnesium	**3250**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Manganese	**282**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Nickel	**11.7**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Potassium	**1550**	73.9		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Silver	**31.9**	4.40		mg/Kg dry	12/19/18 22:52	B8L0622	KJ1	10
Sodium	**108**	7.39		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Thallium	**2.27**	0.390		mg/Kg dry	12/20/18 23:53	B8L0622	KJ1	1
Vanadium	**23.2**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Zinc	**51.6**	1.48		mg/Kg dry	12/20/18 00:24	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:37	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:37	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:37	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.070	0.070		mg/Kg dry	12/27/18 12:51	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.6**	0.100		% (Percent)	12/15/18 08:41	B8L0498	MKP	1
Method: SW9045C								
pH	**7.89**			pH Units	12/19/18 06:43	B8L0596	PK1	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-37 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:17
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-60 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**92.7**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
2-Methylnaphthalene	**113**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Acenaphthene	< 9.72	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Acenaphthylene	**41.2**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Anthracene	**28.3**	4.86		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(a)anthracene	**120**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(a)pyrene	**246**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(b)fluoranthene	**262**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(g,h,i)perylene	**106**	24.3		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Benzo(k)fluoranthene	**49.6**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Chrysene	**112**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Dibenzo(a,h)anthracene	< 48.6	48.6		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Fluoranthene	**145**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Fluorene	< 9.72	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**243**	9.72		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Naphthalene	**59.6**	24.3		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Phenanthrene	**140**	4.86		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Pyrene	**173**	19.4		ug/Kg dry		12/27/18 01:10	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/27/18 01:10*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 97%*	*Limits: 50-150*	*12/27/18 01:10*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-39 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:38
Matrix: Soil
Lab ID: 18L0509-62

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**8980**	749		mg/Kg dry	12/19/18 21:26	B8L0622	KJ1	100
Antimony	< 1.50	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Arsenic	**8.36**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Barium	**155**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Beryllium	< 0.150	0.150		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Cadmium	**0.515**	0.150		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Calcium	**10500**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Chromium	**35.3**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Cobalt	**6.22**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Copper	**22.1**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Iron	**11500**	300	B	mg/Kg dry	12/19/18 21:26	B8L0622	KJ1	100
Lead	**18.1**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Magnesium	**2670**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Manganese	**678**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Nickel	**12.4**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Potassium	**1970**	74.9		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Silver	**37.3**	4.40		mg/Kg dry	12/19/18 22:56	B8L0622	KJ1	10
Sodium	**89.8**	7.49		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Thallium	**3.40**	0.396		mg/Kg dry	12/20/18 23:58	B8L0622	KJ1	1
Vanadium	**27.4**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Zinc	**58.3**	1.50		mg/Kg dry	12/20/18 00:45	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/11/19 12:08	B9A0271	AG	5
Manganese, TCLP	< 0.0250	0.0250		mg/L	01/11/19 12:08	B9A0271	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/11/19 12:08	B9A0271	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/11/19 12:08	B9A0271	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.109**	0.073		mg/Kg dry	12/27/18 12:57	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**79.6**	0.100		% (Percent)	12/17/18 06:55	B8L0510	MKP	1
Method: SW9045C								
pH	**7.59**			pH Units	12/19/18 06:43	B8L0596	PK1	1

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 P 847.967.6666 800.246.0663 F 847.967.6735 www.emt.com

Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-39 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 13:38
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-62 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Ethylbenzene	< 208	208		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Toluene	< 104	104		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Xylenes, Total	< 625	625		ug/Kg dry		12/19/18 08:15	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 93%*	*Limits: 91-106*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 88%*	*Limits: 71-112*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 93%*	*Limits: 85-119*	*12/19/18 08:15*	*B8L0745*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**136**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
2-Methylnaphthalene	**144**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Acenaphthene	**14.5**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Acenaphthylene	**255**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Anthracene	**157**	4.84		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(a)anthracene	**551**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(a)pyrene	**704**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(b)fluoranthene	**835**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(g,h,i)perylene	**423**	24.2		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Benzo(k)fluoranthene	**279**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Chrysene	**550**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Dibenzo(a,h)anthracene	**99.9**	48.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Fluoranthene	**672**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Fluorene	**20.8**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**597**	9.68		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Naphthalene	**88.7**	24.2		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Phenanthrene	**474**	4.84		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Pyrene	**712**	19.4		ug/Kg dry		12/22/18 06:15	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 79%*	*Limits: 50-150*	*12/22/18 06:15*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 84%*	*Limits: 50-150*	*12/22/18 06:15*	*B8L0635*	*LP*	*1*

Environmental Monitoring and Technologies, Inc.

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-41 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:49
Matrix: Soil
Lab ID: 18L0509-64

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**8500**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Antimony	< 1.35	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Arsenic	**7.42**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Barium	**90.2**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Beryllium	< 0.135	0.135		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Cadmium	**0.630**	0.135		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Calcium	**53400**	676		mg/Kg dry	12/19/18 21:30	B8L0622	KJ1	100
Chromium	**34.9**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Cobalt	**6.02**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Copper	**21.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Iron	**18700**	270	B	mg/Kg dry	12/19/18 21:30	B8L0622	KJ1	100
Lead	**81.4**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Magnesium	**9190**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Manganese	**623**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Nickel	**13.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Potassium	**1150**	67.6		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Selenium	< 1.30	1.30		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Silver	**31.5**	4.40		mg/Kg dry	12/19/18 23:00	B8L0622	KJ1	10
Sodium	**69.6**	6.76		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Thallium	**2.66**	0.357		mg/Kg dry	12/21/18 00:02	B8L0622	KJ1	1
Vanadium	**18.0**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Zinc	**88.7**	1.35		mg/Kg dry	12/20/18 00:49	B8L0622	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Chromium, TCLP	< 0.0250	0.0250		mg/L	01/08/19 18:39	B9A0188	AG	5
Iron, TCLP	< 0.125	0.125		mg/L	01/08/19 18:39	B9A0188	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/08/19 18:39	B9A0188	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/08/19 18:39	B9A0188	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.070	0.070		mg/Kg dry	12/27/18 13:01	B8L0785	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**84.7**	0.100		% (Percent)	12/17/18 06:59	B8L0510	MKP	1
Method: SW9045C								
pH	**7.92**			pH Units	12/19/18 06:43	B8L0596	PK1	1

Environmental Monitoring and Technologies, Inc.

