**IDOT 199-014 / HH-2 WO#31A**
**BDE Sequence No. 15830C / Section No. 120-Y-B**
**LPC-663 Form Package**

# APPENDIX D

# LPC-663 FORMS

# 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 31A Rand Road - PSI Office Phone Number, if available: 847-705-4122

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

Rand Road over the Des Plaines River, see attached documentation

City: Des Plaines State: IL Zip Code: 60016

County: Cook Township:

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

Latitude: 42.04592 Longitude: - 87.88244

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

◯ GPS ◯ Map Interpolation ◯ Photo Interpolation ◯ Survey ⊘ Other

Google Earth - Approximate center of Site

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

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

Estimated Volume of debris (cu. Yd.):

## 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 31A Rand Road - PSI Latitude: 42.04592 Longitude: - 87.88244

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 attachment for a list of borings with stationing.

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 #23-9514,#23-9546, #23-9606, #23-9643, and #23-9710. 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:

Mar 2, 2024
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS

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

# LPC-663
# Uncontaminated Soil Certification Form
# Attachment

Below is a list referenced in Section I (Source Location Information) of the attached LPC-663 Uncontaminated Soil Certification Form, which requests information about Physical Site Locations (addresses, including number and street):

| ISGS Site No. | Name |
|---|---|
| 2199V2-5 | Rand River Center |
| 2199V2-7 | Byline Bank |
| 2199V2-8 | Mixed-use Building |
| 2199V2-9 | Commercial Buildings |
| 2199V2-10 | Our Lady Fatima Center |
| 2199V2-11 | Commercial Building |
| 2199V2-12 | Commercial Building |
| 2199V2-13 | Jose A. Vasquez General Dentistry |
| 2199V2-14 | A Mother's Touch |
| 2199V2-15 | Columbus Foods and Gifts |
| 2199V2-20 | Pavestone Brick Paving, Inc. |
| 2199V2-21 | Mixed-use Building |
| 2199V2-22 | Ashlbeck & Company Museums International |
| 2199V2-23 | Commercial Building |
| 2199V2-24 | Elk Creek Office Center |
| 2199V2-25 | Residence |
| 2199V2-26 | Residential Building |
| 2199V2-27 | Residence |
| 2199V2-28 | The Catholic Charities of the Archdiocese of Chicago |
| 2199V2-29 | Residence |
| 2199V2-30 | St. George |
| 2199V2-31 | Hawthorne Hill Condominiums |
| 2199V2-32 | Residence |

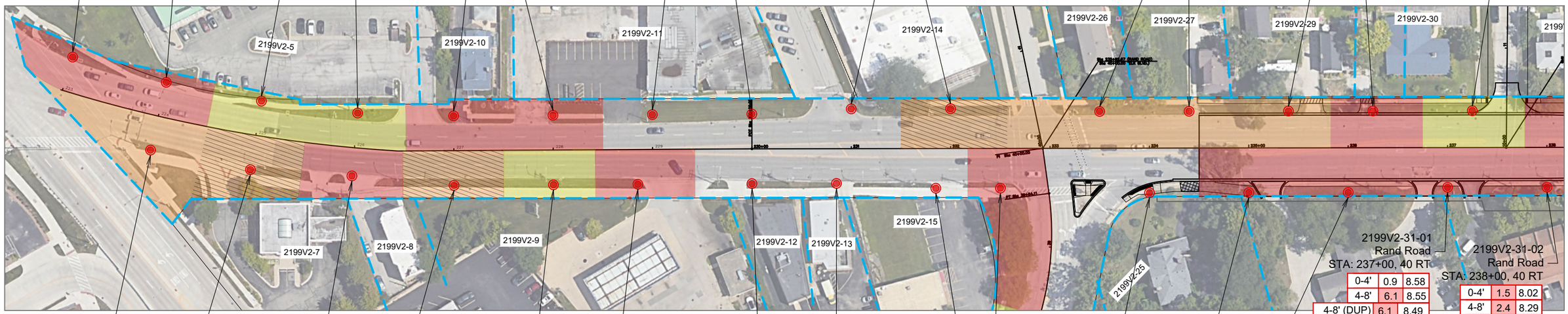
| ISGS Site No. | Name |
|---|---|
| 2199V2-33 | Parking lot |
| 2199V2-34 | Residence |
| 2199V2-35 | Residential Building |
| 2199V2-36 | Residence |
| 2199V2-37 | Residence |
| 2199V2-38 | North Elementary School |
| 2199V2-39 | Residence |
| 2199V2-40 | Chicago Behavioral Hospital |
| 2199V2-41 | Residence |
| 2199V2-42 | Residence |
| 2199V2-49 | Cook County Forest Preserve |
| 2199V2-50 | ROW |
| 2199V2-51 | Vacant lot |

# LPC-663
# Uncontaminated Soil Certification Form
# Attachment

MSA Counties + Chicago [669.05(a)(2) and (a)(3)]

Below is a list referenced in Section III A (Basis for Certification and Attachments) of the attached LPC-663 Uncontaminated Soil Certification Form, which requests a description of the soil sample points and how they were determined to be sufficient in number and appropriately located:

| ISGS Boring No. | Approximate Stationing |
|---|---|
| 2199V2-7-01 | STA: Rand Rd 224+00, 35 Right |
| 2199V2-7-02 | STA: Rand Rd 225+00, 35 Right |
| 2199V2-9-01 | STA: Rand Rd 227+00, 35 Right |
| 2199V2-14-01 | STA: Rand Rd 228+00, 40 Left |
| 2199V2-20-01 | STA: Elk Blvd 34+00, 30 Right |
| 2199V2-21-02 | STA: Elk Blvd 34+00, 30 Left |
| 2199V2-23-01 | STA: Elk Blvd 36+00, 30 Left |
| 2199V2-24-01 | STA: Elk Blvd 37+00, 30 Right |
| 2199V2-26-01 | STA: Rand Rd 233+50, 37 Left |
| 2199V2-27-01 | STA: Rand Rd 234+40, 37 Left |
| 2199V2-29-01 | STA: Rand Rd 235+40, 37 Left |
| 2199V2-37-01 | STA: Rand Rd 240+85, 37 Left |
| 2199V2-42-01 | STA: Rand Rd 243+50, 30 Left |
| 2199V2-49-04 | STA: Rand Rd 252+00, 36 Right |
| 2199V2-50-01 | STA: Rand Rd 250+45, 30 Left |




2199V2-5-04
Rand Road
STA: 223+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 0.0 | 7.56 |

2199V2-5-03
Rand Road
STA: 224+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 1064.0 | 7.69 |

2199V2-5-02
Rand Road
STA: 225+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 0.0 | 7.09 |
| 0-5' (DUP) | 0.0 | 6.99 |

2199V2-5-01
Rand Road
STA: 226+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.27 |
| 0-5' | 0.0 | 7.64 |

2199V2-10-01
Rand Road
STA: 227+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.02 |

2199V2-11-03
Rand Road
STA: 228+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 2.0 | 8.06 |

2199V2-11-02
Rand Road
STA: 229+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.08 |

2199V2-11-01
Rand Road
STA: 230+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.53 |

2199V2-14-02
Rand Road
STA: 231+00, 40 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.71 |

2199V2-14-01
Rand Road
STA: 232+00, 40 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.92 |

2199V2-27-01
Rand Road
STA: 234+40, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 8.3 |
| 4-7' | 0.0 | 8.29 |

2199V2-26-01
Rand Road
STA: 233+50, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 7.51 |
| 0-4' (DUP) | 0.0 | 7.58 |

2199V2-30-02
Rand Road
STA: 236+25, 37 LT

| | | |
|---|---|---|
| 0-4' | 1.3 | 8.13 |
| 4-7' | 0.5 | 8.25 |

2199V2-29-01
Rand Road
STA: 235+40, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.2 | 8.31 |
| 4-8' | 0.0 | 7.98 |

2199V2-30-01
Rand Road
STA: 237+25, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 8.04 |
| 4-7' | 0.0 | 8.13 |

2199V2-31-01
Rand Road
STA: 237+00, 40 RT

| | | |
|---|---|---|
| 0-4' | 0.9 | 8.58 |
| 4-8' | 6.1 | 8.55 |
| 4-8' (DUP) | 6.1 | 8.49 |

2199V2-31-02
Rand Road
STA: 238+00, 40 RT

| | | |
|---|---|---|
| 0-4' | 1.5 | 8.02 |
| 4-8' | 2.4 | 8.29 |

2199V2-7-01
Rand Road
STA: 224+00, 35 RT

| | | |
|---|---|---|
| 0-3' | 0.0 | 8.82 |

2199V2-7-02
Rand Road
STA: 225+00, 35 RT

| | | |
|---|---|---|
| 0-3' | 0.0 | 8.45 |

2199V2-8-01
Rand Road
STA: 226+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.96 |

2199V2-9-01
Rand Road
STA: 227+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.88 |

2199V2-9-02
Rand Road
STA: 228+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.84 |

2199V2-9-03
Rand Road
STA: 228+85, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.68 |

2199V2-12-01
Rand Road
STA: 230+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.2 | 7.67 |
| 0-2.5' (DUP) | 0.2 | 7.53 |

2199V2-13-01
Rand Road
STA: 230+85, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.2 | 8.18 |

