# APPENDIX D

# LPC-663 CCDD DOCUMENTS

# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## 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: IDOT 199-014 WO 06A I80 at Wheeler Avenue - PSI Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):

ISGS Site 2233V3-1: I-80 ROW, adjacent to Wheeler Avenue, see attached documentation

City: Joliet State: IL Zip Code: 60436

County: Will Township: Joliet

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.51185 (Decimal Degrees) Longitude: - 88.10516 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ◯ Map Interpolation ◯ Photo Interpolation ◯ Survey ◉ Other

Google Earth - Approximate center of multiple addresses

IEPA Site Number(s), if assigned: BOL: NA BOW: NA BOA: NA

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 836

## II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Dept of Transportation, District 1
Street Address: 201 W. Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Dept of Transportation, District 1
Street Address: 201 W. Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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: IDOT 199-014 WO 06A I80 at Wheeler Avenue - PSI Latitude: 41.51185 Longitude: - 88.10516

Uncontaminated Soil 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 4-1.1 through 4-1.3 in the Final PSI Report and borings 2233V3-1-01 (Wheeler Ave 17+45, 25 Right), 2233V3-1-02 (Wheeler Ave 18+30, 25 Right), 2233V3-1-03 (W Park Avenue 10+50, 25 Right), 2233V3-1-04 (W Park Avenue 11 +00, 25 Left), 2233V3-1-12 (I-80 637+00, 00), 2233V3-1-13 (I-80 639+00, 00).

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 4-2 and 4-3 in the Final PSI Report for results summary and First Environmental Laboratories, Inc. report numbers #22-3607 and #22-3645. Site specific table of results is 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. / GZA GeoEnvironmental, Inc. |
| Street Address: | 915 Harger Road, Suite 330 |
| City: | Oak Brook State: IL Zip Code: 60523 |
| Phone: | 630-684-9100 |

Jeremy J. Reynolds, P.G.
Printed Name:

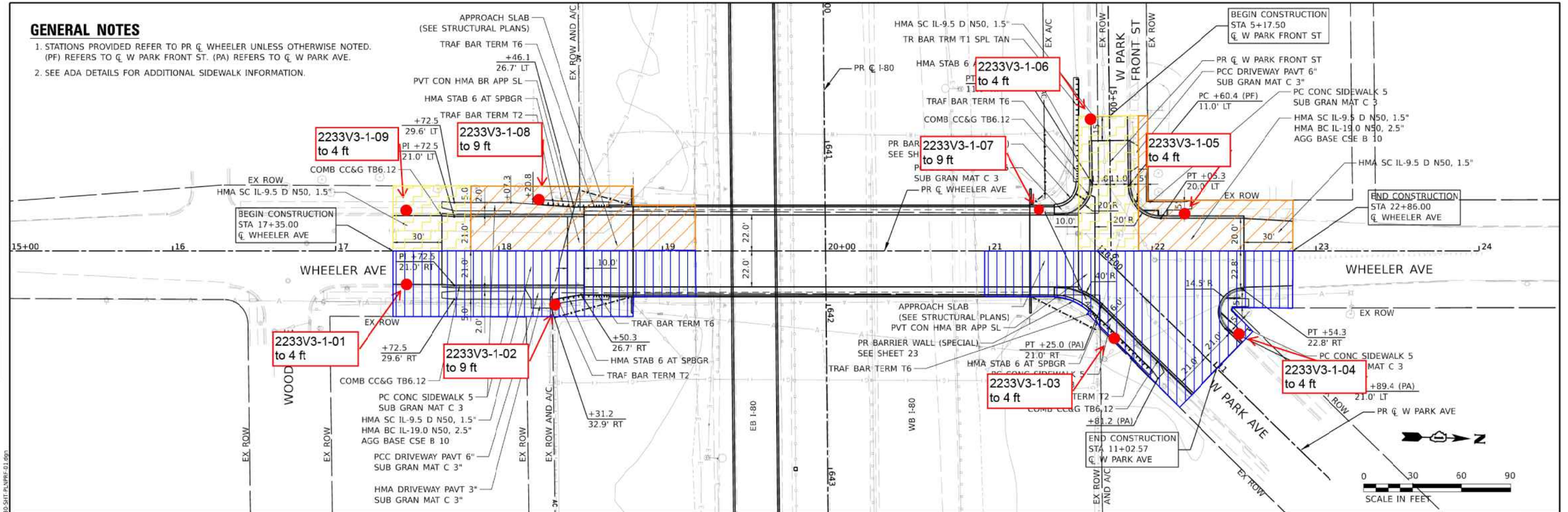
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Jul 27 2022
Date:


P.E or L.P.G. Seal:

## GENERAL NOTES

1. STATIONS PROVIDED REFER TO PR ℄ WHEELER UNLESS OTHERWISE NOTED. (PF) REFERS TO ℄ W PARK FRONT ST. (PA) REFERS TO ℄ W PARK AVE.
2. SEE ADA DETAILS FOR ADDITIONAL SIDEWALK INFORMATION.




SOIL BORING LOCATION

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).

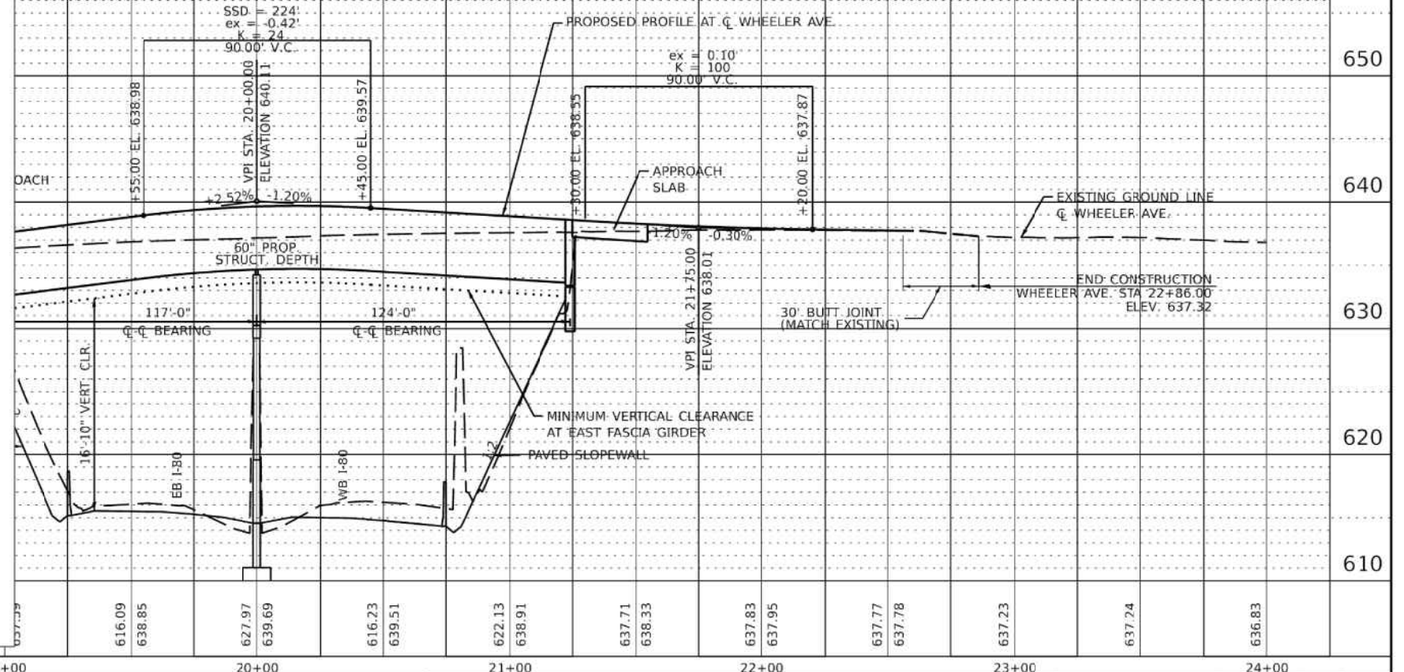
APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.