8100 N. Austin Avenue Morton Grove, IL 60053-3203 **P** 847.967.6666 800.246.0663 **F** 847.967.6735 www.emt.com

Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-41 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 13:49
Matrix: Soil
Lab ID: 18L0509-64 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	< 18.2	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
2-Methylnaphthalene	< 18.2	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Acenaphthene	**9.63**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Acenaphthylene	**9.71**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Anthracene	**29.0**	4.55		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(a)anthracene	**165**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(a)pyrene	**199**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(b)fluoranthene	**202**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(g,h,i)perylene	**106**	22.7		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Benzo(k)fluoranthene	**74.5**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Chrysene	**154**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Dibenzo(a,h)anthracene	< 45.5	45.5		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Fluoranthene	**298**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Fluorene	< 9.10	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Indeno(1,2,3-cd)pyrene	**148**	9.10		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Naphthalene	< 22.7	22.7		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Phenanthrene	**111**	4.55		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Pyrene	**241**	18.2		ug/Kg dry		12/22/18 06:53	B8L0635	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 79%*	*Limits: 50-150*	*12/22/18 06:53*	*B8L0635*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 85%*	*Limits: 50-150*	*12/22/18 06:53*	*B8L0635*	*LP*	*1*

Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Mattoon Bike Trail Extension Office Phone Number, if available: 217-549-0939

Physical Site Location (address, inclduding number and street):

Lincoln Prairie Grass Trail from 16th Street in the City of Mattoon to 14th Street in the City of Charleston (see attached report)

City: Mattoon State: IL Zip Code: 61938

County: Coles Township: Mattoon

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 39.48444 (Decimal Degrees) Longitude: -88.36953 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☐ Map Interpolation ☐ Photo Interpolation ☒ Survey ☐ Other

ISGS Public Land Survey System. Lat/long above refer to the approximate center of the Project Area

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	City of Mattoon	Name:	City of Mattoon
Street Address:	208 N 19th Street	Street Address:	208 N 19th Street
PO Box:		PO Box:	
City:	Mattoon State: il	City:	Mattoon State: il
Zip Code:	61938 Phone: 217-549-0939	Zip Code:	61938 Phone: 217-549-0939
Contact:	Dean Barber	Contact:	Dean Barber
Email, if available:	barberd@mattoonillinois.org	Email, if available:	barberd@mattoonillinois.org

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: Mattoon Bike Trail Extension

Latitude: 39.48444 Longitude: -88.36953

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Refer to Figure 4-1 in the Final PSI Report and borings and depths of SB-5 (0-3), SB-8 (3-5), SB-9 (3-5), SB-25 (0-1), and SB-31 (0-3).

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0,including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Refer to Tables 3-2 through 3-10 in the Final PSI Report for results summary and Environmental Monitoring and Technologies, Inc. report #18L0509. Site specific table of results are attached to this form.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Huff & Huff, Inc.

Street Address: 915 Harger Rd Suite 330

City: Oak Brook State: IL Zip Code: 60523

Phone: (630) 684-9100

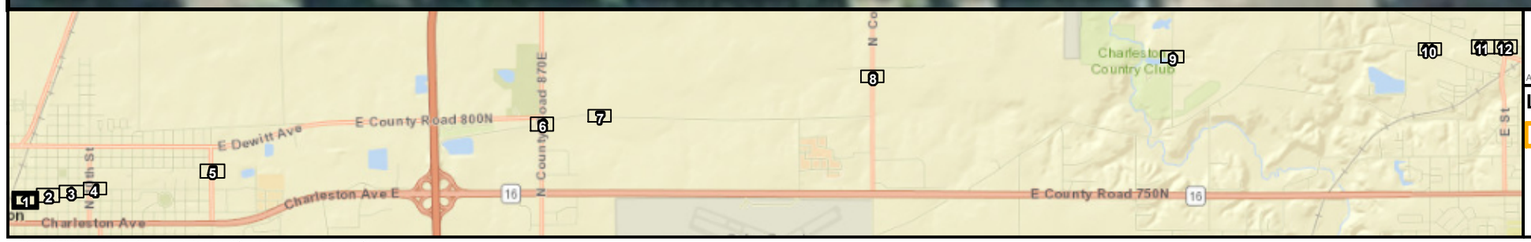
Jeremy J. Reynolds, P.G.
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

2/18/19
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS

P.E. or L.P.G. Seal:



0 50 100 200
Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

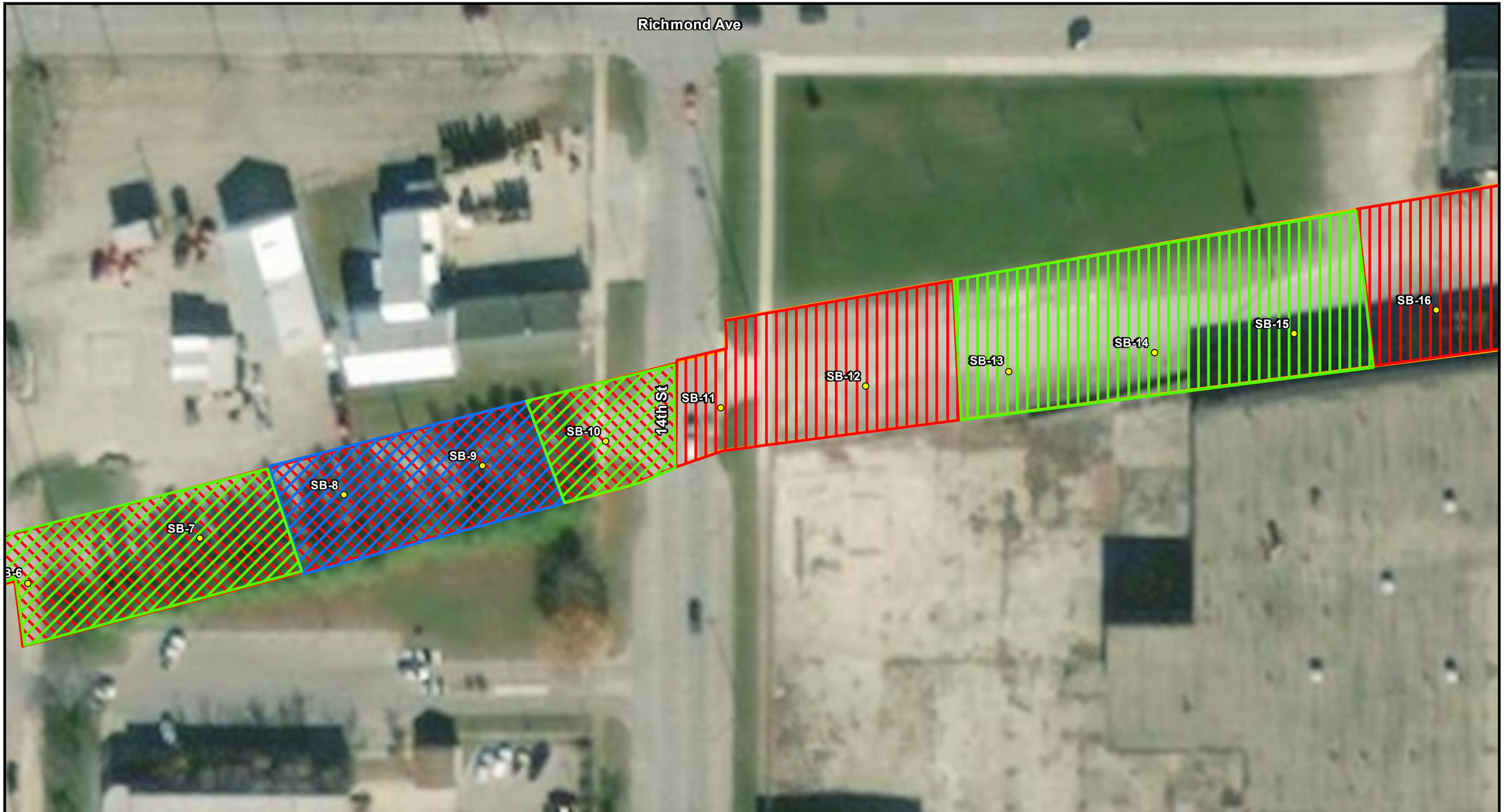
Soil Classification

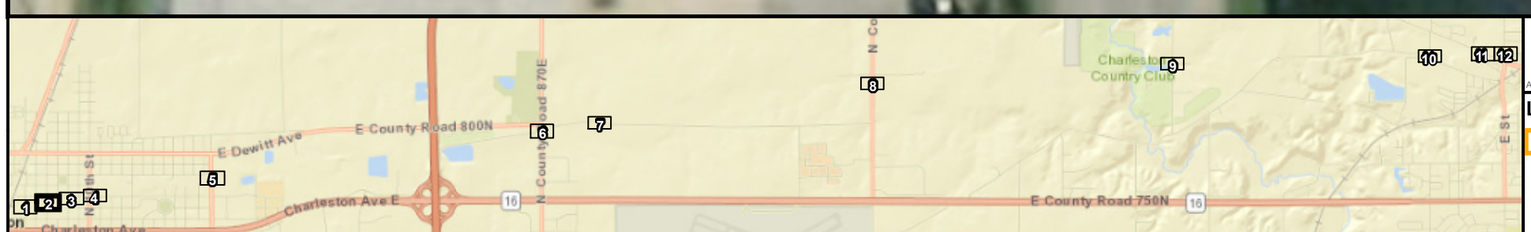
- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 1 of 12

J:\81022053\03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd





0 50 100 200
Feet

Aerial Source: ESRI Online World Imagery

N W E S

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth

- 0-1'
- 0-3'
- 3-5'

Soil Classification

- a(1)
- a(5)
- a(3)
- Unrestricted
- a(4)

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 2 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

Richmond Ave

12Th St

11Th St

SB-17

SB-18

SB-19

SB-20

SB-21

SB-22

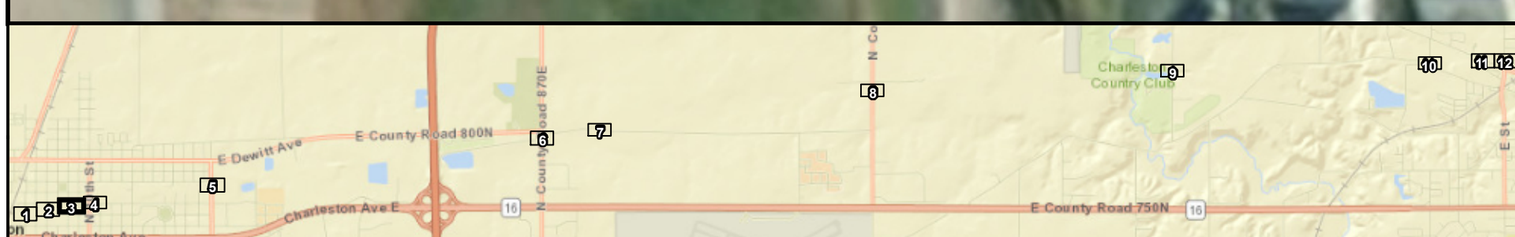
SB-23

SB-24

SB-25

SB-26

SB-27



0 50 100 200

Feet

Aerial Source: ESRI Online World Imagery

N W E S

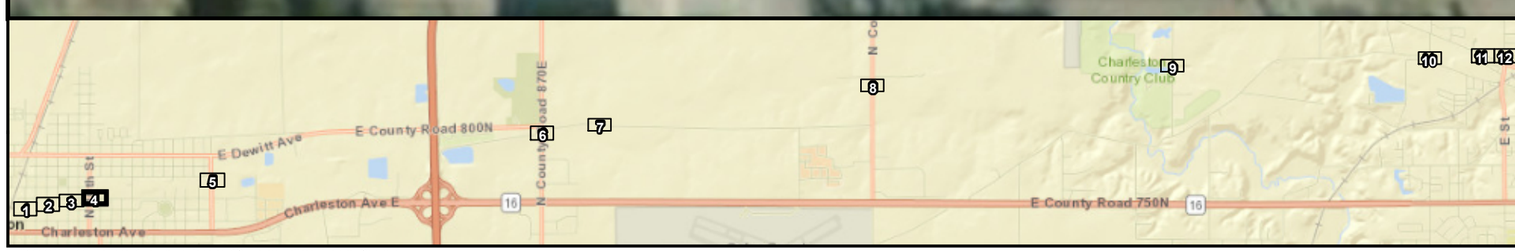
Legend	Soil Depth	Soil Classification	
Project Corridor	0-1'	a(1)	a(5)
Proposed Soil Boring	0-3'	a(3)	Unrestricted
	3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 3 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

SB-29
SB-30
SB-31
SB-32
SB-33
SB-28
10th St
Richmond Ave
9th St



0 50 100 200
Feet

N W E S

Aerial Source: ESRI Online World Imagery

Legend

- Project Corridor
- Proposed Soil Boring

Soil Depth	Soil Classification	
0-1'	a(1)	a(5)
0-3'	a(3)	Unrestricted
3-5'	a(4)	

Huff & Huff, Inc.