2199V2-15-01
Rand Road
STA: 231+85, 40 RT

| | | |
|---|---|---|
| 0-2.5' | 0.4 | 7.77 |

2199V2-15-02
Rand Road
STA: 232+50, 40 RT

| | | |
|---|---|---|
| 0-2.5' | 0.4 | 7.6 |

2199V2-25-01
Rand Road
STA: 234+00, 45 RT

| | | |
|---|---|---|
| 0-3' | 0.1 | 7.9 |

2199V2-28-01
Rand Road
STA: 235+00, 45 RT

| | | |
|---|---|---|
| 0-4' | 0.1 | 7.62 |
| 4-8' | 12.8 | 7.61 |

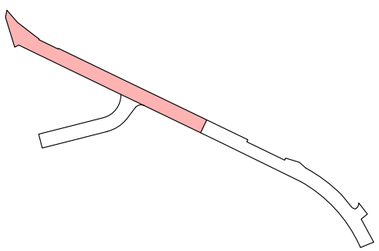
2199V2-28-02
Rand Road
STA: 236+00, 45 RT

| | | |
|---|---|---|
| 0-4' | 6.1 | 7.52 |
| 4-8' | 22.4 | 7.84 |

N

0 50 100 150
SCALE IN FEET

## Location Legend



## Legend

- Soil Boring Location
- PESA Site Boundary
- PID / pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

| | |
|---|---|
| DESIGNED | AK |
| DRAWN | SCC |
| CHECKED | AK |
| APPROVED | |
| DATE | 12/28/2023 |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

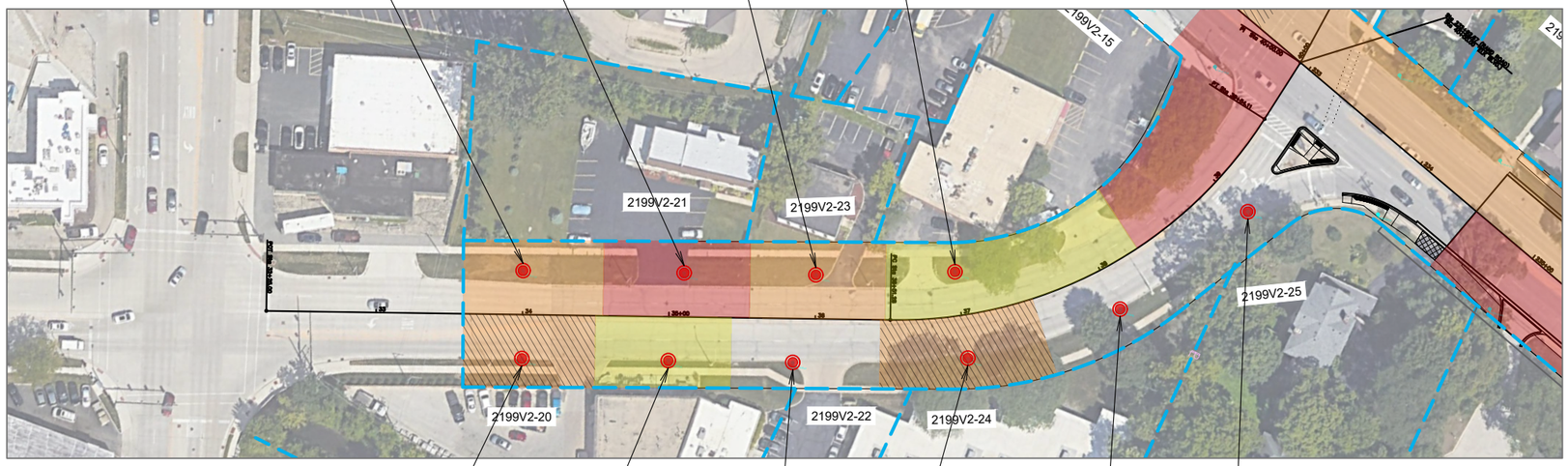
199-014/H&H-2
WO#031

FIGURE 4-1.1
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

Contract No: 60J10
PESA: 2199V2 | Route FAU 3526
IDOT Job No. D-91-117-19 | BDE Sequence No. 15830C
City/County Des Plaines/Cook County

9/16/2022 IDOT_WO#31_20231228.dwg




2199V2-21-01
Elk Blvd
STA: 35+10, 30 LT

| 0-2.5' | 0.0 | 8.37 |
|---|---|---|

2199V2-21-02
Elk Blvd
STA: 34+00, 30 LT

| 0-2.5' | 0.1 | 8.03 |
|---|---|---|

2199V2-15-03
Elk Blvd
STA: 37+00, 30 LT

| 0-2.5' | 0.8 | 8.25 |
|---|---|---|

2199V2-23-01
Elk Blvd
STA: 36+00, 30 LT

| 0-2.5' | 0.0 | 8.61 |
|---|---|---|

2199V2-20-01
Elk Blvd
STA: 34+00, 30 RT

| 0-2.5' | 0.0 | 8.25 |
|---|---|---|

2199V2-20-02
Elk Blvd
STA: 35+00, 30 RT

| 0-2.5' | 0.0 | 8.74 |
|---|---|---|

2199V2-22-01
Elk Blvd
STA: 35+85, 30 RT

| 0-2.5' | 0.0 | 8.74 |
|---|---|---|

2199V2-24-01
Elk Blvd
STA: 37+00, 30 RT

| 0-2.5' | 0.0 | 8.39 |
|---|---|---|

2199V2-24-02
Elk Blvd
STA: 38+00, 30 RT

| 0-2.5' | 0.4 | 8.36 |
|---|---|---|

2199V2-24-03
Elk Blvd
STA: 39+00, 30 RT

| 0-2.5' | 0.6 | 7.74 |
|---|---|---|

N

0 50 100 150
SCALE IN FEET

## Legend

- Soil Boring Location
- PESA Site Boundary
- PID | pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

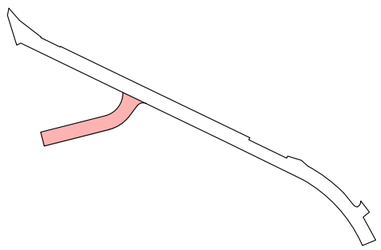
| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

Location Legend



| | |
|---|---|
| DESIGNED | AK |
| DRAWN | SCC |
| CHECKED | AK |
| APPROVED | |
| DATE | 12/28/2023 |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

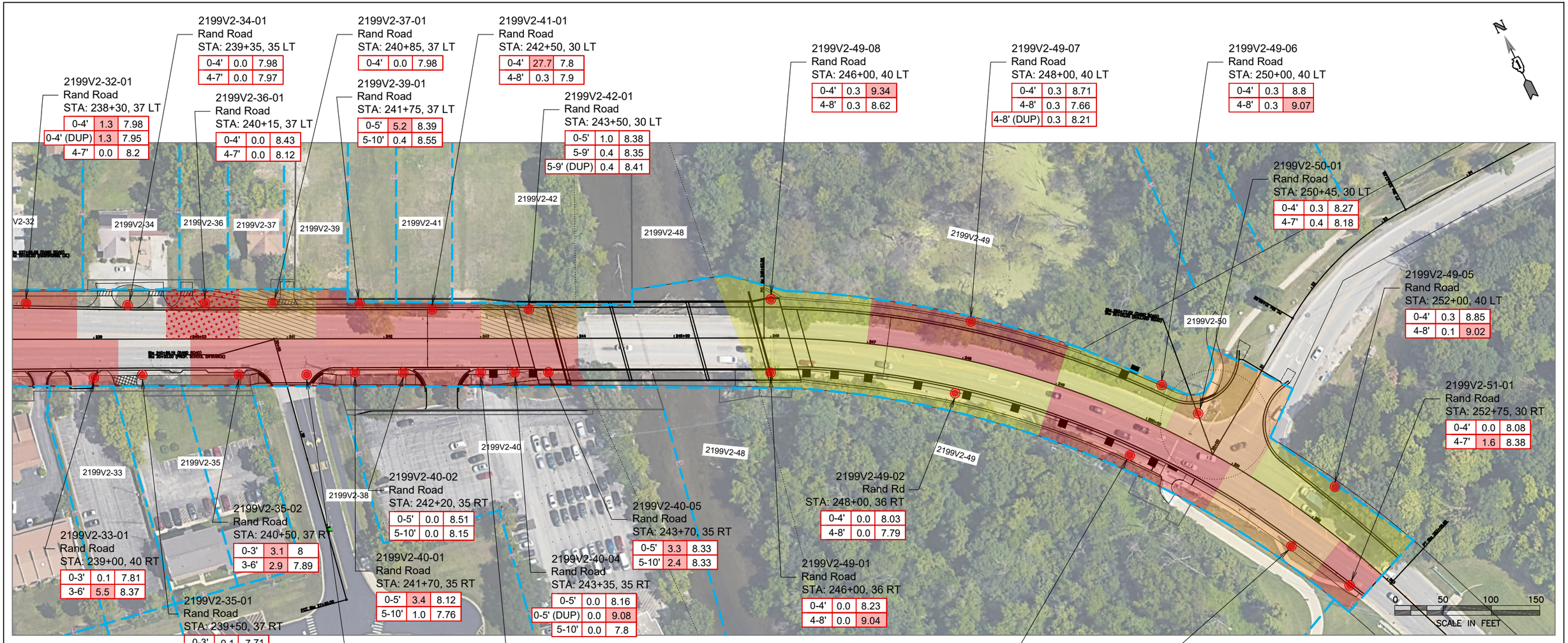
199-014/H&H-2
WO#031

FIGURE 4-1.2
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

Contract No: 60J10
PESA: 2199V2 | Route FAU 3526
IDOT Job No. D-91-117-19 | BDE Sequence No. 15830C
City/County Des Plaines/Cook County

9/16/2022 IDOT_WO#31_20231228.dwg




## Legend

- Soil Boring Location
- PESA Site Boundary
- PID | pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

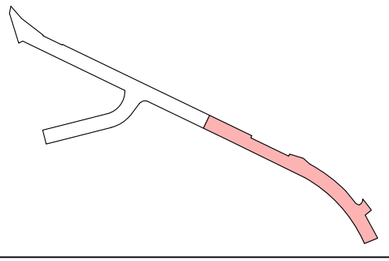
| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