AREAS WITHOUT HATCHING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.




| | | | |
|---|---|---|---|
| USER NAME = karim.mostafa | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = 60.000 ' / in. | CHECKED - | REVISED - | |
| PLOT DATE = 1/27/2022 | DATE - | REVISED - | |

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

FIGURE 4-1.1 Extent of Potentially Impacted Soil
Huff & Huff, Inc. 199-014 WO #06A

**WHEELER AVENUE OVER F.A.I. ROUTE 80**
**PLAN & PROFILE**

SCALE: 1"=30' | SHEET 1 OF 1 SHEETS | STA. 15+00 TO STA. 24+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 340 | | WILL | 55 | 19 |
| | | CONTRACT NO. 62R30 | | |
| | | ILLINOIS FED. AID PROJECT | | |

MODEL: Default
FILE NAME: pw://transystems-ow.bentley.com:TRANSYSCORP-PW1-HOSTED\Documents\Projects\2018CH401140118002\02-TranSystems\CAD\62R30\Sheets\06 Road Plan Pro ls\D162R30-SHT-PLVPRF-01.dgn

## REMOVAL LEGEND:

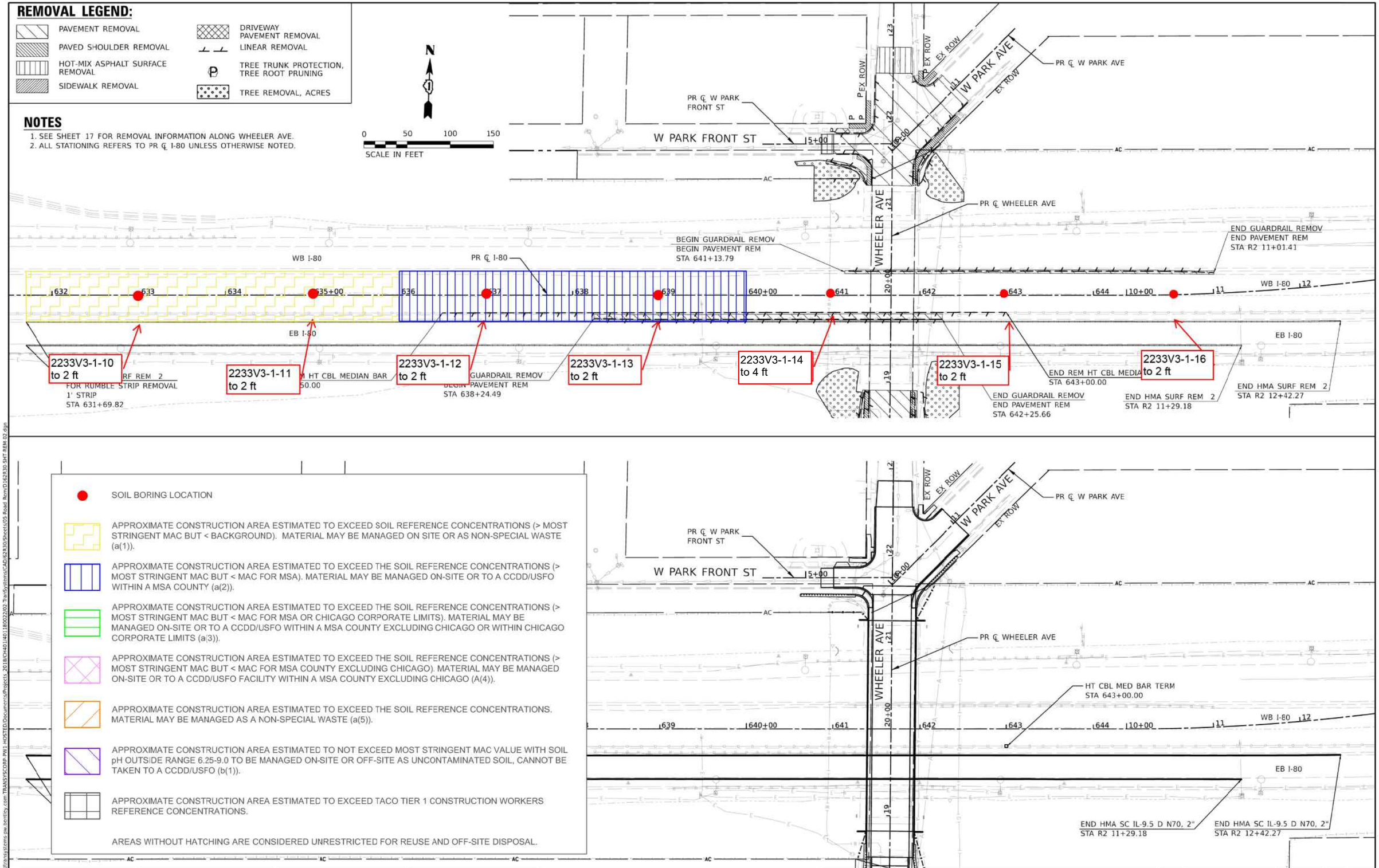
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- LINEAR REMOVAL
- TREE TRUNK PROTECTION, TREE ROOT PRUNING
- TREE REMOVAL, ACRES

## NOTES

1. SEE SHEET 17 FOR REMOVAL INFORMATION ALONG WHEELER AVE.
2. ALL STATIONING REFERS TO PR ℄ I-80 UNLESS OTHERWISE NOTED.

N

0 50 100 150
SCALE IN FEET




- SOIL BORING LOCATION
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.

AREAS WITHOUT HATCHING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.



AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5278
PHONE: (312) 373-7700 FAX: (312) 373-6800

| | | |
|---|---|---|
| USER NAME = karim.mostafa | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.000 ' / in. | CHECKED - | REVISED - |
| PLOT DATE = 1/27/2022 | DATE - | REVISED - |

FIGURE 4-1.2 Extent of Potentially Impacted Soil
Huff & Huff, Inc. 199-014 WO #06A

**WHEELER AVENUE OVER F.A.I. ROUTE 80**
**REMOVAL PLAN AND ROADWAY PLAN – I-80**

SCALE: 1"=50' | SHEET 2 OF 2 SHEETS | STA. 631+50 | TO STA. 12+90

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 340 | | WILL | 55 | 18 |
| | | CONTRACT NO. 62R30 | | |
| | ILLINOIS FED. AID PROJECT | | | |

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects - 2018\CH401\401180022\02 Tra\Systems\CAD\62R30\Sheets\05 Road Rem\D162R30 SHT REM 02.dgn

LPC-663 Results
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
IDOT, District One
I-80 at Wheeler Avenue, Will County, Illinois
BDE Sequence No.: 15923A
PTB: 199-014/HH-2, Work Order No.: 6A