Figure 4-1
Extent of Potentially Impacted Soil Map
Mattoon Bike Trail PSI
Mattoon, Coles County, IL
Sheet 4 of 12

J:\81.0220535.03 Mattoon Bike Trail Extension PSI\Figures\Mattoon_Bike_Trail_Soils.mxd

TABLE 3-3
VOC (& BTEX) SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-5**	**SB-25**	**SB-31**
Depth, ft	*Concentration* [a/]	1-3	0-1	1-3
Constituent	----------*mg/kg*----------			
Acetone	*25*	--	--	--
Benzene	*0.03*	<0.03	<0.03	<0.03
Bromodichloromethane	*0.6*	--	--	--
Bromoform	*0.8*	--	--	--
Bromomethane	*0.2*	--	--	--
Carbon disulfide	*9*	--	--	--
Carbon tetrachloride	*0.07*	--	--	--
Chlorobenzene	*1*	--	--	--
Chlorodibromomethane	*0.4*	--	--	--
Chloroform	*0.3*	--	--	--
cis-1,3-Dichloropropene	*0.005*	--	--	--
trans-1,3-Dichloropropene	*0.005*	--	--	--
1,1-Dichloroethane	*23*	--	--	--
1,2-Dichloroethane	*0.02*	--	--	--
1,1-Dichloroethene	*0.06*	--	--	--
cis-1,2-Dichloroethene	*0.4*	--	--	--
trans-1,2-Dichloroethene	*0.7*	--	--	--
1,2-Dichloropropane	*0.03*	--	--	--
Ethylbenzene	*13*	<0.219	<0.155	<0.188
Methyl-tert-butylether (MTBE)	*0.32*	--	--	--
Methylene chloride	*0.02*	--	--	--
Styrene	*4*	--	--	--
Tetrachloroethene	*0.06*	--	--	--
Toluene	*12*	<0.109	<0.0774	<0.0941
1,1,1-Trichloroethane	*2*	--	--	--
1,1,2-Trichloroethane	*0.02*	--	--	--
Trichloroethene	*0.06*	--	--	--
Vinyl acetate	*10*	--	--	--
Vinyl chloride	*0.01*	--	--	--
Xylene, Total	*5.6*	<0.656	<0.464	<0.565

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

-- Constituent for which sample was not analyzed, or for which no Remedial Objective

TABLE 3-5
PNA SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Sample ID	*Maximum Allowable Concentration* [1]				**SB-5**	**SB-8**	**SB-9**
Sample Depth	*Within Chicago Corporate Limits*	*Within a Populated Area in a MSA Excluding Chicago*	*Within a Populated Area in a non-MSA County*	*Outside a Populated Area*	1-3	3-5	3-5
Constituents	*mg/kg*						
Acenaphthene	*570*	*570*	*570*	*570*	0.012	0.069	0.0381
Acenaphthylene	*85*	*85*	*85*	*85*	0.374	0.0259	0.0183
Anthracene	*12,000*	*12,000*	*12,000*	*12,000*	0.205	0.166	0.0635
Benzo(a)anthracene	*1.1* [2]	*1.8* [2]	*0.9*	*0.9*	0.807	0.729	0.517
Benzo(a)pyrene	*1.3* [2]	*2.1* [2]	*0.98* [2]	*0.09*	**1.08**	**0.987**	**1**
Benzo(b)fluoranthene	*1.5* [2]	*2.1* [2]	*0.9*	*0.9*	**1.2**	0.813	0.722
Benzo(k)fluoranthene	*9*	*9*	*9*	*9*	0.422	0.263	0.304
Benzo(g,h,i)perylene	*2,300*	*2,300*	*2,300*	*2,300*	0.623	0.44	0.407
Chrysene	*88*	*88*	*88*	*88*	0.705	0.506	0.375
Dibenzo(a,h)anthracene	*0.20* [2]	*0.42* [2]	*0.15* [2]	*0.09*	**0.142**	**0.132**	**0.123**
Fluoranthene	*3,100*	*3,100*	*3,100*	*3,100*	0.944	0.755	0.359
Fluorene	*560*	*560*	*560*	*560*	0.0165	0.098	0.0319
Indeno(1,2,3-cd)pyrene	*0.9*	*1.6* [2]	*0.9*	*0.9*	**0.969**	**0.958**	**0.928**
Naphthalene	*1.8*	*1.8*	*1.8*	*1.8*	0.0948	0.0604	<0.0246
Phenanthrene	*210*	*210*	*210*	*210*	0.333	1.3	0.342
Pyrene	*2,300*	*2,300*	*2,300*	*2,300*	1.01	0.681	0.341

[1] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart F)