Location Legend



| | | |
|---|---|---|
| DESIGNED | AK | |
| DRAWN | SCC | |
| CHECKED | AK | |
| APPROVED | | |
| DATE | 12/28/2023 | |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

199-014/H&H-2
WO#031

FIGURE 4-1.3
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

| | | | |
|---|---|---|---|
| Contract No: 60J10 | | | |
| PESA: | 2199V2 | Route FAU 3526 | |
| IDOT Job No. D-91-117-19 | | BDE Sequence No. 15830C | |
| City/County | Des Plaines/Cook County | | |

9/16/2022 IDOT_WO#31_20231228.dwg

LPC-663 Results (Page 1 of 6)
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-7-01 | 2199V2-7-02 | 2199V2-9-01 | 2199V2-14-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-3) | (0-3) | (0-2.5) | (0-2.5) |
| **Sample Date** | | | | | | 10/27/2023 | 10/27/2023 | 10/27/2023 | 10/26/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-7 | 2199V2-7 | 2199V2-9 | 2199V2-14 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.82 | 8.45 | 7.88 | 7.92 |
| PID Readings (ppm) | | | | | | 0.0 | 0.0 | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | **0.0158** | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | **0.0074** | **0.024** | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | **0.475** | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | **0.525** | **0.244** | **0.262** |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | **0.782** | **0.349** | **0.388** |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | **0.439** | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | **0.567** | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | **0.091** | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | **1.2** | **0.479** | **0.441** |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | **0.409** | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | **0.502** | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | **0.336** | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | **0.646** | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | **0.774** | **0.345** | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **4** | **5.7** | **6.8** | **5.8** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **29.3** | **66.4** | **75.6** | **60.7** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | **0.5** | <0.5 | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | **0.9** | **0.7** | **0.6** |
| Calcium | --- | --- | --- | --- | --- | **58600** | **29800** | **24600** | **56100** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **6.9** | **17.5** | **14.1** | **11** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **4.4** | **6.3** | **7.4** | **4.6** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **11.3** | **26.6** | **22.9** | **24.9** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **10900** | **14700** | **15900** | **11900** |
| Lead | 107 | 700 | --- | 400 | --- | **14.8** | **163** | **104** | **99.3** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **34100** | **18200** | **15400** | **36200** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **423** | **333** | **549** | **312** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | <0.05 | **0.17** | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **10.2** | **16.4** | **18.2** | **13** |
| Potassium | --- | --- | --- | --- | --- | **789** | **1150** | **1140** | **1060** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **284** | **687** | **98** | **248** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **14.1** | **20.7** | **19.7** | **15.9** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **51.1** | **120** | **93.3** | **82.1** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.53** | **0.78** | **0.6** | **0.33** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | **0.017** | **0.016** | <0.010 | <0.010 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.029** | **0.055** | **0.018** | **0.011** |
| Copper | 0.65 | | | | | **0.036** | **0.054** | **0.022** | **0.014** |
| Iron | 5 | | | | | **35.8** | **50.9** | **17.9** | **8.5** |
| Lead | 0.0075 | | | | | **0.044** | **0.088** | **0.051** | **0.054** |
| Manganese | 0.15 | | | | | **0.54** | **0.42** | **0.19** | **0.19** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | **0.2** | **0.3** | <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.
* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago

US 12 Over Des Plaines River, Des Plaines, Cook County, IL

BDE Sequence No.: 15830C

PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-20-01 | 2199V2-21-02 | 2199V2-23-01 | 2199V2-24-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-2.5) | (0-2.5) | (0-2.5) | (0-2.5) |
| **Sample Date** | | | | | | 10/23/2023 | 10/23/2023 | 10/23/2023 | 10/23/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-20 | 2199V2-21 | 2199V2-23 | 2199V2-24 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.25 | 8.03 | 8.61 | 8.39 |
| PID Readings (ppm) | | | | | | 0.0 | **0.1** | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | **0.346** | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | **0.321** | <0.09 | **0.206** | **0.24** |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | **0.413** | <0.33 | <0.33 | **0.346** |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | **0.349** | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | **0.685** | <0.33 | **0.411** | **0.443** |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | **0.445** | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | **0.596** | <0.33 | <0.33 | **0.342** |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | **1.2** | **1.3** | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **4.1** | **4.8** | **7.2** | **6.5** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **68** | **75.2** | **103** | **45.3** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | **0.5** | **0.5** | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | <0.5 | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **41700** | **44600** | **17100** | **51900** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **13.9** | **15.2** | **17** | **16.1** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **7.8** | **8.2** | **7.8** | **9.8** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **24.2** | **23.9** | **22.9** | **24.2** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **18000** | **17900** | **16300** | **19300** |
| Lead | 107 | 700 | --- | 400 | --- | **44.2** | **67.1** | **75.8** | **19.3** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **24200** | **27700** | **10400** | **25300** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **521** | **495** | **612** | **377** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | **0.06** | **0.1** | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **20** | **19.3** | **16.5** | **25** |
| Potassium | --- | --- | --- | --- | --- | **1330** | **1490** | **1250** | **1880** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **476** | **475** | **757** | **146** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **20.1** | **21.9** | **20.6** | **20.4** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **55.4** | **70.2** | **90.3** | **46.6** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | **0.2** | **0.2** | <0.1 | **0.2** |
| Lead | 0.0075 | | | | | **0.037** | **0.069** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **6.41** | **8.81** | **0.79** | **4.7** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | **0.01** | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | **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 | **0.012** |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | **0.033** | **0.021** |
| Copper | 0.65 | | | | | <0.005 | **0.007** | **0.046** | **0.028** |
| Iron | 5 | | | | | **1.4** | **2.3** | **35** | **23.4** |
| Lead | 0.0075 | | | | | <0.005 | **0.009** | **0.146** | **0.011** |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | **0.27** | **0.12** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | <0.1 | <0.1 | **0.2** | <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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago

US 12 Over Des Plaines River, Des Plaines, Cook County, IL

BDE Sequence No.: 15830C

PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-26-01 | 2199V2 -DUP 8 (2199V2-26-01) | 2199V2-27-01 | 2199V2-27-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-4) | (0-4) | (0-4) | (4-7) |
| **Sample Date** | | | | | | 10/26/2023 | 10/26/2023 | 10/26/2023 | 10/26/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-26 | 2199V2-26 | 2199V2-27 | 2199V2-27 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 7.51 | 7.58 | 8.3 | 8.29 |
| PID Readings (ppm) | | | | | | 0.0 | 0.0 | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | **0.0066** | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | **0.094** | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **8.1** | **10.6** | **8** | **3.5** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **84.9** | **87.3** | **33** | **23.1** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | **0.6** | **0.5** | <0.5 | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | **0.6** | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **2510** | **3470** | **32400** | **77700** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **18** | **13.9** | **14.5** | **8.3** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **8.4** | **6.4** | **6.4** | **4** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **16.4** | **17.4** | **15.4** | **15.2** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **20900** | **17300** | **15200** | **9690** |
| Lead | 107 | 700 | --- | 400 | --- | **20.9** | **55.9** | **55.2** | **49.4** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **3450** | **2920** | **21600** | **47700** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **419** | **505** | **423** | **460** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | **0.08** | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **17.6** | **13.3** | **16.7** | **10** |
| Potassium | --- | --- | --- | --- | --- | **1190** | **1220** | **526** | **668** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | **1.3** | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **243** | **191** | **352** | **306** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **29.3** | **24.2** | **19.1** | **10.3** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **81.7** | **120** | **30.2** | **42.9** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | **0.1** | **0.6** | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | **0.011** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | **0.13** | **0.96** | **1.08** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | **0.3** | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | **0.047** | **0.015** |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | **0.005** | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | **0.008** | <0.005 |
| Chromium | 0.1 | | | | | **0.038** | **0.02** | **0.184** | **0.03** |
| Copper | 0.65 | | | | | **0.037** | **0.023** | **0.216** | **0.041** |
| Iron | 5 | | | | | **38.6** | **17.6** | **188** | **34.4** |
| Lead | 0.0075 | | | | | **0.021** | **0.034** | **0.112** | **0.016** |
| Manganese | 0.15 | | | | | **0.21** | **0.16** | **1.35** | **0.24** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | **0.2** | <0.1 |
| Zinc | 5 | | | | | **0.1** | **0.2** | **0.5** | **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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

LPC-663 Results (Page 4 of 6)
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-29-01 | 2199V2-29-01 | 2199V2-37-01 | 2199V2-37-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-4) | (4-8) | (0-4) | (4-7) |
| **Sample Date** | | | | | | 10/26/2023 | 10/26/2023 | 10/26/2023 | 10/26/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-29 | 2199V2-29 | 2199V2-37 | 2199V2-37 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.31 | 7.98 | 7.76 | 8.26 |
| PID Readings (ppm) | | | | | | **0.2** | 0.0 | 0.0 | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | **0.0053** |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | **0.346** |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | <0.09 | <0.09 | **0.465** |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 | **0.757** |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | **0.365** |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 | **0.498** |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | **1.08** |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | **0.387** |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | **0.457** |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 | **0.695** |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **7.3** | **6.6** | **7.5** | **4.2** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **75.8** | **67.8** | **72.6** | **16.5** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | **0.9** | <0.5 | **0.7** | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | **0.6** | **0.6** | **0.7** | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **20900** | **65300** | **2720** | **47400** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **11.7** | **12.6** | **19.3** | **10.1** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **7.1** | **22.9** | **8.3** | **4.2** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **19.6** | **17.3** | **18.5** | **13.2** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **17000** | **16900** | **23800** | **12700** |
| Lead | 107 | 700 | --- | 400 | --- | **34.4** | **45** | **22.6** | **8.7** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **11800** | **18700** | **3740** | **32200** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **535** | **1210** | **722** | **263** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | **0.1** | **0.11** | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **17.1** | **16.3** | **17.6** | **11** |
| Potassium | --- | --- | --- | --- | --- | **1530** | **920** | **866** | **656** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | **1** | **1.3** | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **541** | **285** | **253** | **203** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **21.9** | **20** | **27.5** | **18.3** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **115** | **43.7** | **49.6** | **28** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.57** | <0.10 | <0.10 | **1.06** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | **0.1** | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | **0.018** | <0.010 | <0.010 | <0.010 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.043** | **0.006** | **0.007** | <0.005 |
| Copper | 0.65 | | | | | **0.045** | **0.006** | **0.009** | <0.005 |
| Iron | 5 | | | | | **44.5** | **5.4** | **5.5** | **2.1** |
| Lead | 0.0075 | | | | | **0.04** | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.42** | <0.10 | <0.10 | <0.10 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | **0.3** | <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.
* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