| Boring ID | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2233V3-1-01 | 2233V3-1-02 | 2233V3-1-02 | 2233V3-1-03 | 2233V3-1-04 | 2233V3-1-12 | 2233V3-1-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-4) | (0-5) | (5-9) | (0-4) | (0-4) | (0-2) | (0-2) |
| **Sample Date** | | | | | | 5/20/2022 | 5/20/2022 | 5/20/2022 | 5/20/2022 | 5/20/2022 | 5/23/2022 | 5/23/2022 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 |
| **Parameter** | | | | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.82 | 7.81 | 8.81 | 8.57 | 8.43 | 8.84 | 8.89 |
| PID Readings (ppm) | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | | | | |
| **SVOCs, mg/kg** | | | | | | | | | | | | |
| **Total Metals, mg/kg** | | | | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **10.2** | **10** | **9.8** | **10.4** | **8.5** | **7** | **8.4** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **56.1** | **86.5** | **46.4** | **62.6** | **84.5** | **58.7** | **51.5** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | **0.6** | <0.5 | <0.5 | **0.8** | **0.6** | **0.6** |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | **0.5** | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **37400** | **2910** | **60500** | **58000** | **28000** | **68700** | **63300** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **13.1** | **19.8** | **14** | **14.4** | **19.8** | **18.5** | **18.1** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **9.4** | **8.1** | **8.9** | **8.4** | **6.5** | **9.9** | **12** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **26.5** | **22.1** | **27.7** | **25.1** | **23.6** | **25.3** | **27.1** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **21500** | **25200** | **21600** | **23200** | **24300** | **21600** | **22000** |
| Lead | 107 | 700 | --- | 400 | --- | **12** | **20.8** | **11.9** | **16.2** | **15.3** | **13.6** | **17.1** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **21700** | **3530** | **29300** | **36000** | **14300** | **29500** | **28100** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **443** | **504** | **513** | **567** | **280** | **379** | **460** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **23** | **16.5** | **27.4** | **21.2** | **20.1** | **24.8** | **27.5** |
| Potassium | --- | --- | --- | --- | --- | **1160** | **830** | **1580** | **1450** | **1490** | **1950** | **2170** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **641** | **1660** | **882** | **1100** | **3090** | **1050** | **1460** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **19** | **34.4** | **20.2** | **22.7** | **30.5** | **24.6** | **23.8** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **63.8** | **56.1** | **64.4** | **67.4** | **62.9** | **64.8** | **76.1** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Barium | 2 | | | | | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Cobalt | 1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Copper | 0.65 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Iron | 5 | | | | | **0.2** | **0.4** | **0.5** | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **1** | <0.1 | **0.3** | **1** | **0.6** | **0.7** | **0.8** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | | | | |
| Arsenic | 0.05 | | | | | **0.047** | **0.023** | **0.031** | **0.03** | **0.03** | **0.013** | **0.027** |
| Barium | 2 | | | | | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.06** | **0.08** | **0.075** | **0.057** | **0.07** | **0.04** | **0.068** |
| Cobalt | 1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Copper | 0.65 | | | | | **0.119** | **0.099** | **0.105** | **0.078** | **0.081** | **0.06** | **0.088** |
| Iron | 5 | | | | | **102** | **96.7** | **93.6** | **83.8** | **87.6** | **45.4** | **76.1** |
| Lead | 0.0075 | | | | | **0.036** | **0.03** | **0.032** | **0.038** | **0.032** | **0.022** | **0.031** |
| Manganese | 0.15 | | | | | **0.7** | **0.5** | **0.5** | **0.5** | **0.3** | **0.3** | **0.4** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | **0.3** | **0.2** | **0.3** | **0.3** | **0.2** | **0.2** | **0.2** |

--- - Refers to not applicable or value not available

[a/] Soil reference concentrations from MAC table. Background values for MSA counties are included as applicable.
Organic Soil Reference Concentrations (XX.XX / XX.XX / XX.XX) Include the Most Stringent Values from the MAC Table / The Chicago Corporate Limit / and The MSA County Excluding Chicago Values From the MAC Table.
Inorganic Soil Reference Concentrations (xx.xx / xx.xx) Include the Most Stringent values from the MAC Table / and the MSA County Value From the MAC Table as Applicable.

[b/] Soil Remediation Objectives for Construction Workers, Illinois EPA Tier 1 Soil Remedial Objectives; 35 IAC 742, Appendix B, Table B

[c/] Soil Remediation Objectives for Residential exposure, Illinois EPA Tier 1 Soil Remedial Objectives; 35 IAC 742, Appendix B, Table A

[d/] Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater.

When comparing results to the Soil Remediation Objectives, IDOT compares to the most stringent of the ingestion or inhalation exposure route value.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 83.95 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 10.2 | 1.0 | mg/kg | |
| Barium | 56.1 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 37,400 | 50 | mg/kg | |
| Chromium | 13.1 | 0.5 | mg/kg | |
| Cobalt | 9.4 | 0.5 | mg/kg | |
| Copper | 26.5 | 0.5 | mg/kg | |
| Iron | 21,500 | 5.0 | mg/kg | |
| Lead | 12.0 | 0.5 | mg/kg | |
| Magnesium | 21,700 | 50 | mg/kg | |
| Manganese | 443 | 0.5 | mg/kg | |
| Nickel | 23.0 | 0.5 | mg/kg | |
| Potassium | 1,160 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 641 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 19.0 | 1.0 | mg/kg | |
| Zinc | 63.8 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.82 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/23/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | 0.2 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 1.0 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/23/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.047 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-01 (0-4)
**Sample No:** 22-3607-001

**Date Collected:** 05/20/22
**Time Collected:** 9:20
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.060 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.119 | 0.005 | mg/L | |
| Iron | 102 | 0.1 | mg/L | |
| Lead | 0.036 | 0.005 | mg/L | |
| Manganese | 0.7 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.3 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 100.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 107.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 113* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 71* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 49.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 114* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 95* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 0-5)
**Sample No:** 22-3607-002

**Date Collected:** 05/20/22
**Time Collected:** 9:30
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 81.45 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 0-5)
**Sample No:** 22-3607-002

**Date Collected:** 05/20/22
**Time Collected:** 9:30
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 0-5)
**Sample No:** 22-3607-002

**Date Collected:** 05/20/22
**Time Collected:** 9:30
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 0-5)
**Sample No:** 22-3607-002

**Date Collected:** 05/20/22
**Time Collected:** 9:30
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 10.0 | 1.0 | mg/kg | |
| Barium | 86.5 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | 0.5 | 0.5 | mg/kg | |
| Calcium | 2,910 | 50 | mg/kg | |
| Chromium | 19.8 | 0.5 | mg/kg | |
| Cobalt | 8.1 | 0.5 | mg/kg | |
| Copper | 22.1 | 0.5 | mg/kg | |
| Iron | 25,200 | 5.0 | mg/kg | |
| Lead | 20.8 | 0.5 | mg/kg | |
| Magnesium | 3,530 | 50 | mg/kg | |
| Manganese | 504 | 0.5 | mg/kg | |
| Nickel | 16.5 | 0.5 | mg/kg | |
| Potassium | 830 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 1,660 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 34.4 | 1.0 | mg/kg | |
| Zinc | 56.1 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 05/20/22 |
| **Project ID:** | PO# 81.0220714.08, IDOT 199-014 WO #6 | **Time Collected:** | 9:30 |
| **Sample ID:** | 2233V3-1-02 0-5) | **Date Received:** | 05/20/22 |
| **Sample No:** | 22-3607-002 | **Date Reported:** | 06/06/22 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 7.81 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/23/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | 0.4 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/23/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.023 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 0-5)
**Sample No:** 22-3607-002

**Date Collected:** 05/20/22
**Time Collected:** 9:30
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.080 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.099 | 0.005 | mg/L | |
| Iron | 96.7 | 0.1 | mg/L | |
| Lead | 0.030 | 0.005 | mg/L | |
| Manganese | 0.5 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.2 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | | *%R Limits Low* | *High* |
|---|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 98.7* | | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.9* | | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 106.5* | | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 133* | * | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 75* | | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 66.5* | | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 129* | * | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 102* | | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 82.5* | | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 86.53 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/26/22 Preparation Date: 05/25/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 9.8 | 1.0 | mg/kg | |
| Barium | 46.4 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 60,500 | 50 | mg/kg | |
| Chromium | 14.0 | 0.5 | mg/kg | |
| Cobalt | 8.9 | 0.5 | mg/kg | |
| Copper | 27.7 | 0.5 | mg/kg | |
| Iron | 21,600 | 5.0 | mg/kg | |
| Lead | 11.9 | 0.5 | mg/kg | |
| Magnesium | 29,300 | 50 | mg/kg | |
| Manganese | 513 | 0.5 | mg/kg | |
| Nickel | 27.4 | 0.5 | mg/kg | |
| Potassium | 1,580 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 882 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.2 | 1.0 | mg/kg | |
| Zinc | 64.4 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.81 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/23/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | 0.5 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.3 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/23/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.031 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-02 (5-9)
**Sample No:** 22-3607-003

**Date Collected:** 05/20/22
**Time Collected:** 9:35
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.075 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.105 | 0.005 | mg/L | |
| Iron | 93.6 | 0.1 | mg/L | |
| Lead | 0.032 | 0.005 | mg/L | |
| Manganese | 0.5 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.3 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 100.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 114* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 68* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 51.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 117* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 91* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69.5* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-03 (0-4)
**Sample No:** 22-3607-004