[2] Refers to background concentration from 35 IAC 742, Appendix A, Table H

Bold = Constituent detected above its reporting limit

Bold/Shaded = Constituent detected above its applicable MAC

Note: Table only includes samples analyzed for PNAs

TABLE 3-9
RCRA METALS SOIL RESULTS COMPARED TO THE MACs FOR CCDD DISPOSAL

Soil Boring	*Maximum Allowable*	**SB-5**	**SB-8**	**SB-9**	**SB-25**	**SB-31**
Depth, ft	*Concentration* [a/]	1-3	3-5	3-5	0-1	1-3
Constituent	----------*mg/kg*----------					
Antimony	5	<1.39	<1.63	<1.65	<1.4	<1.39
Arsenic	11.3/13	9.28	<11.3	<11.3	7.73	10.4
Barium	1,500	49.8	60.9	48	51.9	80.5
Beryllium	22	<0.56	<0.163	<0.165	<0.561	<0.56
Cadmium	5.2	0.755	0.711	<0.5	0.348	1.54
Calcium	--	28500	1460		46100	22800
Chromium, total	21	8.92	<13	<13	10.1	8.3
Cobalt	20	7.01	2.79	<1.65	3.65	6.06
Copper	2,900	83.4	133	51.6	18.3	83
Iron	15,000/15,900	**29700**	14400	13600	11000	**34300**
Lead	107	92.1	42.6	42.2	21.8	**118**
Magnesium	325,000	8910	802	450	5080	9120
Manganese	630/636	315	31.7	13.8	271	258
Mercury	0.1	**0.161**	**0.254**	**0.201**	<0.064	0.094
Nickel	100	15	10.5	6.71	8.17	19.4
Potassium	--	517	683	764	751	738
Selenium	1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Silver	4.4	<4.4	<4.4	<4.4	<4.4	**6.54**
Sodium	--	331	328	292	56.1	378
Thallium	2.6	**2.75**	<2.2	<2.2	1.79	**3.15**
Vanadium	550	24	13.8	12.7	18.2	20.2
Zinc	5,100	70.9	82.2	14.7	32.7	148

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical Constituents in Uncontaminated Soil Used As Fill Material At Regulated Fill Operations (35 IAC 1100.Subpart

b/ Refers to MAC value within a populated area in a MSA excluding Chicago

uent for which sample was not analyzed, or for which no Remedial Objecti

*TCLP analysis indicates achievment of MAC, refer to table 3-12

TABLE 3-10
TCLP/SPLP METALS SOIL RESULTS COMPARED TO

Soil Boring Depth, ft	*Maximum Allowable Concentration* [a/]	**SB-31** 1-3'
Constituent	----------*mg/L*----------	
SPLP Manganese	0.15	--
TCLP Chromium	0.1	--
TCLP Iron	5	<0.125
TCLP Lead	0.0075	<0.0075
TCLP Manganese	0.15	--
TCLP Silver	0.05	<0.0025
TCLP Thallium	0.002	<0.002

[a/] Refers to Maximum Allowable Concentration (MAC) of Chemical

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Analytical Report

Adam Kittler
Huff & Huff, A subsidiary of GZA
915 Harger Road, Suite 330
Oak Brook, IL 60523

January 30, 2019

Work Order: 18L0509

RE: TACO Listed Parameters 2018
Mattoon Bike Trail

Dear Adam Kittler:

Enclosed are the analytical reports for the EMT Work Order listed. Also included with this analytical report is a copy of the chain of custody associated with these samples. If you have any questions, please contact me.

This is a revised report, that supersedes all previous reports. Please see case narrative for an explanation of revision.

Sincerely,

Tim Witrzek
Federal Program Manager
847.967.6666
twitrzek@emt.com
Approved for release: 1/30/2019 8:29:13AM

Approved by,

Matthew Gregory
Technical Manager

The contents of this report apply to the sample(s) analyzed. No duplication is allowed except in its entirety. Detection and Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

State of Illinois, NELAP Accredited Lab No. 100256, Cert No. 003674

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Sample Summary

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 1-3'	18L0509-02	Soil	12/12/18 10:55	12/14/18 09:40
SB-2 1-3'	18L0509-05	Soil	12/12/18 11:01	12/14/18 09:40
SB-3 1-3'	18L0509-08	Soil	12/12/18 11:07	12/14/18 09:40
SB-4 1-3'	18L0509-11	Soil	12/12/18 11:12	12/14/18 09:40
SB-4 3-5'	18L0509-12	Soil	12/12/18 11:13	12/14/18 09:40
SB-5 1-3'	18L0509-14	Soil	12/12/18 11:16	12/14/18 09:40
SB-5 3-5'	18L0509-15	Soil	12/12/18 11:17	12/14/18 09:40
SB-6 1-3'	18L0509-17	Soil	12/12/18 11:19	12/14/18 09:40
SB-6 3-5'	18L0509-18	Soil	12/12/18 11:20	12/14/18 09:40
SB-7 1-3'	18L0509-20	Soil	12/12/18 11:25	12/14/18 09:40
SB-7 3-5'	18L0509-21	Soil	12/12/18 11:26	12/14/18 09:40
SB-8 1-3'	18L0509-23	Soil	12/12/18 11:28	12/14/18 09:40
SB-8 3-5'	18L0509-24	Soil	12/12/18 11:29	12/14/18 09:40
SB-9 1-3'	18L0509-26	Soil	12/12/18 11:31	12/14/18 09:40
SB-9 3-5'	18L0509-27	Soil	12/12/18 11:32	12/14/18 09:40
SB-10 1-3'	18L0509-29	Soil	12/12/18 00:00	12/14/18 09:40
SB-10 3-5'	18L0509-30	Soil	12/12/18 00:00	12/14/18 09:40
SB-11 0-1'	18L0509-31	Soil	12/12/18 11:38	12/14/18 09:40
SB-12 0-1'	18L0509-32	Soil	12/12/18 11:42	12/14/18 09:40
SB-13 0-1'	18L0509-33	Soil	12/12/18 11:45	12/14/18 09:40
SB-14 0-1'	18L0509-34	Soil	12/12/18 11:49	12/14/18 09:40
SB-15 0-1'	18L0509-35	Soil	12/12/18 11:53	12/14/18 09:40
SB-16 0-1'	18L0509-36	Soil	12/12/18 11:58	12/14/18 09:40
SB-17 0-1'	18L0509-37	Soil	12/12/18 12:02	12/14/18 09:40
SB-18 0-1'	18L0509-38	Soil	12/12/18 12:05	12/14/18 09:40
SB-19 0-1'	18L0509-39	Soil	12/12/18 12:07	12/14/18 09:40
SB-20 0-1'	18L0509-40	Soil	12/12/18 12:10	12/14/18 09:40
SB-21 0-1'	18L0509-41	Soil	12/12/18 12:16	12/14/18 09:40
SB-22 0-1'	18L0509-42	Soil	12/12/18 12:18	12/14/18 09:40
SB-23 0-1'	18L0509-43	Soil	12/12/18 12:21	12/14/18 09:40
SB-24 0-1'	18L0509-44	Soil	12/12/18 12:25	12/14/18 09:40
SB-25 0-1'	18L0509-45	Soil	12/12/18 12:27	12/14/18 09:40
SB-26 0-1'	18L0509-46	Soil	12/12/18 12:30	12/14/18 09:40
SB-27 0-1'	18L0509-47	Soil	12/12/18 12:33	12/14/18 09:40
SB-28 0-1'	18L0509-48	Soil	12/12/18 12:37	12/14/18 09:40
SB-29 1-3'	18L0509-49	Soil	12/12/18 12:39	12/14/18 09:40
SB-29 3-5'	18L0509-50	Soil	12/12/18 12:40	12/14/18 09:40
SB-30 1-3'	18L0509-51	Soil	12/12/18 12:42	12/14/18 09:40
SB-30 3-5'	18L0509-52	Soil	12/12/18 12:43	12/14/18 09:40
SB-31 1-3'	18L0509-53	Soil	12/12/18 12:44	12/14/18 09:40
SB-31 3-5'	18L0509-54	Soil	12/12/18 12:45	12/14/18 09:40
SB-32 0-1'	18L0509-55	Soil	12/12/18 12:47	12/14/18 09:40
SB-33 0-1'	18L0509-56	Soil	12/12/18 12:51	12/14/18 09:40
SB-34 0-1'	18L0509-57	Soil	12/12/18 12:54	12/14/18 09:40
SB-35 0-1'	18L0509-58	Soil	12/12/18 13:02	12/14/18 09:40
SB-36 0-1'	18L0509-59	Soil	12/12/18 13:08	12/14/18 09:40
SB-37 0-1'	18L0509-60	Soil	12/12/18 13:17	12/14/18 09:40
SB-38 0-1'	18L0509-61	Soil	12/12/18 13:20	12/14/18 09:40
SB-39 0-1'	18L0509-62	Soil	12/12/18 13:38	12/14/18 09:40
SB-40 0-1'	18L0509-63	Soil	12/12/18 13:35	12/14/18 09:40