LPC-663 Results (Page 5 of 6)
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-42-01 | 2199V2-42-01 | 2199V2-DUP 6 (2199V2-42-01) | 2199V2-49-04 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-5) | (5-9) | (5-9) | (0-4) |
| **Sample Date** | | | | | | 10/25/2023 | 10/25/2023 | 10/25/2023 | 10/25/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-42 | 2199V2-42 | 2199V2-42 | 2199V2-49 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.38 | 8.35 | 8.41 | 8.84 |
| PID Readings (ppm) | | | | | | **1.0** | **0.4** | **0.4** | **0.1** |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | **0.215** | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | **0.005** | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | **0.0091** | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | **0.0051** | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | **0.63** | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | **0.627** | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | **0.671** | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | **0.382** | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | **0.705** | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | **0.104** | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | **1.11** | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | **0.347** | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | **0.734** | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | **1.14** | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **5.5** | **6.2** | **4.7** | <1.0 |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **82.2** | **32.4** | **25.1** | **32.2** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | <0.5 | <0.5 | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | **0.8** | <0.5 | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **25200** | **58300** | **83900** | **70800** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **11.9** | **9.3** | **6.8** | **9.7** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **8.8** | **5.7** | **6.6** | **5.2** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **18.1** | **9.3** | **7.9** | **9.1** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **17300** | **12500** | **10800** | **9870** |
| Lead | 107 | 700 | --- | 400 | --- | **61.1** | **5.6** | **4.7** | **7.1** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **12000** | **38900** | **42000** | **42900** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **1120** | **792** | **825** | **477** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | **0.09** | <0.05 | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **17.3** | **14.2** | **12.3** | **10.8** |
| Potassium | --- | --- | --- | --- | --- | **905** | **469** | **414** | **915** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **302** | **182** | **246** | **534** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **20.7** | **11.9** | **10.1** | **14** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **65.7** | **24.8** | **19.9** | **24.2** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.91** | **1.78** | **1.67** | **0.98** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <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 | **0.022** |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | **0.006** | <0.005 | **0.084** |
| Copper | 0.65 | | | | | **0.01** | **0.008** | <0.005 | **0.108** |
| Iron | 5 | | | | | **3.1** | **4.9** | **3** | **92.3** |
| Lead | 0.0075 | | | | | **0.006** | <0.005 | <0.005 | **0.047** |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | <0.10 | **0.56** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | **0.3** |

--- - 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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

Soils for Reuse or Disposal at CCDD Facilities in MSA Counties including Chicago

US 12 Over Des Plaines River, Des Plaines, Cook County, IL

BDE Sequence No.: 15830C

PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-49-04 | 2199V2-50-01 | 2199V2-50-01 |
|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (4-8) | (0-4) | (4-7) |
| **Sample Date** | | | | | | 10/25/2023 | 10/25/2023 | 10/25/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-49 | 2199V2-50 | 2199V2-50 |
| **Parameter** | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.42 | 8.27 | 8.18 |
| PID Readings (ppm) | | | | | | 0.0 | **0.3** | **0.4** |
| **VOCs, mg/kg** | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | **0.0057** | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **5.9** | **5.9** | **8.4** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **46.6** | **60.7** | **53.9** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | <0.5 | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | **0.7** | **0.8** | **0.7** |
| Calcium | --- | --- | --- | --- | --- | **33200** | **50600** | **39900** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **15** | **18.4** | **12.7** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **8.8** | **7.4** | **13.7** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **21.1** | **23.5** | **17.9** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **18600** | **19600** | **17600** |
| Lead | 107 | 700 | --- | 400 | --- | **12.3** | **88.7** | **13.7** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **22900** | **21400** | **24000** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **764** | **403** | **1030** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | **0.2** | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **25.5** | **22.3** | **23.4** |
| Potassium | --- | --- | --- | --- | --- | **1040** | **1380** | **882** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **698** | **287** | **300** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **23.7** | **23.4** | **21.3** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **41.3** | **75.2** | **36.2** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | **0.013** | <0.005 |
| Manganese | 0.15 | | | | | **1.01** | **0.13** | **1.42** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.009** | **0.008** | <0.005 |
| Copper | 0.65 | | | | | **0.013** | **0.012** | <0.005 |
| Iron | 5 | | | | | **8.9** | **7** | **3** |
| Lead | 0.0075 | | | | | <0.005 | **0.009** | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | <0.10 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | <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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Total Solids | 93.48 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| Acetone | < 200 | 200 | ug/kg | |
| Benzene | 15.8 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| 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: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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: 11/02/23 | | Preparation Date: 11/01/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 4.0 | 1.0 | mg/kg | |
| Barium | 29.3 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 58,600 | 50 | mg/kg | |
| Chromium | 6.9 | 0.5 | mg/kg | |
| Cobalt | 4.4 | 0.5 | mg/kg | |
| Copper | 11.3 | 0.5 | mg/kg | |
| Iron | 10,900 | 5.0 | mg/kg | |
| Lead | 14.8 | 0.5 | mg/kg | |
| Magnesium | 34,100 | 50 | mg/kg | |
| Manganese | 423 | 0.5 | mg/kg | |
| Nickel | 10.2 | 0.5 | mg/kg | |
| Potassium | 789 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 284 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 14.1 | 1.0 | mg/kg | |
| Zinc | 51.1 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 11/01/23 7:30 | | | | |
| pH @ 25°C, 1:2 | 8.82 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/02/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/08/23 | | |
| 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 | 0.53 | 0.10 | 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: 11/06/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.017 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-01 (0-3)
**Sample No:** 23-9710-004

**Date Collected:** 10/27/23
**Time Collected:** 9:30
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

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: 11/08/23 | | Preparation Date: 11/08/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.029 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.036 | 0.005 | mg/L | |
| Iron | 35.8 | 0.1 | mg/L | |
| Lead | 0.044 | 0.005 | mg/L | |
| Manganese | 0.54 | 0.10 | 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: 11/07/23 | | | | |
| 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: 102.6* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.4* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 103.5* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 79.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 80* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 53* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 86* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 76* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Total Solids | 90.13 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| 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 | 7.4 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| 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: 11/09/23 | | Preparation Date: 11/07/23 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | 475 | 330 | ug/kg | |
| Benzo(a)pyrene | 525 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 782 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | 439 | 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 | 567 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | 91 | 90 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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 | 1,200 | 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 | 409 | 330 | ug/kg | |
| Isophorone | < 330 | 330 | ug/kg | |
| 2-Methylnaphthalene | 502 | 330 | ug/kg | |
| 2-Methylphenol | < 330 | 330 | ug/kg | |
| 3 & 4-Methylphenol | < 330 | 330 | ug/kg | |
| Naphthalene | 336 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | 646 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | 774 | 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: 11/02/23 | | Preparation Date: 11/01/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.7 | 1.0 | mg/kg | |
| Barium | 66.4 | 0.5 | mg/kg | |
| Beryllium | 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.9 | 0.5 | mg/kg | |
| Calcium | 29,800 | 50 | mg/kg | |
| Chromium | 17.5 | 0.5 | mg/kg | |
| Cobalt | 6.3 | 0.5 | mg/kg | |
| Copper | 26.6 | 0.5 | mg/kg | |
| Iron | 14,700 | 5.0 | mg/kg | |
| Lead | 163 | 0.5 | mg/kg | |
| Magnesium | 18,200 | 50 | mg/kg | |
| Manganese | 333 | 0.5 | mg/kg | |
| Nickel | 16.4 | 0.5 | mg/kg | |
| Potassium | 1,150 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 687 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.7 | 1.0 | mg/kg | |
| Zinc | 120 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 11/01/23 7:30 | | | | |
| pH @ 25°C, 1:2 | 8.45 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/02/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.78 | 0.10 | 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: 11/06/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.016 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-7-02 (0-3)
**Sample No:** 23-9710-005