**Date Collected:** 05/20/22
**Time Collected:** 9:45
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 83.33 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-03 (0-4)
**Sample No:** 22-3607-004

**Date Collected:** 05/20/22
**Time Collected:** 9:45
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/26/22 Preparation Date: 05/25/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-03 (0-4)
**Sample No:** 22-3607-004

**Date Collected:** 05/20/22
**Time Collected:** 9:45
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-03 (0-4)
**Sample No:** 22-3607-004

**Date Collected:** 05/20/22
**Time Collected:** 9:45
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 10.4 | 1.0 | mg/kg | |
| Barium | 62.6 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 58,000 | 50 | mg/kg | |
| Chromium | 14.4 | 0.5 | mg/kg | |
| Cobalt | 8.4 | 0.5 | mg/kg | |
| Copper | 25.1 | 0.5 | mg/kg | |
| Iron | 23,200 | 5.0 | mg/kg | |
| Lead | 16.2 | 0.5 | mg/kg | |
| Magnesium | 36,000 | 50 | mg/kg | |
| Manganese | 567 | 0.5 | mg/kg | |
| Nickel | 21.2 | 0.5 | mg/kg | |
| Potassium | 1,450 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 1,100 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 22.7 | 1.0 | mg/kg | |
| Zinc | 67.4 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 05/20/22 |
| **Project ID:** | PO# 81.0220714.08, IDOT 199-014 WO #6 | **Time Collected:** | 9:45 |
| **Sample ID:** | 2233V3-1-03 (0-4) | **Date Received:** | 05/20/22 |
| **Sample No:** | 22-3607-004 | **Date Reported:** | 06/06/22 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.57 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/23/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 1.0 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/23/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.030 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-03 (0-4)
**Sample No:** 22-3607-004

**Date Collected:** 05/20/22
**Time Collected:** 9:45
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.057 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.078 | 0.005 | mg/L | |
| Iron | 83.8 | 0.1 | mg/L | |
| Lead | 0.038 | 0.005 | mg/L | |
| Manganese | 0.5 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.3 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | | *%R Limits Low* | *High* |
|---|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 101.4* | | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102.4* | | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.8* | | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 142* | * | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 100* | | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 66* | | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 136* | * | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 118* | * | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 84* | | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 77.02 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.5 | 1.0 | mg/kg | |
| Barium | 84.5 | 0.5 | mg/kg | |
| Beryllium | 0.8 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 28,000 | 50 | mg/kg | |
| Chromium | 19.8 | 0.5 | mg/kg | |
| Cobalt | 6.5 | 0.5 | mg/kg | |
| Copper | 23.6 | 0.5 | mg/kg | |
| Iron | 24,300 | 5.0 | mg/kg | |
| Lead | 15.3 | 0.5 | mg/kg | |
| Magnesium | 14,300 | 50 | mg/kg | |
| Manganese | 280 | 0.5 | mg/kg | |
| Nickel | 20.1 | 0.5 | mg/kg | |
| Potassium | 1,490 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 3,090 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 30.5 | 1.0 | mg/kg | |
| Zinc | 62.9 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.43 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/23/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.6 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/23/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.030 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-04 (0-4)
**Sample No:** 22-3607-005

**Date Collected:** 05/20/22
**Time Collected:** 9:50
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.070 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.081 | 0.005 | mg/L | |
| Iron | 87.6 | 0.1 | mg/L | |
| Lead | 0.032 | 0.005 | mg/L | |
| Manganese | 0.3 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.2 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 100.8* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102.3* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.8* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 115* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 59* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 53.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 109* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 85* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 70.5* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/25/22 | | | | |
| Total Solids | 83.41 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/27/22 Preparation Date: 05/26/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.0 | 1.0 | mg/kg | |
| Barium | 58.7 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 68,700 | 50 | mg/kg | |
| Chromium | 18.5 | 0.5 | mg/kg | |
| Cobalt | 9.9 | 0.5 | mg/kg | |
| Copper | 25.3 | 0.5 | mg/kg | |
| Iron | 21,600 | 5.0 | mg/kg | |
| Lead | 13.6 | 0.5 | mg/kg | |
| Magnesium | 29,500 | 50 | mg/kg | |
| Manganese | 379 | 0.5 | mg/kg | |
| Nickel | 24.8 | 0.5 | mg/kg | |
| Potassium | 1,950 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 1,050 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 24.6 | 1.0 | mg/kg | |
| Zinc | 64.8 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/31/22 11:20 | | | | |
| pH @ 25°C, 1:2 | 8.84 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/06/22 | | Preparation Date: 06/03/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.7 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/25/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.013 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-12 (0-2)
**Sample No:** 22-3645-003

**Date Collected:** 05/23/22
**Time Collected:** 9:55
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/08/22 | | Preparation Date: 06/06/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.040 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.060 | 0.005 | mg/L | |
| Iron | 45.4 | 0.1 | mg/L | |
| Lead | 0.022 | 0.005 | mg/L | |
| Manganese | 0.3 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.2 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 99.8* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102.4* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 111.3* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 77.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 68* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 61* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 107* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 77* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 73* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/25/22 | | | | |
| Total Solids | 82.85 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/27/22 Preparation Date: 05/26/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.4 | 1.0 | mg/kg | |
| Barium | 51.5 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 63,300 | 50 | mg/kg | |
| Chromium | 18.1 | 0.5 | mg/kg | |
| Cobalt | 12.0 | 0.5 | mg/kg | |
| Copper | 27.1 | 0.5 | mg/kg | |
| Iron | 22,000 | 5.0 | mg/kg | |
| Lead | 17.1 | 0.5 | mg/kg | |
| Magnesium | 28,100 | 50 | mg/kg | |
| Manganese | 460 | 0.5 | mg/kg | |
| Nickel | 27.5 | 0.5 | mg/kg | |
| Potassium | 2,170 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 1,460 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 23.8 | 1.0 | mg/kg | |
| Zinc | 76.1 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/31/22 11:20 | | | | |
| pH @ 25°C, 1:2 | 8.89 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/06/22 | | Preparation Date: 06/03/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.8 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/25/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.027 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-13 (0-2)
**Sample No:** 22-3645-004

**Date Collected:** 05/23/22
**Time Collected:** 10:05
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/08/22 | | Preparation Date: 06/06/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.068 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.088 | 0.005 | mg/L | |
| Iron | 76.1 | 0.1 | mg/L | |
| Lead | 0.031 | 0.005 | mg/L | |
| Manganese | 0.4 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.2 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 96.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 101.5* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 72.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 72* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 58* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 105* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 78* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 71.5* | *50* | *100* |

# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## 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: IDOT 199-014 WO 06A I80 at Wheeler Avenue - PSI Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):

ISGS Site 2233V3-1: I-80 ROW, adjacent to Wheeler Avenue, see attached documentation

City: Joliet State: IL Zip Code: 60436

County: Will Township: Joliet

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.51185 (Decimal Degrees) Longitude: - 88.10516 (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ◯ Map Interpolation ◯ Photo Interpolation ◯ Survey ◉ Other

Google Earth - Approximate center of multiple addresses

IEPA Site Number(s), if assigned: BOL: NA BOW: NA BOA: NA

Approximate Start Date (mm/dd/yyyy): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 732

## II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Dept of Transportation, District 1
Street Address: 201 W. Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Dept of Transportation, District 1
Street Address: 201 W. Center Court
PO Box:
City: Schaumburg State: IL
Zip Code: 60196 Phone: 847-705-4122
Contact: Irma Romiti-Johnson
Email, if available: Irma.Romiti-Johnson@illinois.gov

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: IDOT 199-014 WO 06A I80 at Wheeler Avenue - PSI Latitude: 41.51185 Longitude: - 88.10516

Uncontaminated Soil 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 4-1.3 in the Final PSI Report and boring 2233V3-1-07 (Wheeler Ave 21+25, 25 Left), 2233V3-1-14 (I-80 641+00, 00), 2233V3-1-15 (I-80 643+00, 00), and 2233V3-1-16 (I-80 10+50, 00).