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SB-41 0-1'	18L0509-64	Soil	12/12/18 13:49	12/14/18 09:40
SB-42 0-1'	18L0509-65	Soil	12/12/18 13:51	12/14/18 09:40
SB-43 0-1'	18L0509-66	Soil	12/12/18 14:02	12/14/18 09:40
SB-44 0-1'	18L0509-67	Soil	12/12/18 14:05	12/14/18 09:40
SB-45 0-1'	18L0509-68	Soil	12/12/18 14:11	12/14/18 09:40
SB-46 0-1'	18L0509-69	Soil	12/12/18 14:15	12/14/18 09:40
SB-47 0-1'	18L0509-70	Soil	12/12/18 14:18	12/14/18 09:40

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Case Narrative

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Date: 01/30/2019

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Sample results only relate to the sample(s) received at the laboratory and analytes of interest tested.

Work Order: 18L0509
The samples were received on 12/14/18 09:40. The samples arrived in good condition and properly preserved. The temperature of the cooler at receipt was:

Cooler	Temp C°
Default Cooler	4.8

Refer to Qualifiers and Definitions for quality and analytical clarifications or deviations.

On 1/4/19 client added addtional analyses TCLP, SPLP and Sim PNAs to several samples. Client is aware that Sim PNA samples are passed hold time.

On 1/16/19 client added TCLP Fe analysis to several samples.

On 1/22/19 client added additional TCLP analysis to two samples.

6010 Total Metals:
B8L0552-BS1: The LCS had multiple analytes below the laboratory control limit, but all are within 15% of the target value. The bracketing CCV recoveries in the run are within the acceptance limits.

6010_Ca, Fe, and K:
There were trace detection of these analytes in the blank, but the levels of the analytes in the samples was well above 10% of the blank level. The levels detected in the blank are not significant for the level found in the samples.

The Batch B8L0552 QC for the MS, MSD, DUP, and PS had many outliers, most likely due to the sample matrices combined with some of the high levels for some of the target analytes.

B9A0160: Elevated limit for Tl due to biases caused by spectral overlap from high concentrations of interfering elements .

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8270_PNA_SIM

Samples 20 and 23, the surrogate spike compound, fluoranthene-d10 recovered outside control criteria due to matrix.

Sample 56 was utilized for matrix spike / matrix spike (MS/MSD) duplicate analysis. Due to matrix and relatively high concentration of analytes in the sample, several MS/MSD compounds were outside control criteria.

8270D_SVOC

Sample 39 was utilized for matrix spike / matrix spike duplicate analysis. Due to sample matrix some compounds recovered outside control criteria.

The internal standard perylene-d12 recovered outside control criteria for samples 33, 35 (2X dilution reported), 37, 39 and 57 at 45%, 37%, 40%, 42%,and 32%, respectfully. Control criteria for the internal standards are 50% to 200%. Those with recoveries above 40% were reported to maintain the detection limits for the associated analytes. Samples 35 and 57 were run initially at a 1X dilution and repeated at a 2Xwhich was then reported.

The analytes associated with this internal standard would be:

benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene.

8260B_VOC_5035_LOW

The surrogate spike compound, 1,2-dichloroethane-d4, for sample 66 recovered outside control criteria due to sample matrix.

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-5 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:17
Matrix: Soil
Lab ID: 18L0509-15

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**5230**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Antimony	< 1.39	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Barium	**52.9**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Beryllium	< 0.139	0.139		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Calcium	**22300**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Cobalt	**5.21**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Copper	**27.6**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Iron	**8230**	278		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Lead	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Magnesium	**6010**	695		mg/Kg dry	01/08/19 17:45	B9A0160	KJ1	100
Manganese	**306**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Nickel	**12.0**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Potassium	**831**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:28	B9A0160	KJ1	10
Sodium	**97.8**	6.95		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Vanadium	**17.8**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Zinc	**31.7**	1.39		mg/Kg dry	01/08/19 21:13	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.065	0.065		mg/Kg dry	01/08/19 12:28	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**88.7**	0.100	H	% (Percent)	01/08/19 08:22	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
2-Methylnaphthalene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Acenaphthylene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Anthracene	< 3.78	3.78	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)anthracene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(a)pyrene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(b)fluoranthene	< 15.1	15.1	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(g,h,i)perylene	< 18.9	18.9	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Benzo(k)fluoranthene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Chrysene	< 7.56	7.56	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1
Dibenzo(a,h)anthracene	< 37.8	37.8	H	ug/Kg dry	01/09/19 08:10	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-5 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:17
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-15 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Fluorene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	< 7.56	7.56	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Naphthalene	< 18.9	18.9	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Phenanthrene	**9.80**	3.78	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Pyrene	< 15.1	15.1	H	ug/Kg dry		01/09/19 08:10	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 91%*	*Limits: 50-150*	*01/09/19 08:10*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-8 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:29
Matrix: Soil
Lab ID: 18L0509-24