**Date Collected:** 10/27/23
**Time Collected:** 9:40
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

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: 11/08/23 | | Preparation Date: 11/08/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.055 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.054 | 0.005 | mg/L | |
| Iron | 50.9 | 0.1 | mg/L | |
| Lead | 0.088 | 0.005 | mg/L | |
| Manganese | 0.42 | 0.10 | 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: 11/07/23 | | | | |
| 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: 102.8* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 83* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 88* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 76* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 71* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Total Solids | 86.24 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| 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 | 24.0 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/02/23 | | | | |
| 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: 11/09/23 Preparation Date: 11/07/23 | | | | |
| 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 | 244 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 349 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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 | 479 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/09/23 | | Preparation Date: 11/07/23 | | |
| 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 | 345 | 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: 11/02/23 | | Preparation Date: 11/01/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.8 | 1.0 | mg/kg | |
| Barium | 75.6 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.7 | 0.5 | mg/kg | |
| Calcium | 24,600 | 50 | mg/kg | |
| Chromium | 14.1 | 0.5 | mg/kg | |
| Cobalt | 7.4 | 0.5 | mg/kg | |
| Copper | 22.9 | 0.5 | mg/kg | |
| Iron | 15,900 | 5.0 | mg/kg | |
| Lead | 104 | 0.5 | mg/kg | |
| Magnesium | 15,400 | 50 | mg/kg | |
| Manganese | 549 | 0.5 | mg/kg | |
| Nickel | 18.2 | 0.5 | mg/kg | |
| Potassium | 1,140 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 98 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 19.7 | 1.0 | mg/kg | |
| Zinc | 93.3 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

Results are reported on a dry weight basis.

| Analyte | | Result | R.L. | Units | Flags |
|---|---|---|---|---|---|
| **Total Mercury** | **Method: 7471B** | | | | |
| Analysis Date: 11/02/23 | | | | | |
| Mercury | | 0.17 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** | **Method: 9045D** | | | | |
| Analysis Date: 11/01/23 7:30 | | | | | |
| pH @ 25°C, 1:2 | | 7.88 | | Units | |
| **TCLP Extraction** | **Method: 1311** | | | | |
| Analysis Date: 11/02/23 | | | | | |
| TCLP Extraction | | Complete | | | |
| **TCLP Metals Method 1311** | **Method: 6010C** | **Preparation Method 3010A** | | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | | |
| 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 | | 0.60 | 0.10 | 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: 11/06/23 | | | | | |
| Mercury | | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** | **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | | |
| SPLP Metals Extraction | | Complete | | | |
| Arsenic | | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-9-01 (0-2.5)
**Sample No:** 23-9710-007

**Date Collected:** 10/27/23
**Time Collected:** 9:50
**Date Received:** 10/27/23
**Date Reported:** 11/10/23

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: 11/08/23 | | Preparation Date: 11/08/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.018 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.022 | 0.005 | mg/L | |
| Iron | 17.9 | 0.1 | mg/L | |
| Lead | 0.051 | 0.005 | mg/L | |
| Manganese | 0.19 | 0.10 | 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: 11/07/23 | | | | |
| 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: 101.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.3* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 80.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 82* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 56.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 94* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 77* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 74* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:15 |
| **Sample ID:** | 2199V2 - 14-01 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-022 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 91.35 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-01 (0-2.5)
**Sample No:** 23-9643-022

**Date Collected:** 10/26/23
**Time Collected:** 12:15
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | 262 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 388 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-01 (0-2.5)
**Sample No:** 23-9643-022

**Date Collected:** 10/26/23
**Time Collected:** 12:15
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | 441 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-01 (0-2.5)
**Sample No:** 23-9643-022

**Date Collected:** 10/26/23
**Time Collected:** 12:15
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.8 | 1.0 | mg/kg | |
| Barium | 60.7 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.6 | 0.5 | mg/kg | |
| Calcium | 56,100 | 50 | mg/kg | |
| Chromium | 11.0 | 0.5 | mg/kg | |
| Cobalt | 4.6 | 0.5 | mg/kg | |
| Copper | 24.9 | 0.5 | mg/kg | |
| Iron | 11,900 | 5.0 | mg/kg | |
| Lead | 99.3 | 0.5 | mg/kg | |
| Magnesium | 36,200 | 50 | mg/kg | |
| Manganese | 312 | 0.5 | mg/kg | |
| Nickel | 13.0 | 0.5 | mg/kg | |
| Potassium | 1,060 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 248 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 15.9 | 1.0 | mg/kg | |
| Zinc | 82.1 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:15 |
| **Sample ID:** | 2199V2 - 14-01 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-022 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.92 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.33 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-01 (0-2.5)
**Sample No:** 23-9643-022

**Date Collected:** 10/26/23
**Time Collected:** 12:15
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.011 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.014 | 0.005 | mg/L | |
| Iron | 8.5 | 0.1 | mg/L | |
| Lead | 0.054 | 0.005 | mg/L | |
| Manganese | 0.19 | 0.10 | 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: 11/07/23 | | | | |
| 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: 96.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 100.1* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 67* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 72* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 47.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 75* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 68* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 62.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:45 |
| **Sample ID:** | 2199V2-20-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-005 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 83.90 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-20-01
**Sample No:** 23-9514-005

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | 346 | 330 | ug/kg | |
| Benzo(a)pyrene | 321 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 413 | 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 | 349 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-20-01
**Sample No:** 23-9514-005

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 685 | 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 | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:45 |
| **Sample ID:** | 2199V2-20-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-005 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | 445 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | 596 | 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 4.1 | 1.0 | mg/kg | |
| Barium | 68.0 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 41,700 | 50 | mg/kg | |
| Chromium | 13.9 | 0.5 | mg/kg | |
| Cobalt | 7.8 | 0.5 | mg/kg | |
| Copper | 24.2 | 0.5 | mg/kg | |
| Iron | 18,000 | 5.0 | mg/kg | |
| Lead | 44.2 | 0.5 | mg/kg | |
| Magnesium | 24,200 | 50 | mg/kg | |
| Manganese | 521 | 0.5 | mg/kg | |
| Nickel | 20.0 | 0.5 | mg/kg | |
| Potassium | 1,330 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 476 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.1 | 1.0 | mg/kg | |
| Zinc | 55.4 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:45 |
| **Sample ID:** | 2199V2-20-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-005 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.25 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.037 | 0.005 | mg/L | |
| Manganese | 6.41 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-20-01
**Sample No:** 23-9514-005

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 1.4 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 98.9* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 106.6* | *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: 58.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 92* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 59* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 70* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:40 |
| **Sample ID:** | 2199V2-21-02 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-004 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 84.35 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:40 |
| **Sample ID:** | 2199V2-21-02 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-004 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 Preparation Date: 10/24/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-21-02
**Sample No:** 23-9514-004

**Date Collected:** 10/23/23
**Time Collected:** 11:40
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-21-02
**Sample No:** 23-9514-004

**Date Collected:** 10/23/23
**Time Collected:** 11:40
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | 1.2 | 1.0 | mg/kg | |
| Arsenic | 4.8 | 1.0 | mg/kg | |
| Barium | 75.2 | 0.5 | mg/kg | |
| Beryllium | 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 44,600 | 50 | mg/kg | |
| Chromium | 15.2 | 0.5 | mg/kg | |
| Cobalt | 8.2 | 0.5 | mg/kg | |
| Copper | 23.9 | 0.5 | mg/kg | |
| Iron | 17,900 | 5.0 | mg/kg | |
| Lead | 67.1 | 0.5 | mg/kg | |
| Magnesium | 27,700 | 50 | mg/kg | |
| Manganese | 495 | 0.5 | mg/kg | |
| Nickel | 19.3 | 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 | 475 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.9 | 1.0 | mg/kg | |
| Zinc | 70.2 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:40 |
| **Sample ID:** | 2199V2-21-02 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-004 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | 0.06 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.03 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.069 | 0.005 | mg/L | |
| Manganese | 8.81 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-21-02
**Sample No:** 23-9514-004

**Date Collected:** 10/23/23
**Time Collected:** 11:40
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.007 | 0.005 | mg/L | |
| Iron | 2.3 | 0.1 | mg/L | |
| Lead | 0.009 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 101* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 102.4* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 78.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 74* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 61.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 95* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 62* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 71* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:30 |
| **Sample ID:** | 2199V2-23-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-002 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 83.02 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-23-01
**Sample No:** 23-9514-002

**Date Collected:** 10/23/23
**Time Collected:** 11:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 206 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-23-01
**Sample No:** 23-9514-002

**Date Collected:** 10/23/23
**Time Collected:** 11:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 411 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-23-01
**Sample No:** 23-9514-002

**Date Collected:** 10/23/23
**Time Collected:** 11:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | 1.3 | 1.0 | mg/kg | |
| Arsenic | 7.2 | 1.0 | mg/kg | |
| Barium | 103 | 0.5 | mg/kg | |
| Beryllium | 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 17,100 | 50 | mg/kg | |
| Chromium | 17.0 | 0.5 | mg/kg | |
| Cobalt | 7.8 | 0.5 | mg/kg | |
| Copper | 22.9 | 0.5 | mg/kg | |
| Iron | 16,300 | 5.0 | mg/kg | |
| Lead | 75.8 | 0.5 | mg/kg | |
| Magnesium | 10,400 | 50 | mg/kg | |
| Manganese | 612 | 0.5 | mg/kg | |
| Nickel | 16.5 | 0.5 | mg/kg | |
| Potassium | 1,250 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 757 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.6 | 1.0 | mg/kg | |
| Zinc | 90.3 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:30 |
| **Sample ID:** | 2199V2-23-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-002 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | 0.10 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.61 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.79 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-23-01
**Sample No:** 23-9514-002

**Date Collected:** 10/23/23
**Time Collected:** 11:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.033 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.046 | 0.005 | mg/L | |
| Iron | 35.0 | 0.1 | mg/L | |
| Lead | 0.146 | 0.005 | mg/L | |
| Manganese | 0.27 | 0.10 | 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: 10/26/23 | | | | |
| 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: 100.1* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 112.1* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 76* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 58.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 92* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 76* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 73.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-01
**Sample No:** 23-9514-007

**Date Collected:** 10/23/23
**Time Collected:** 11:55
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 88.40 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-01
**Sample No:** 23-9514-007

**Date Collected:** 10/23/23
**Time Collected:** 11:55
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 240 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 346 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-01
**Sample No:** 23-9514-007