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 4-2 and 4-3 in the Final PSI Report for results summary and First Environmental Laboratories, Inc. report numbers #22-3607 and #22-3645. Site specific table of results is 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. / GZA GeoEnvironmental, Inc. |
| Street Address: | 915 Harger Road, 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:

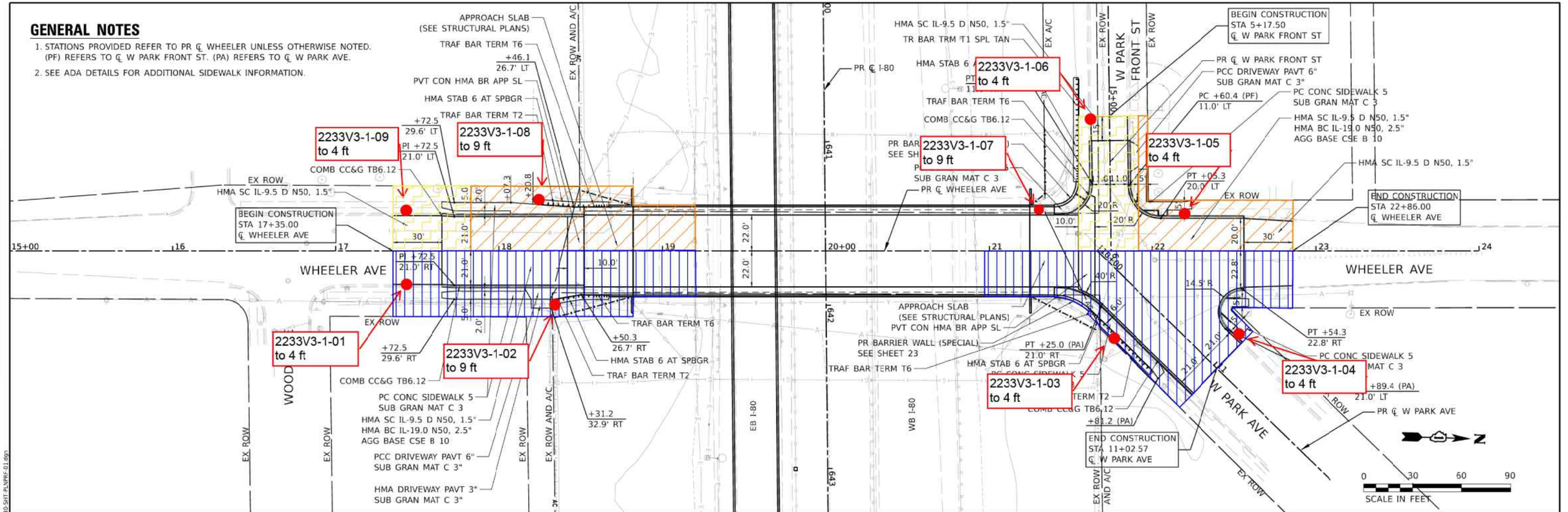
Jul 27, 2022
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS
3/23

P.E or L.P.G. Seal:

## GENERAL NOTES

1. STATIONS PROVIDED REFER TO PR ℄ WHEELER UNLESS OTHERWISE NOTED. (PF) REFERS TO ℄ W PARK FRONT ST. (PA) REFERS TO ℄ W PARK AVE.
2. SEE ADA DETAILS FOR ADDITIONAL SIDEWALK INFORMATION.




SOIL BORING LOCATION

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).

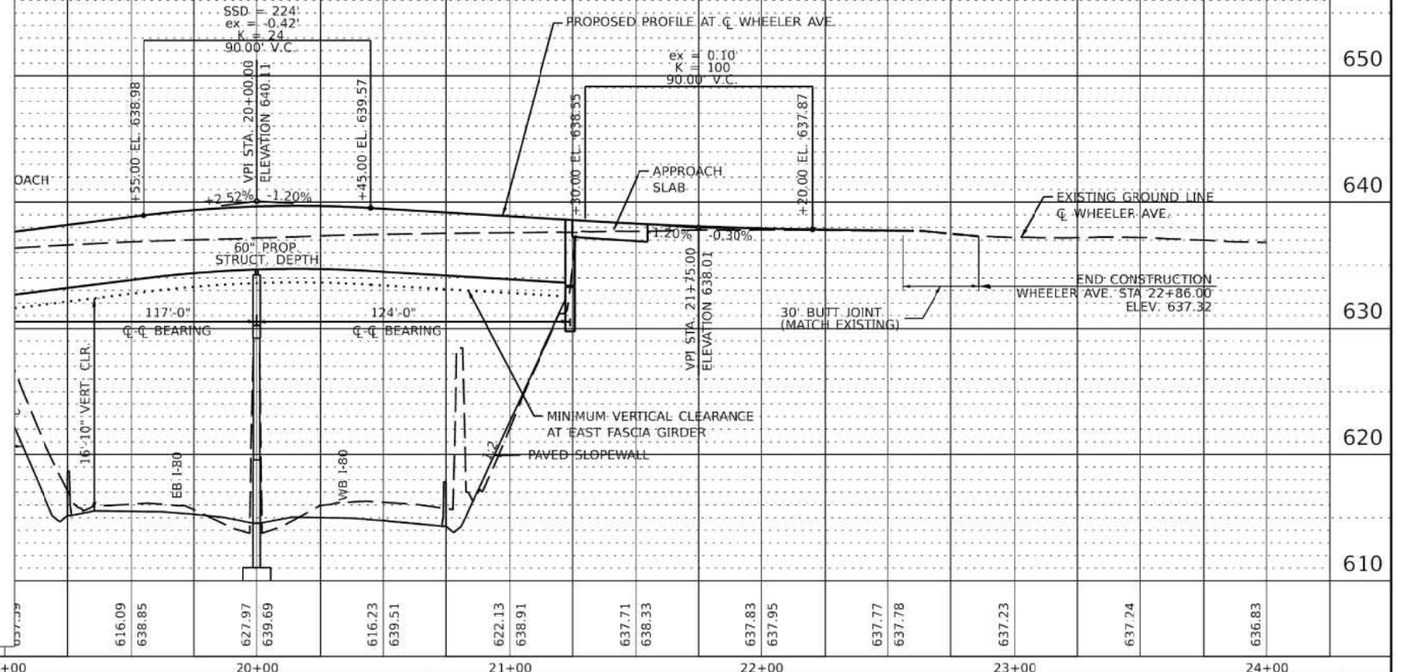
APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).

APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.

AREAS WITHOUT HATCHING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.




| | | | |
|---|---|---|---|
| USER NAME = karim.mostafa | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = 60.000 ' / in. | CHECKED - | REVISED - | |
| PLOT DATE = 1/27/2022 | DATE - | REVISED - | |

AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5276
PHONE: (312) 373-7700 FAX: (312) 373-6800

FIGURE 4-1.1 Extent of Potentially Impacted Soil
Huff & Huff, Inc. 199-014 WO #06A

**WHEELER AVENUE OVER F.A.I. ROUTE 80**
**PLAN & PROFILE**

SCALE: 1"=30' | SHEET 1 OF 1 SHEETS | STA. 15+00 TO STA. 24+00

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 340 | | WILL | 55 | 19 |
| | | CONTRACT NO. 62R30 | | |
| | | ILLINOIS FED. AID PROJECT | | |

MODEL: Default
FILE NAME: pw://transystems-ow.bentley.com:TRANSYSCORP-PW1-HOSTED\Documents\Projects\2018CH401140118002\02-TranSystems\CAD\62R30\Sheets\06 Road Plan Pro ls\D162R30-SHT-PLVPRF-01.dgn