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**4750**	81.5		mg/Kg dry	01/08/19 19:40	B9A0160	KJ1	10
Antimony	< 1.63	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Barium	**60.9**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Beryllium	< 0.163	0.163		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Cadmium	**0.711**	0.500		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Calcium	**1460**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Cobalt	**2.79**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Copper	**133**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Iron	**14400**	326		mg/Kg dry	01/08/19 18:14	B9A0160	KJ1	100
Lead	**42.6**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Magnesium	**802**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Manganese	**31.7**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Nickel	**10.5**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Potassium	**683**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:40	B9A0160	KJ1	10
Sodium	**328**	8.15		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Vanadium	**13.8**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Zinc	**82.2**	1.63		mg/Kg dry	01/08/19 21:26	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.254**	0.073		mg/Kg dry	01/08/19 12:35	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.4**	0.100	H	% (Percent)	01/08/19 08:28	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**136**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
2-Methylnaphthalene	**103**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Acenaphthene	**69.0**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Acenaphthylene	**25.9**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Anthracene	**166**	5.40	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(a)anthracene	**729**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(a)pyrene	**987**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(b)fluoranthene	**813**	21.6	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(g,h,i)perylene	**440**	27.0	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Benzo(k)fluoranthene	**263**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Chrysene	**506**	10.8	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1
Dibenzo(a,h)anthracene	**132**	54.0	H	ug/Kg dry	01/09/19 10:04	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-8 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:29
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-24 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluoranthene	**755**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Fluorene	**98.0**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**958**	10.8	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Naphthalene	**60.4**	27.0	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Phenanthrene	**1300**	5.40	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Pyrene	**681**	21.6	H	ug/Kg dry		01/09/19 10:04	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 92%*	*Limits: 50-150*	*01/09/19 10:04*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 90%*	*Limits: 50-150*	*01/09/19 10:04*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-9 3-5'
Report Date: 01/30/2019
Collection Date: 12/12/2018 11:32
Matrix: Soil
Lab ID: 18L0509-27

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**3240**	82.6		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Antimony	< 1.65	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Arsenic	< 11.3	11.3		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Barium	**48.0**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Beryllium	< 0.165	0.165		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Cadmium	< 0.500	0.500		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Chromium	< 13.0	13.0		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Cobalt	< 1.65	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Copper	**51.6**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Iron	**13600**	33.0		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Lead	**42.2**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Magnesium	**450**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Manganese	**13.8**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Nickel	**6.71**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Potassium	**764**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	01/08/19 19:44	B9A0160	KJ1	10
Sodium	**292**	8.26		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Thallium	< 2.20	2.20		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Vanadium	**12.7**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Zinc	**14.7**	1.65		mg/Kg dry	01/08/19 21:30	B9A0160	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.201**	0.076		mg/Kg dry	01/08/19 12:37	B9A0170	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**75.1**	0.100	H	% (Percent)	01/08/19 08:30	B9A0158	MKP	1
Semivolatile Organic Compounds by GC/MS								
Method: SW8270D SIM / SW3550								
1-Methylnaphthalene	**50.1**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
2-Methylnaphthalene	**42.8**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Acenaphthene	**38.1**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Acenaphthylene	**18.3**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Anthracene	**63.5**	4.92	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(a)anthracene	**517**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(a)pyrene	**1000**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(b)fluoranthene	**722**	19.7	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(g,h,i)perylene	**407**	24.6	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Benzo(k)fluoranthene	**304**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Chrysene	**375**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Dibenzo(a,h)anthracene	**123**	49.2	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1
Fluoranthene	**359**	9.85	H	ug/Kg dry	01/09/19 13:35	B9A0180	LP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-9 3-5'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 11:32
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-27 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS (Continued)									
Method: SW8270D SIM / SW3550 (Continued)									
Fluorene	**31.9**	9.85	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Indeno(1,2,3-cd)pyrene	**928**	9.85	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Naphthalene	< 24.6	24.6	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Phenanthrene	**342**	4.92	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Pyrene	**341**	19.7	H	ug/Kg dry		01/09/19 13:35	B9A0180	LP	1
Surrogate: 2-Methylnaphthalene-d10			*H*	*Recovery: 89%*	*Limits: 50-150*	*01/09/19 13:35*	*B9A0180*	*LP*	*1*
Surrogate: Fluoranthene-d10			*H*	*Recovery: 77%*	*Limits: 50-150*	*01/09/19 13:35*	*B9A0180*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-25 0-1'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:27
Matrix: Soil
Lab ID: 18L0509-45

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7350**	701		mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Antimony	< 1.40	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Arsenic	**7.73**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Barium	**51.9**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Beryllium	< 0.561	0.561		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Cadmium	**0.348**	0.140		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Calcium	**46100**	701	B	mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Chromium	**10.1**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Cobalt	**3.65**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Copper	**18.3**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Iron	**11000**	280		mg/Kg dry	12/18/18 20:24	B8L0552	KJ1	100
Lead	**21.8**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Magnesium	**5080**	70.1		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Manganese	**271**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Nickel	**8.17**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Potassium	**751**	7.01	B	mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Silver	< 4.40	4.40		mg/Kg dry	12/18/18 22:15	B8L0552	KJ1	10
Sodium	**56.1**	7.01		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Thallium	**1.79**	0.370		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Vanadium	**18.2**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Zinc	**32.7**	1.40		mg/Kg dry	12/19/18 00:28	B8L0552	KJ1	1
Mercury by CVAA								
Method: SW7471B								
Mercury	< 0.064	0.064		mg/Kg dry	12/26/18 14:19	B8L0730	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**86.1**	0.100		% (Percent)	12/15/18 08:21	B8L0498	MKP	1
Volatile Organic Compounds by GC/MS								
Method: SW8260B / SW5035								
Benzene	< 30.0	30.0		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Ethylbenzene	< 155	155		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Toluene	< 77.4	77.4		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Xylenes, Total	< 464	464		ug/Kg dry	12/19/18 01:15	B8L0744	JL	50
Surrogate: Fluorobenzene				*Recovery: 94%* *Limits: 91-106*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 88%* *Limits: 71-112*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 97%* *Limits: 85-119*	*12/19/18 01:15*	*B8L0744*	*JL*	*50*