**Date Collected:** 10/23/23
**Time Collected:** 11:55
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 443 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-01
**Sample No:** 23-9514-007

**Date Collected:** 10/23/23
**Time Collected:** 11:55
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 342 | 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.5 | 1.0 | mg/kg | |
| Barium | 45.3 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 51,900 | 50 | mg/kg | |
| Chromium | 16.1 | 0.5 | mg/kg | |
| Cobalt | 9.8 | 0.5 | mg/kg | |
| Copper | 24.2 | 0.5 | mg/kg | |
| Iron | 19,300 | 5.0 | mg/kg | |
| Lead | 19.3 | 0.5 | mg/kg | |
| Magnesium | 25,300 | 50 | mg/kg | |
| Manganese | 377 | 0.5 | mg/kg | |
| Nickel | 25.0 | 0.5 | mg/kg | |
| Potassium | 1,880 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 146 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.4 | 1.0 | mg/kg | |
| Zinc | 46.6 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:55 |
| **Sample ID:** | 2199V2-24-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-007 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.39 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 4.70 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.012 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-01
**Sample No:** 23-9514-007

**Date Collected:** 10/23/23
**Time Collected:** 11:55
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.021 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.028 | 0.005 | mg/L | |
| Iron | 23.4 | 0.1 | mg/L | |
| Lead | 0.011 | 0.005 | mg/L | |
| Manganese | 0.12 | 0.10 | 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: 10/26/23 | | | | |
| 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: 101.9* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.1* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 106.4* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 75* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 55* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 94* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 69* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 68* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 26-01 (0-4)
**Sample No:** 23-9643-021

**Date Collected:** 10/26/23
**Time Collected:** 12:10
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 84.60 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 26-01 (0-4)
**Sample No:** 23-9643-021

**Date Collected:** 10/26/23
**Time Collected:** 12:10
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/06/23 Preparation Date: 11/02/23 | | | | |
| 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 | 94 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 26-01 (0-4)
**Sample No:** 23-9643-021

**Date Collected:** 10/26/23
**Time Collected:** 12:10
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 26-01 (0-4)
**Sample No:** 23-9643-021

**Date Collected:** 10/26/23
**Time Collected:** 12:10
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.1 | 1.0 | mg/kg | |
| Barium | 84.9 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 2,510 | 50 | mg/kg | |
| Chromium | 18.0 | 0.5 | mg/kg | |
| Cobalt | 8.4 | 0.5 | mg/kg | |
| Copper | 16.4 | 0.5 | mg/kg | |
| Iron | 20,900 | 5.0 | mg/kg | |
| Lead | 20.9 | 0.5 | mg/kg | |
| Magnesium | 3,450 | 50 | mg/kg | |
| Manganese | 419 | 0.5 | mg/kg | |
| Nickel | 17.6 | 0.5 | mg/kg | |
| Potassium | 1,190 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 243 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 29.3 | 1.0 | mg/kg | |
| Zinc | 81.7 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:10 |
| **Sample ID:** | 2199V2 - 26-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-021 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.51 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 26-01 (0-4)
**Sample No:** 23-9643-021

**Date Collected:** 10/26/23
**Time Collected:** 12:10
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.038 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.037 | 0.005 | mg/L | |
| Iron | 38.6 | 0.1 | mg/L | |
| Lead | 0.021 | 0.005 | mg/L | |
| Manganese | 0.21 | 0.10 | 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: 11/07/23 | | | | |
| 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: 104* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 114.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 74* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 74* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 58.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 77* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 75* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 71* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 10:05 |
| **Sample ID:** | 2199V2 - DUP 8 | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-030 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 83.59 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - DUP 8
**Sample No:** 23-9643-030

**Date Collected:** 10/26/23
**Time Collected:** 10:05
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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: 11/06/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - DUP 8
**Sample No:** 23-9643-030

**Date Collected:** 10/26/23
**Time Collected:** 10:05
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - DUP 8
**Sample No:** 23-9643-030

**Date Collected:** 10/26/23
**Time Collected:** 10:05
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 10.6 | 1.0 | mg/kg | |
| Barium | 87.3 | 0.5 | mg/kg | |
| Beryllium | 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.6 | 0.5 | mg/kg | |
| Calcium | 3,470 | 50 | mg/kg | |
| Chromium | 13.9 | 0.5 | mg/kg | |
| Cobalt | 6.4 | 0.5 | mg/kg | |
| Copper | 17.4 | 0.5 | mg/kg | |
| Iron | 17,300 | 5.0 | mg/kg | |
| Lead | 55.9 | 0.5 | mg/kg | |
| Magnesium | 2,920 | 50 | mg/kg | |
| Manganese | 505 | 0.5 | mg/kg | |
| Nickel | 13.3 | 0.5 | mg/kg | |
| Potassium | 1,220 | 50 | mg/kg | |
| Selenium | 1.3 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 191 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 24.2 | 1.0 | mg/kg | |
| Zinc | 120 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 10:05 |
| **Sample ID:** | 2199V2 - DUP 8 | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-030 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | 0.08 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.58 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/02/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.6 | 0.1 | mg/L | |
| Lead | 0.011 | 0.005 | mg/L | |
| Manganese | 0.13 | 0.10 | 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 | |
| **TCLP Mercury Method 1311** **Method: 7470A** | | | | |
| Analysis Date: 11/06/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - DUP 8
**Sample No:** 23-9643-030

**Date Collected:** 10/26/23
**Time Collected:** 10:05
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.020 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.023 | 0.005 | mg/L | |
| Iron | 17.6 | 0.1 | mg/L | |
| Lead | 0.034 | 0.005 | mg/L | |
| Manganese | 0.16 | 0.10 | 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: 11/07/23 | | | | |
| 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: 102.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 106.9* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 83* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 72* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 57* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 88* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 72* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:55 |
| **Sample ID:** | 2199V2 - 27-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-019 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 77.52 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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 | 6.6 | 5.0 | ug/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:55 |
| **Sample ID:** | 2199V2 - 27-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-019 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (0-4)
**Sample No:** 23-9643-019

**Date Collected:** 10/26/23
**Time Collected:** 11:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (0-4)
**Sample No:** 23-9643-019

**Date Collected:** 10/26/23
**Time Collected:** 11:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.0 | 1.0 | mg/kg | |
| Barium | 33.0 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 32,400 | 50 | mg/kg | |
| Chromium | 14.5 | 0.5 | mg/kg | |
| Cobalt | 6.4 | 0.5 | mg/kg | |
| Copper | 15.4 | 0.5 | mg/kg | |
| Iron | 15,200 | 5.0 | mg/kg | |
| Lead | 55.2 | 0.5 | mg/kg | |
| Magnesium | 21,600 | 50 | mg/kg | |
| Manganese | 423 | 0.5 | mg/kg | |
| Nickel | 16.7 | 0.5 | mg/kg | |
| Potassium | 526 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 352 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 19.1 | 1.0 | mg/kg | |
| Zinc | 30.2 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:55 |
| **Sample ID:** | 2199V2 - 27-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-019 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.30 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.96 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.047 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (0-4)
**Sample No:** 23-9643-019

**Date Collected:** 10/26/23
**Time Collected:** 11:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | 0.005 | 0.004 | mg/L | |
| Cadmium | 0.008 | 0.005 | mg/L | |
| Chromium | 0.184 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.216 | 0.005 | mg/L | |
| Iron | 188 | 0.1 | mg/L | |
| Lead | 0.112 | 0.005 | mg/L | |
| Manganese | 1.35 | 0.10 | mg/L | |
| Nickel | 0.2 | 0.1 | mg/L | |
| Selenium | < 0.010 | 0.010 | mg/L | |
| Silver | < 0.005 | 0.005 | mg/L | |
| Zinc | 0.5 | 0.1 | mg/L | |
| **SPLP Mercury Method 1312** **Method: 7470A** | | | | |
| Analysis Date: 11/07/23 | | | | |
| 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: 99.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 108.3* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 79.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 67* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 56* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 86* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 67* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 67.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:00 |
| **Sample ID:** | 2199V2 - 27-01 (4-7) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-020 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 81.32 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (4-7)
**Sample No:** 23-9643-020

**Date Collected:** 10/26/23
**Time Collected:** 12:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (4-7)
**Sample No:** 23-9643-020

**Date Collected:** 10/26/23
**Time Collected:** 12:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (4-7)
**Sample No:** 23-9643-020

**Date Collected:** 10/26/23
**Time Collected:** 12:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 3.5 | 1.0 | mg/kg | |
| Barium | 23.1 | 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 | 8.3 | 0.5 | mg/kg | |
| Cobalt | 4.0 | 0.5 | mg/kg | |
| Copper | 15.2 | 0.5 | mg/kg | |
| Iron | 9,690 | 5.0 | mg/kg | |
| Lead | 49.4 | 0.5 | mg/kg | |
| Magnesium | 47,700 | 50 | mg/kg | |
| Manganese | 460 | 0.5 | mg/kg | |
| Nickel | 10.0 | 0.5 | mg/kg | |
| Potassium | 668 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 306 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 10.3 | 1.0 | mg/kg | |
| Zinc | 42.9 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:00 |
| **Sample ID:** | 2199V2 - 27-01 (4-7) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-020 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.29 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | 1.08 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.015 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 27-01 (4-7)
**Sample No:** 23-9643-020