## REMOVAL LEGEND:

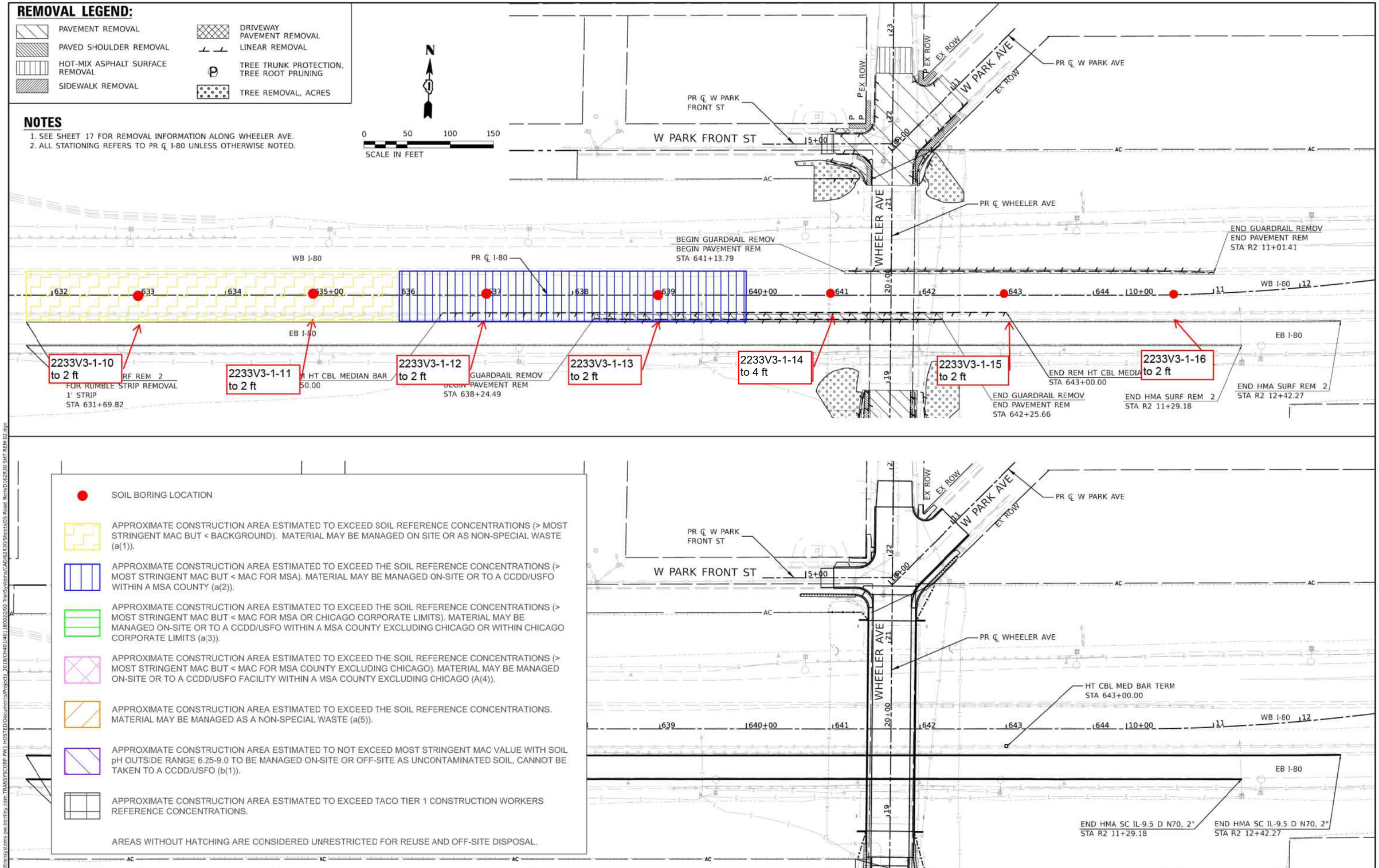
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- LINEAR REMOVAL
- TREE TRUNK PROTECTION, TREE ROOT PRUNING
- TREE REMOVAL, ACRES

## NOTES

1. SEE SHEET 17 FOR REMOVAL INFORMATION ALONG WHEELER AVE.
2. ALL STATIONING REFERS TO PR ℄ I-80 UNLESS OTHERWISE NOTED.

N

0 50 100 150
SCALE IN FEET




- SOIL BORING LOCATION
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).
- APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.

AREAS WITHOUT HATCHING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.



AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, IL 60601-5278
PHONE: (312) 373-7700 FAX: (312) 373-6800

| | | |
|---|---|---|
| USER NAME = karim.mostafa | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.000 ' / in. | CHECKED - | REVISED - |
| PLOT DATE = 1/27/2022 | DATE - | REVISED - |

FIGURE 4-1.2 Extent of Potentially Impacted Soil
Huff & Huff, Inc. 199-014 WO #06A

**WHEELER AVENUE OVER F.A.I. ROUTE 80**
**REMOVAL PLAN AND ROADWAY PLAN – I-80**

SCALE: 1"=50' | SHEET 2 OF 2 SHEETS | STA. 631+50 | TO STA. 12+90

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 340 | | WILL | 55 | 18 |
| | | CONTRACT NO. 62R30 | | |
| | ILLINOIS FED. AID PROJECT | | | |

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects - 2018\CH401\401180022\02 Tra\Systems\CAD\62R30\Sheets\05 Road Rem\D162R30 SHT REM 02.dgn

LPC-663 Results
Soils for Unrestricted Reuse or Disposal at CCDD Facilities
IDOT, District One
I-80 at Wheeler Avenue, Will County, Illinois
BDE Sequence No.: 15923A
PTB: 199-014/HH-2, Work Order No.: 6A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2233V3-1-07 | 2233V3-1-07 | 2233V3-1-14 | 2233V3-1-15 | 2233V3-1-16 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-5) | (5-9) | (0-4) | (0-2) | (0-2) |
| **Sample Date** | | | | | | 5/20/2022 | 5/20/2022 | 5/23/2022 | 5/23/2022 | 5/23/2022 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 | 2233V3-1 |
| **Parameter** | | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.27 | 8.75 | 8.02 | 8.57 | 7.93 |
| PID Readings (ppm) | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | NO EXCEEDANCES | | | | |
| **SVOCs, mg/kg** | | | | | | NO EXCEEDANCES | | | | |
| **Total Metals, mg/kg** | | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **8.8** | **9.5** | **5** | **6.4** | **7.6** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **60.6** | **101** | **41.2** | **43.4** | **48.4** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | **0.6** | **0.6** | <0.5 | **0.6** |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **57300** | **40500** | **68300** | **77700** | **64500** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **16.1** | **17.6** | **16.5** | **15.7** | **17.2** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **10.3** | **12** | **9.8** | **10.3** | **11.9** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **24.9** | **22** | **21.4** | **24.4** | **24.5** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **21800** | **23800** | **19200** | **19200** | **21000** |
| Lead | 107 | 700 | --- | 400 | --- | **15.3** | **15.5** | **13.4** | **13.3** | **15.7** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **30300** | **19700** | **34600** | **38700** | **31700** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **661** | **591** | **401** | **444** | **501** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **26.4** | **26.2** | **25.7** | **26.3** | **28.7** |
| Potassium | --- | --- | --- | --- | --- | **1780** | **1820** | **2270** | **2200** | **2310** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **154** | **297** | **1080** | **776** | **669** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **21.5** | **25.1** | **21.2** | **21.1** | **22** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **65.9** | **59.5** | **61** | **63.7** | **80.5** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Barium | 2 | | | | | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Cobalt | 1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Copper | 0.65 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Iron | 5 | | | | | <0.1 | **0.3** | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **1** | **1.7** | **1.8** | **1.1** | **0.9** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | **0.01** | **0.01** |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Barium | 2 | | | | | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | **0.017** | **0.005** |
| Cobalt | 1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Copper | 0.65 | | | | | <0.005 | <0.005 | <0.005 | **0.024** | **0.008** |
| Iron | 5 | | | | | **2.5** | **3.7** | <0.1 | **14** | **4.4** |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | **0.006** | <0.005 |
| Manganese | 0.15 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |

--- - Refers to not applicable or value not available

[a/] Soil reference concentrations from MAC table. Background values for MSA counties are included as applicable.
Organic Soil Reference Concentrations (XX.XX / XX.XX / XX.XX) Include the Most Stringent Values from the MAC Table / The Chicago Corporate Limit / and The MSA County Excluding Chicago Values From the MAC Table.
Inorganic Soil Reference Concentrations (xx.xx / xx.xx) Include the Most Stringent values from the MAC Table / and the MSA County Value From the MAC Table as Applicable.