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-25 0-1'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:27
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-45 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**37.4**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
2-Methylnaphthalene	**46.7**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Acenaphthene	**38.5**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Acenaphthylene	**418**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Anthracene	**252**	4.63		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(a)anthracene	**839**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(a)pyrene	**1070**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(b)fluoranthene	**1340**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(g,h,i)perylene	**871**	23.2		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Benzo(k)fluoranthene	**459**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Chrysene	**737**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Dibenzo(a,h)anthracene	**162**	46.3		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Fluoranthene	**924**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Fluorene	**31.9**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1100**	9.27		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Naphthalene	**43.6**	23.2		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Phenanthrene	**347**	4.63		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Pyrene	**960**	18.5		ug/Kg dry		12/22/18 21:40	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 100%*	*Limits: 50-150*	*12/22/18 21:40*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 104%*	*Limits: 50-150*	*12/22/18 21:40*	*B8L0673*	*LP*	*1*

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Client Sample Results

(Continued)

Client: Huff & Huff, A subsidiary of GZA
Project: TACO Listed Parameters 2018
Mattoon Bike Trail
Work Order: 18L0509

Client Sample ID: SB-31 1-3'
Report Date: 01/30/2019
Collection Date: 12/12/2018 12:44
Matrix: Soil
Lab ID: 18L0509-53

Analyses	Result	EMT Reporting Limit	Qual	Units	Date/Time Analyzed	Batch	Analyst	DF
Metals by ICP-AES								
Method: SW6010C / SW3050								
Aluminum	**7500**	69.5		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Antimony	< 1.39	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Arsenic	**10.4**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Barium	**80.5**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Beryllium	< 0.560	0.560		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Cadmium	**1.54**	0.139		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Calcium	**22800**	695	B	mg/Kg dry	12/18/18 20:36	B8L0552	KJ1	100
Chromium	**8.30**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Cobalt	**6.06**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Copper	**83.0**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Iron	**34300**	278		mg/Kg dry	12/18/18 20:36	B8L0552	KJ1	100
Lead	**118**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Magnesium	**9120**	69.5		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Manganese	**258**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Nickel	**19.4**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Potassium	**738**	6.95	B	mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Selenium	< 1.30	1.30		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Silver	**6.54**	4.40		mg/Kg dry	12/18/18 22:27	B8L0552	KJ1	10
Sodium	**378**	6.95		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Thallium	**3.15**	0.367		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Vanadium	**20.2**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Zinc	**148**	1.39		mg/Kg dry	12/19/18 00:42	B8L0552	KJ1	1
Metals by ICP-MS								
Method: SW6020A / SW3015 / SW1311								
Iron, TCLP	< 0.125	0.125		mg/L	01/29/19 11:30	B9A0875	AG	5
Lead, TCLP	< 0.00750	0.00750		mg/L	01/29/19 11:30	B9A0875	AG	5
Silver, TCLP	< 0.00250	0.00250		mg/L	01/29/19 11:30	B9A0875	AG	5
Thallium, TCLP	< 0.00200	0.00200		mg/L	01/29/19 11:30	B9A0875	AG	5
Mercury by CVAA								
Method: SW7471B								
Mercury	**0.094**	0.068		mg/Kg dry	12/26/18 14:48	B8L0731	GSB	1
Wet Chemistry								
Method: SM2540G								
Total Solids	**83.8**	0.100		% (Percent)	12/15/18 08:29	B8L0498	MKP	1

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Client Sample Results

(Continued)

Client:	Huff & Huff, A subsidiary of GZA	**Client Sample ID:**	SB-31 1-3'
Project:	TACO Listed Parameters 2018 Mattoon Bike Trail	**Report Date:**	01/30/2019
		Collection Date:	12/12/2018 12:44
Work Order:	18L0509	**Matrix:**	Soil
		Lab ID:	18L0509-53 (Continued)

Analyses	Result	EMT Reporting Limit	Qual	Units		Date/Time Analyzed	Batch	Analyst	DF
Volatile Organic Compounds by GC/MS									
Method: SW8260B / SW5035									
Benzene	< 30.0	30.0		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Ethylbenzene	< 188	188		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Toluene	< 94.1	94.1		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Xylenes, Total	< 565	565		ug/Kg dry		12/19/18 06:38	B8L0745	JL	50
Surrogate: Fluorobenzene				*Recovery: 95%*	*Limits: 91-106*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Surrogate: Toluene-d8				*Recovery: 86%*	*Limits: 71-112*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Surrogate: 4-Bromofluorobenzene				*Recovery: 89%*	*Limits: 85-119*	*12/19/18 06:38*	*B8L0745*	*JL*	*50*
Semivolatile Organic Compounds by GC/MS									
Method: SW8270D SIM / SW3550									
1-Methylnaphthalene	**333**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
2-Methylnaphthalene	**383**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Acenaphthene	**18.8**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Acenaphthylene	**271**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Anthracene	**159**	4.78		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(a)anthracene	**936**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(a)pyrene	**1240**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(b)fluoranthene	**1460**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(g,h,i)perylene	**671**	23.9		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Benzo(k)fluoranthene	**299**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Chrysene	**899**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Dibenzo(a,h)anthracene	**269**	47.8		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Fluoranthene	**860**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Fluorene	**37.0**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Indeno(1,2,3-cd)pyrene	**1320**	9.55		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Naphthalene	**185**	23.9		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Phenanthrene	**873**	4.78		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Pyrene	**1120**	19.1		ug/Kg dry		12/26/18 23:20	B8L0673	LP	1
Surrogate: 2-Methylnaphthalene-d10				*Recovery: 101%*	*Limits: 50-150*	*12/26/18 23:20*	*B8L0673*	*LP*	*1*
Surrogate: Fluoranthene-d10				*Recovery: 88%*	*Limits: 50-150*	*12/26/18 23:20*	*B8L0673*	*LP*	*1*

Huff & Huff, a Subsidiary of GZA