**Date Collected:** 10/26/23
**Time Collected:** 12:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.030 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.041 | 0.005 | mg/L | |
| Iron | 34.4 | 0.1 | mg/L | |
| Lead | 0.016 | 0.005 | mg/L | |
| Manganese | 0.24 | 0.10 | 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: 11/07/23 | | | | |
| 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: 100.4* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 100.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 71.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 61* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 50.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 75* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 61* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 61* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 85.34 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.3 | 1.0 | mg/kg | |
| Barium | 75.8 | 0.5 | mg/kg | |
| Beryllium | 0.9 | 0.5 | mg/kg | |
| Cadmium | 0.6 | 0.5 | mg/kg | |
| Calcium | 20,900 | 50 | mg/kg | |
| Chromium | 11.7 | 0.5 | mg/kg | |
| Cobalt | 7.1 | 0.5 | mg/kg | |
| Copper | 19.6 | 0.5 | mg/kg | |
| Iron | 17,000 | 5.0 | mg/kg | |
| Lead | 34.4 | 0.5 | mg/kg | |
| Magnesium | 11,800 | 50 | mg/kg | |
| Manganese | 535 | 0.5 | mg/kg | |
| Nickel | 17.1 | 0.5 | mg/kg | |
| Potassium | 1,530 | 50 | mg/kg | |
| Selenium | 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 541 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.9 | 1.0 | mg/kg | |
| Zinc | 115 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | 0.10 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.31 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.57 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.018 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (0-4)
**Sample No:** 23-9643-017

**Date Collected:** 10/26/23
**Time Collected:** 11:45
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.043 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.045 | 0.005 | mg/L | |
| Iron | 44.5 | 0.1 | mg/L | |
| Lead | 0.040 | 0.005 | mg/L | |
| Manganese | 0.42 | 0.10 | 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: 11/07/23 | | | | |
| 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: 101.6* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.1* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 111.9* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 85.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 83* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 64.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 92* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 80* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 78.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:50 |
| **Sample ID:** | 2199V2 - 29-01 (4-8) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-018 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 80.51 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (4-8)
**Sample No:** 23-9643-018

**Date Collected:** 10/26/23
**Time Collected:** 11:50
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (4-8)
**Sample No:** 23-9643-018

**Date Collected:** 10/26/23
**Time Collected:** 11:50
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (4-8)
**Sample No:** 23-9643-018

**Date Collected:** 10/26/23
**Time Collected:** 11:50
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.6 | 1.0 | mg/kg | |
| Barium | 67.8 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.6 | 0.5 | mg/kg | |
| Calcium | 65,300 | 50 | mg/kg | |
| Chromium | 12.6 | 0.5 | mg/kg | |
| Cobalt | 22.9 | 0.5 | mg/kg | |
| Copper | 17.3 | 0.5 | mg/kg | |
| Iron | 16,900 | 5.0 | mg/kg | |
| Lead | 45.0 | 0.5 | mg/kg | |
| Magnesium | 18,700 | 50 | mg/kg | |
| Manganese | 1,210 | 0.5 | mg/kg | |
| Nickel | 16.3 | 0.5 | mg/kg | |
| Potassium | 920 | 50 | mg/kg | |
| Selenium | 1.3 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 285 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.0 | 1.0 | mg/kg | |
| Zinc | 43.7 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:50 |
| **Sample ID:** | 2199V2 - 29-01 (4-8) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-018 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | 0.11 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.98 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 29-01 (4-8)
**Sample No:** 23-9643-018

**Date Collected:** 10/26/23
**Time Collected:** 11:50
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.006 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.006 | 0.005 | mg/L | |
| Iron | 5.4 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/07/23 | | | | |
| 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: 101.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 103.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 73* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 63* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 51.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 80* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 65* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 61.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (0-4)
**Sample No:** 23-9643-005

**Date Collected:** 10/26/23
**Time Collected:** 10:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 84.85 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (0-4)
**Sample No:** 23-9643-005

**Date Collected:** 10/26/23
**Time Collected:** 10:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/04/23 Preparation Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (0-4)
**Sample No:** 23-9643-005

**Date Collected:** 10/26/23
**Time Collected:** 10:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (0-4)
**Sample No:** 23-9643-005

**Date Collected:** 10/26/23
**Time Collected:** 10:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.5 | 1.0 | mg/kg | |
| Barium | 72.6 | 0.5 | mg/kg | |
| Beryllium | 0.7 | 0.5 | mg/kg | |
| Cadmium | 0.7 | 0.5 | mg/kg | |
| Calcium | 2,720 | 50 | mg/kg | |
| Chromium | 19.3 | 0.5 | mg/kg | |
| Cobalt | 8.3 | 0.5 | mg/kg | |
| Copper | 18.5 | 0.5 | mg/kg | |
| Iron | 23,800 | 5.0 | mg/kg | |
| Lead | 22.6 | 0.5 | mg/kg | |
| Magnesium | 3,740 | 50 | mg/kg | |
| Manganese | 722 | 0.5 | mg/kg | |
| Nickel | 17.6 | 0.5 | mg/kg | |
| Potassium | 866 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 253 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 27.5 | 1.0 | mg/kg | |
| Zinc | 49.6 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 10:30 |
| **Sample ID:** | 2199V2 - 37-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-005 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.76 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/31/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/02/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (0-4)
**Sample No:** 23-9643-005

**Date Collected:** 10/26/23
**Time Collected:** 10:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/06/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.007 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.009 | 0.005 | mg/L | |
| Iron | 5.5 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/07/23 | | | | |
| 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: 104.5* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 115.8* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 78* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 60.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 77* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 73* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (4-7)
**Sample No:** 23-9643-006

**Date Collected:** 10/26/23
**Time Collected:** 10:35
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 83.89 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 5.3 | 5.0 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (4-7)
**Sample No:** 23-9643-006

**Date Collected:** 10/26/23
**Time Collected:** 10:35
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/04/23 | | Preparation Date: 11/01/23 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | 346 | 330 | ug/kg | |
| Benzo(a)pyrene | 465 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 757 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | 365 | 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 | 498 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | < 90 | 90 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (4-7)
**Sample No:** 23-9643-006

**Date Collected:** 10/26/23
**Time Collected:** 10:35
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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 | 1,080 | 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 | 387 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (4-7)
**Sample No:** 23-9643-006

**Date Collected:** 10/26/23
**Time Collected:** 10:35
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | 457 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | 695 | 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: 11/01/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 4.2 | 1.0 | mg/kg | |
| Barium | 16.5 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 47,400 | 50 | mg/kg | |
| Chromium | 10.1 | 0.5 | mg/kg | |
| Cobalt | 4.2 | 0.5 | mg/kg | |
| Copper | 13.2 | 0.5 | mg/kg | |
| Iron | 12,700 | 5.0 | mg/kg | |
| Lead | 8.7 | 0.5 | mg/kg | |
| Magnesium | 32,200 | 50 | mg/kg | |
| Manganese | 263 | 0.5 | mg/kg | |
| Nickel | 11.0 | 0.5 | mg/kg | |
| Potassium | 656 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 203 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 18.3 | 1.0 | mg/kg | |
| Zinc | 28.0 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 10:35 |
| **Sample ID:** | 2199V2 - 37-01 (4-7) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-006 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.26 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/31/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | 1.06 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/02/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 37-01 (4-7)
**Sample No:** 23-9643-006

**Date Collected:** 10/26/23
**Time Collected:** 10:35
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/06/23 | | |
| 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 | 2.1 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/07/23 | | | | |
| 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* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 98* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 79.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 76* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 59* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 85* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 72* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 70* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 90.62 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Acetone | 215 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/04/23 | | Preparation Date: 11/01/23 | | |
| Acenaphthene | < 330 | 330 | ug/kg | |
| Acenaphthylene | < 330 | 330 | ug/kg | |
| Anthracene | < 330 | 330 | ug/kg | |
| Benzidine | < 330 | 330 | ug/kg | |
| Benzo(a)anthracene | 630 | 330 | ug/kg | |
| Benzo(a)pyrene | 627 | 90 | ug/kg | |
| Benzo(b)fluoranthene | 671 | 330 | ug/kg | |
| Benzo(k)fluoranthene | < 330 | 330 | ug/kg | |
| Benzo(ghi)perylene | 382 | 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 | 705 | 330 | ug/kg | |
| Dibenzo(a,h)anthracene | 104 | 90 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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 | 1,110 | 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 | 347 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| n-Nitrosodimethylamine | < 330 | 330 | ug/kg | |
| n-Nitrosodiphenylamine | < 330 | 330 | ug/kg | |
| Pentachlorophenol | < 330 | 330 | ug/kg | |
| Phenanthrene | 734 | 330 | ug/kg | |
| Phenol | < 330 | 330 | ug/kg | |
| Pyrene | 1,140 | 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: 11/01/23 | | Preparation Date: 10/30/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.5 | 1.0 | mg/kg | |
| Barium | 82.2 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.8 | 0.5 | mg/kg | |
| Calcium | 25,200 | 50 | mg/kg | |
| Chromium | 11.9 | 0.5 | mg/kg | |
| Cobalt | 8.8 | 0.5 | mg/kg | |
| Copper | 18.1 | 0.5 | mg/kg | |
| Iron | 17,300 | 5.0 | mg/kg | |
| Lead | 61.1 | 0.5 | mg/kg | |
| Magnesium | 12,000 | 50 | mg/kg | |
| Manganese | 1,120 | 0.5 | mg/kg | |
| Nickel | 17.3 | 0.5 | mg/kg | |
| Potassium | 905 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 302 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.7 | 1.0 | mg/kg | |
| Zinc | 65.7 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | 0.09 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.38 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 11/01/23 | | |
| 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 | 0.91 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/01/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (0-5)
**Sample No:** 23-9606-027