[b/] Soil Remediation Objectives for Construction Workers, Illinois EPA Tier 1 Soil Remedial Objectives; 35 IAC 742, Appendix B, Table B

[c/] Soil Remediation Objectives for Residential exposure, Illinois EPA Tier 1 Soil Remedial Objectives; 35 IAC 742, Appendix B, Table A

[d/] Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater.

When comparing results to the Soil Remediation Objectives, IDOT compares to the most stringent of the ingestion or inhalation exposure route value.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (0-4)
**Sample No:** 22-3607-008

**Date Collected:** 05/20/22
**Time Collected:** 10:05
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 82.74 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (0-4)
**Sample No:** 22-3607-008

**Date Collected:** 05/20/22
**Time Collected:** 10:05
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (0-4)
**Sample No:** 22-3607-008

**Date Collected:** 05/20/22
**Time Collected:** 10:05
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (0-4)
**Sample No:** 22-3607-008

**Date Collected:** 05/20/22
**Time Collected:** 10:05
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.8 | 1.0 | mg/kg | |
| Barium | 60.6 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 57,300 | 50 | mg/kg | |
| Chromium | 16.1 | 0.5 | mg/kg | |
| Cobalt | 10.3 | 0.5 | mg/kg | |
| Copper | 24.9 | 0.5 | mg/kg | |
| Iron | 21,800 | 5.0 | mg/kg | |
| Lead | 15.3 | 0.5 | mg/kg | |
| Magnesium | 30,300 | 50 | mg/kg | |
| Manganese | 661 | 0.5 | mg/kg | |
| Nickel | 26.4 | 0.5 | mg/kg | |
| Potassium | 1,780 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 154 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.5 | 1.0 | mg/kg | |
| Zinc | 65.9 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 05/20/22 |
| **Project ID:** | PO# 81.0220714.08, IDOT 199-014 WO #6 | **Time Collected:** | 10:05 |
| **Sample ID:** | 2233V3-1-07 (0-4) | **Date Received:** | 05/20/22 |
| **Sample No:** | 22-3607-008 | **Date Reported:** | 06/06/22 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.27 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 1.0 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/24/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (0-4)
**Sample No:** 22-3607-008

**Date Collected:** 05/20/22
**Time Collected:** 10:05
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.005 | 0.005 | mg/L | |
| Iron | 2.5 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | | *%R Limits Low* | *High* |
|---|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 98.2* | | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102.6* | | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 111.9* | | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 118* | | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 84* | | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52.5* | | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 125* | * | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 100* | | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 72* | | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/23/22 | | | | |
| Total Solids | 85.41 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/25/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 9.5 | 1.0 | mg/kg | |
| Barium | 101 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 40,500 | 50 | mg/kg | |
| Chromium | 17.6 | 0.5 | mg/kg | |
| Cobalt | 12.0 | 0.5 | mg/kg | |
| Copper | 22.0 | 0.5 | mg/kg | |
| Iron | 23,800 | 5.0 | mg/kg | |
| Lead | 15.5 | 0.5 | mg/kg | |
| Magnesium | 19,700 | 50 | mg/kg | |
| Manganese | 591 | 0.5 | mg/kg | |
| Nickel | 26.2 | 0.5 | mg/kg | |
| Potassium | 1,820 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 297 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 25.1 | 1.0 | mg/kg | |
| Zinc | 59.5 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/26/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/27/22 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.75 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | 0.3 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 1.7 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/01/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/24/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** PO# 81.0220714.08, IDOT 199-014 WO #6
**Sample ID:** 2233V3-1-07 (5-9)
**Sample No:** 22-3607-009

**Date Collected:** 05/20/22
**Time Collected:** 10:10
**Date Received:** 05/20/22
**Date Reported:** 06/06/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/01/22 | | Preparation Date: 06/01/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.005 | 0.005 | mg/L | |
| Iron | 3.7 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 101.2* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 101.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 112.5* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 124* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 83* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 54* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 119* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 98* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 73.5* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/25/22 | | | | |
| Total Solids | 84.33 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/27/22 Preparation Date: 05/26/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.0 | 1.0 | mg/kg | |
| Barium | 41.2 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 68,300 | 50 | mg/kg | |
| Chromium | 16.5 | 0.5 | mg/kg | |
| Cobalt | 9.8 | 0.5 | mg/kg | |
| Copper | 21.4 | 0.5 | mg/kg | |
| Iron | 19,200 | 5.0 | mg/kg | |
| Lead | 13.4 | 0.5 | mg/kg | |
| Magnesium | 34,600 | 50 | mg/kg | |
| Manganese | 401 | 0.5 | mg/kg | |
| Nickel | 25.7 | 0.5 | mg/kg | |
| Potassium | 2,270 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 1,080 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.2 | 1.0 | mg/kg | |
| Zinc | 61.0 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | | Result | R.L. | Units | Flags |
|---|---|---|---|---|---|
| **Total Mercury** | **Method: 7471B** | | | | |
| Analysis Date: 05/27/22 | | | | | |
| Mercury | | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** | **Method: 9045D** | | | | |
| Analysis Date: 05/31/22 11:20 | | | | | |
| pH @ 25°C, 1:2 | | 8.02 | | Units | |
| **TCLP Extraction** | **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | | |
| TCLP Extraction | | Complete | | | |
| **TCLP Metals Method 1311** | **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/06/22 | | | Preparation Date: 06/03/22 | | |
| Arsenic | | < 0.010 | 0.010 | mg/L | |
| Barium | | < 1.0 | 1.0 | mg/L | |
| Beryllium | | < 0.004 | 0.004 | mg/L | |
| Cadmium | | < 0.005 | 0.005 | mg/L | |
| Chromium | | < 0.005 | 0.005 | mg/L | |
| Cobalt | | < 0.1 | 0.1 | mg/L | |
| Copper | | < 0.1 | 0.1 | mg/L | |
| Iron | | < 0.1 | 0.1 | mg/L | |
| Lead | | < 0.005 | 0.005 | mg/L | |
| Manganese | | 1.8 | 0.1 | mg/L | |
| Nickel | | < 0.1 | 0.1 | mg/L | |
| Selenium | | < 0.010 | 0.010 | mg/L | |
| Silver | | < 0.005 | 0.005 | mg/L | |
| Zinc | | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** | **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | | |
| Mercury | | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** | **Method: 1312** | | | | |
| Analysis Date: 05/25/22 | | | | | |
| SPLP Metals Extraction | | Complete | | | |
| Arsenic | | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-14 (0-4)
**Sample No:** 22-3645-005

**Date Collected:** 05/23/22
**Time Collected:** 10:15
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/08/22 | | Preparation Date: 06/06/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.005 | 0.005 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 96.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 102.2* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.8* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 69* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 68* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 59.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 98* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 73* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 70.5* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/25/22 | | | | |
| Total Solids | 84.47 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/27/22 Preparation Date: 05/26/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.4 | 1.0 | mg/kg | |
| Barium | 43.4 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 77,700 | 50 | mg/kg | |
| Chromium | 15.7 | 0.5 | mg/kg | |
| Cobalt | 10.3 | 0.5 | mg/kg | |
| Copper | 24.4 | 0.5 | mg/kg | |
| Iron | 19,200 | 5.0 | mg/kg | |
| Lead | 13.3 | 0.5 | mg/kg | |
| Magnesium | 38,700 | 50 | mg/kg | |
| Manganese | 444 | 0.5 | mg/kg | |
| Nickel | 26.3 | 0.5 | mg/kg | |
| Potassium | 2,200 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 776 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.1 | 1.0 | mg/kg | |
| Zinc | 63.7 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/31/22 11:20 | | | | |
| pH @ 25°C, 1:2 | 8.57 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/06/22 | | Preparation Date: 06/03/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 1.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/25/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-15 (0-2)
**Sample No:** 22-3645-006

**Date Collected:** 05/23/22
**Time Collected:** 10:25
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/08/22 | | Preparation Date: 06/06/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.017 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.024 | 0.005 | mg/L | |
| Iron | 14.0 | 0.1 | mg/L | |
| Lead | 0.006 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 88.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.6* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 82* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 64* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 103* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 84* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 74.5* | *50* | *100* |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 05/25/22 | | | | |
| Total Solids | 84.76 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | < 5.0 | 5.0 | ug/kg | |
| Bromodichloromethane | < 5.0 | 5.0 | ug/kg | |
| Bromoform | < 5.0 | 5.0 | ug/kg | |
| Bromomethane | < 10.0 | 10.0 | ug/kg | |
| 2-Butanone (MEK) | < 100 | 100 | ug/kg | |
| Carbon disulfide | < 5.0 | 5.0 | ug/kg | |
| Carbon tetrachloride | < 5.0 | 5.0 | ug/kg | |
| Chlorobenzene | < 5.0 | 5.0 | ug/kg | |
| Chlorodibromomethane | < 5.0 | 5.0 | ug/kg | |
| Chloroethane | < 10.0 | 10.0 | ug/kg | |
| Chloroform | < 5.0 | 5.0 | ug/kg | |
| Chloromethane | < 10.0 | 10.0 | ug/kg | |
| 1,1-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | ug/kg | |
| 1,2-Dichloropropane | < 5.0 | 5.0 | ug/kg | |
| cis-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| trans-1,3-Dichloropropene | < 4.0 | 4.0 | ug/kg | |
| Ethylbenzene | < 5.0 | 5.0 | ug/kg | |
| 2-Hexanone | < 10.0 | 10.0 | ug/kg | |
| Methyl-tert-butylether (MTBE) | < 5.0 | 5.0 | ug/kg | |
| 4-Methyl-2-pentanone (MIBK) | < 10.0 | 10.0 | ug/kg | |
| Methylene chloride | < 20.0 | 20.0 | ug/kg | |
| Styrene | < 5.0 | 5.0 | ug/kg | |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | ug/kg | |
| Tetrachloroethene | < 5.0 | 5.0 | ug/kg | |
| Toluene | < 5.0 | 5.0 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | ug/kg | |
| Trichloroethene | < 5.0 | 5.0 | ug/kg | |
| Vinyl acetate | < 10.0 | 10.0 | ug/kg | |
| Vinyl chloride | < 10.0 | 10.0 | ug/kg | |
| Xylene, Total | < 5.0 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 05/27/22 Preparation Date: 05/26/22 | | | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | < 330 | 330 | ug/kg | |
| Benzo(a)pyrene | < 90 | 90 | ug/kg | |
| Benzo(b)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | < 330 | 330 | ug/kg | |
| Benzoic acid | < 330 | 330 | ug/kg | |
| Benzyl alcohol | < 330 | 330 | ug/kg | |
| bis(2-Chloroethoxy)methane | < 330 | 330 | ug/kg | |
| bis(2-Chloroethyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Chloroisopropyl)ether | < 330 | 330 | ug/kg | |
| bis(2-Ethylhexyl)phthalate | < 330 | 330 | ug/kg | |
| 4-Bromophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Butyl benzyl phthalate | < 330 | 330 | ug/kg | |
| Carbazole | < 330 | 330 | ug/kg | |
| 4-Chloroaniline | < 330 | 330 | ug/kg | |
| 4-Chloro-3-methylphenol | < 330 | 330 | ug/kg | |
| 2-Chloronaphthalene | < 330 | 330 | ug/kg | |
| 2-Chlorophenol | < 330 | 330 | ug/kg | |
| 4-Chlorophenyl phenyl ether | < 330 | 330 | ug/kg | |
| Chrysene | < 330 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| Dibenzofuran | < 330 | 330 | ug/kg | |
| 1,2-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,3-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 1,4-Dichlorobenzene | < 330 | 330 | ug/kg | |
| 3,3'-Dichlorobenzidine | < 660 | 660 | ug/kg | |
| 2,4-Dichlorophenol | < 330 | 330 | ug/kg | |
| Diethyl phthalate | < 330 | 330 | ug/kg | |
| 2,4-Dimethylphenol | < 330 | 330 | ug/kg | |
| Dimethyl phthalate | < 330 | 330 | ug/kg | |
| Di-n-butyl phthalate | < 330 | 330 | ug/kg | |
| 4,6-Dinitro-2-methylphenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrophenol | < 1,600 | 1600 | ug/kg | |
| 2,4-Dinitrotoluene | < 250 | 250 | ug/kg | |
| 2,6-Dinitrotoluene | < 260 | 260 | ug/kg | |
| Di-n-octylphthalate | < 330 | 330 | ug/kg | |
| Fluoranthene | < 330 | 330 | ug/kg | |
| Fluorene | < 330 | 330 | ug/kg | |
| Hexachlorobenzene | < 330 | 330 | ug/kg | |
| Hexachlorobutadiene | < 330 | 330 | ug/kg | |
| Hexachlorocyclopentadiene | < 330 | 330 | ug/kg | |
| Hexachloroethane | < 330 | 330 | ug/kg | |
| Indeno(1,2,3-cd)pyrene | < 330 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | < 330 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | < 330 | 330 | ug/kg | |
| 2-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 3-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| 4-Nitroaniline | < 1,600 | 1600 | ug/kg | |
| Nitrobenzene | < 260 | 260 | ug/kg | |
| 2-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| 4-Nitrophenol | < 1,600 | 1600 | ug/kg | |
| n-Nitrosodi-n-propylamine | < 90 | 90 | ug/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 05/27/22 | | Preparation Date: 05/26/22 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | < 330 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | < 330 | 330 | ug/kg | |
| Pyridine | < 330 | 330 | ug/kg | |
| 1,2,4-Trichlorobenzene | < 330 | 330 | ug/kg | |
| 2,4,5-Trichlorophenol | < 330 | 330 | ug/kg | |
| 2,4,6-Trichlorophenol | < 330 | 330 | ug/kg | |
| **Total Metals** **Method: 6010C** | | **Preparation Method 3050B** | | |
| Analysis Date: 05/26/22 | | Preparation Date: 05/25/22 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.6 | 1.0 | mg/kg | |
| Barium | 48.4 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 64,500 | 50 | mg/kg | |
| Chromium | 17.2 | 0.5 | mg/kg | |
| Cobalt | 11.9 | 0.5 | mg/kg | |
| Copper | 24.5 | 0.5 | mg/kg | |
| Iron | 21,000 | 5.0 | mg/kg | |
| Lead | 15.7 | 0.5 | mg/kg | |
| Magnesium | 31,700 | 50 | mg/kg | |
| Manganese | 501 | 0.5 | mg/kg | |
| Nickel | 28.7 | 0.5 | mg/kg | |
| Potassium | 2,310 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 669 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 22.0 | 1.0 | mg/kg | |
| Zinc | 80.5 | 1.0 | mg/kg | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 05/27/22 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 05/31/22 11:20 | | | | |
| pH @ 25°C, 1:2 | 7.93 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 05/24/22 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/06/22 | | Preparation Date: 06/03/22 | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | < 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | < 0.1 | 0.1 | mg/L | |
| Iron | < 0.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.9 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 05/25/22 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199.014-W06
**Sample ID:** 2233V3-1-16 (0-2)
**Sample No:** 22-3645-007

**Date Collected:** 05/23/22
**Time Collected:** 10:30
**Date Received:** 05/23/22
**Date Reported:** 06/08/22

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **SPLP Metals Method 1312** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 06/08/22 | | Preparation Date: 06/06/22 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.005 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.008 | 0.005 | mg/L | |
| Iron | 4.4 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.1 | 0.1 | mg/L | |
| Nickel | < 0.1 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | < 0.1 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 06/03/22 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |

***Sample QC Summary:*** ***Surrogate Recovery***

| *Method* | *Analyte* | *QC Result* | *%R Limits Low* | *High* |
|---|---|---|---|---|
| *5035A/8260B* | *4-Bromofluorobenzene (Surr)* | *%R: 89.2* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 107.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 78* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 57* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 101* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 80* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 72* | *50* | *100* |