**Date Collected:** 10/25/23
**Time Collected:** 13:05
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| 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 | 0.010 | 0.005 | mg/L | |
| Iron | 3.1 | 0.1 | mg/L | |
| Lead | 0.006 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 100.6* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 101.3* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 101.3* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 74.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 80* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 54.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 86* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 76* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 88.61 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/04/23 Preparation Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/30/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.2 | 1.0 | mg/kg | |
| Barium | 32.4 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 58,300 | 50 | mg/kg | |
| Chromium | 9.3 | 0.5 | mg/kg | |
| Cobalt | 5.7 | 0.5 | mg/kg | |
| Copper | 9.3 | 0.5 | mg/kg | |
| Iron | 12,500 | 5.0 | mg/kg | |
| Lead | 5.6 | 0.5 | mg/kg | |
| Magnesium | 38,900 | 50 | mg/kg | |
| Manganese | 792 | 0.5 | mg/kg | |
| Nickel | 14.2 | 0.5 | mg/kg | |
| Potassium | 469 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 182 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 11.9 | 1.0 | mg/kg | |
| Zinc | 24.8 | 1.0 | mg/kg | |

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**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.35 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 11/01/23 | | |
| 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 | 1.78 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/01/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-42-01 (5-9)
**Sample No:** 23-9606-028

**Date Collected:** 10/25/23
**Time Collected:** 13:10
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.006 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.008 | 0.005 | mg/L | |
| Iron | 4.9 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 105.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.4* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 115.6* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 74* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 78* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 54.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 74* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 68* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-DUP 6
**Sample No:** 23-9606-029

**Date Collected:** 10/25/23
**Time Collected:** 9:35
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 88.21 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 9.1 | 5.0 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-DUP 6
**Sample No:** 23-9606-029

**Date Collected:** 10/25/23
**Time Collected:** 9:35
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 5.1 | 5.0 | ug/kg | |
| **Semi-Volatile Compounds** **Method: 8270C** **Preparation Method 3540C** | | | | |
| Analysis Date: 11/04/23 Preparation Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-DUP 6
**Sample No:** 23-9606-029

**Date Collected:** 10/25/23
**Time Collected:** 9:35
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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 | |

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**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-DUP 6
**Sample No:** 23-9606-029

**Date Collected:** 10/25/23
**Time Collected:** 9:35
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/04/23 | | Preparation Date: 11/01/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/30/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 4.7 | 1.0 | mg/kg | |
| Barium | 25.1 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 83,900 | 50 | mg/kg | |
| Chromium | 6.8 | 0.5 | mg/kg | |
| Cobalt | 6.6 | 0.5 | mg/kg | |
| Copper | 7.9 | 0.5 | mg/kg | |
| Iron | 10,800 | 5.0 | mg/kg | |
| Lead | 4.7 | 0.5 | mg/kg | |
| Magnesium | 42,000 | 50 | mg/kg | |
| Manganese | 825 | 0.5 | mg/kg | |
| Nickel | 12.3 | 0.5 | mg/kg | |
| Potassium | 414 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 246 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 10.1 | 1.0 | mg/kg | |
| Zinc | 19.9 | 1.0 | mg/kg | |

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**Sample No:** 23-9606-029

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**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.41 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 11/01/23 | | |
| 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 | 1.67 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/01/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| 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 | 3.0 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 102.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 104.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 73.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 77* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 74* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 66* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 81.32 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/27/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | < 1.0 | 1.0 | mg/kg | |
| Barium | 32.2 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 70,800 | 50 | mg/kg | |
| Chromium | 9.7 | 0.5 | mg/kg | |
| Cobalt | 5.2 | 0.5 | mg/kg | |
| Copper | 9.1 | 0.5 | mg/kg | |
| Iron | 9,870 | 5.0 | mg/kg | |
| Lead | 7.1 | 0.5 | mg/kg | |
| Magnesium | 42,900 | 50 | mg/kg | |
| Manganese | 477 | 0.5 | mg/kg | |
| Nickel | 10.8 | 0.5 | mg/kg | |
| Potassium | 915 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 534 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 14.0 | 1.0 | mg/kg | |
| Zinc | 24.2 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.84 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/26/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/03/23 | | Preparation Date: 10/31/23 | | |
| 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 | 0.98 | 0.10 | 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: 10/30/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/27/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.022 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (0-4)
**Sample No:** 23-9606-012

**Date Collected:** 10/25/23
**Time Collected:** 10:55
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.084 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.108 | 0.005 | mg/L | |
| Iron | 92.3 | 0.1 | mg/L | |
| Lead | 0.047 | 0.005 | mg/L | |
| Manganese | 0.56 | 0.10 | 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: 11/01/23 | | | | |
| 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: 104.5* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 113.9* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 74* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 67* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 53* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 83* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 70* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 64.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 78.79 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/02/23 Preparation Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/27/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.9 | 1.0 | mg/kg | |
| Barium | 46.6 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.7 | 0.5 | mg/kg | |
| Calcium | 33,200 | 50 | mg/kg | |
| Chromium | 15.0 | 0.5 | mg/kg | |
| Cobalt | 8.8 | 0.5 | mg/kg | |
| Copper | 21.1 | 0.5 | mg/kg | |
| Iron | 18,600 | 5.0 | mg/kg | |
| Lead | 12.3 | 0.5 | mg/kg | |
| Magnesium | 22,900 | 50 | mg/kg | |
| Manganese | 764 | 0.5 | mg/kg | |
| Nickel | 25.5 | 0.5 | mg/kg | |
| Potassium | 1,040 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 698 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 23.7 | 1.0 | mg/kg | |
| Zinc | 41.3 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.42 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/03/23 | | Preparation Date: 10/31/23 | | |
| 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 | 1.01 | 0.10 | 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: 11/01/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/31/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-49-04 (4-8)
**Sample No:** 23-9606-013

**Date Collected:** 10/25/23
**Time Collected:** 11:00
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.009 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.013 | 0.005 | mg/L | |
| Iron | 8.9 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 104.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 97.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.1* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 73* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 64* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 50* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 76* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 68* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 59.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 85.21 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 5.7 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/30/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.9 | 1.0 | mg/kg | |
| Barium | 60.7 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.8 | 0.5 | mg/kg | |
| Calcium | 50,600 | 50 | mg/kg | |
| Chromium | 18.4 | 0.5 | mg/kg | |
| Cobalt | 7.4 | 0.5 | mg/kg | |
| Copper | 23.5 | 0.5 | mg/kg | |
| Iron | 19,600 | 5.0 | mg/kg | |
| Lead | 88.7 | 0.5 | mg/kg | |
| Magnesium | 21,400 | 50 | mg/kg | |
| Manganese | 403 | 0.5 | mg/kg | |
| Nickel | 22.3 | 0.5 | mg/kg | |
| Potassium | 1,380 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 287 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 23.4 | 1.0 | mg/kg | |
| Zinc | 75.2 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Mercury | 0.20 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.27 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/03/23 | | Preparation Date: 10/31/23 | | |
| 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 | 0.013 | 0.005 | mg/L | |
| Manganese | 0.13 | 0.10 | 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: 11/01/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/31/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (0-4)
**Sample No:** 23-9606-020

**Date Collected:** 10/25/23
**Time Collected:** 12:25
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.008 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.012 | 0.005 | mg/L | |
| Iron | 7.0 | 0.1 | mg/L | |
| Lead | 0.009 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 103.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 112.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 72* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 57* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 82* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 68* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 67* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Total Solids | 84.59 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 10/31/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/30/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.4 | 1.0 | mg/kg | |
| Barium | 53.9 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.7 | 0.5 | mg/kg | |
| Calcium | 39,900 | 50 | mg/kg | |
| Chromium | 12.7 | 0.5 | mg/kg | |
| Cobalt | 13.7 | 0.5 | mg/kg | |
| Copper | 17.9 | 0.5 | mg/kg | |
| Iron | 17,600 | 5.0 | mg/kg | |
| Lead | 13.7 | 0.5 | mg/kg | |
| Magnesium | 24,000 | 50 | mg/kg | |
| Manganese | 1,030 | 0.5 | mg/kg | |
| Nickel | 23.4 | 0.5 | mg/kg | |
| Potassium | 882 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 300 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.3 | 1.0 | mg/kg | |
| Zinc | 36.2 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/27/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.18 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/30/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/02/23 | | Preparation Date: 11/01/23 | | |
| 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 | 1.42 | 0.10 | 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: 11/01/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/01/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A 81.0220714.56
**Sample ID:** 2199V2-50-01 (4-7)
**Sample No:** 23-9606-021

**Date Collected:** 10/25/23
**Time Collected:** 12:30
**Date Received:** 10/25/23
**Date Reported:** 11/06/23

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: 11/03/23 | | Preparation Date: 11/02/23 | | |
| 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 | 3.0 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| 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: 103.7* | | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.4* | | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.9* | | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 58.5* | * | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 64* | | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 36.5* | * | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 81* | | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 67* | | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 55* | | *50* | *100* |

# Illinois Environmental Protection Agency

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## 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 31A Rand Road - PSI Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
Rand Road over the Des Plaines River, see attached documentation

City: Des Plaines State: IL Zip Code: 60016

County: Cook Township:

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

Latitude: 42.04592 (Decimal Degrees) Longitude: - 87.88244 (-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): Approximate End Date (mm/dd/yyyy):

Estimated Volume of debris (cu. Yd.):

## 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 31A Rand Road - PSI Latitude: 42.04592 Longitude: - 87.88244

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 attachment for a list of borings with stationing.

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 #23-9514,#23-9546, #23-9606, #23-9643, and #23-9710. 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:

Mar 2, 2024
Date:

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

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS

3/25

# LPC-663
# Uncontaminated Soil Certification Form
# Attachment

Below is a list referenced in Section I (Source Location Information) of the attached LPC-663 Uncontaminated Soil Certification Form, which requests information about Physical Site Locations (addresses, including number and street):

| ISGS Site No. | Name |
|---|---|
| 2199V2-5 | Rand River Center |
| 2199V2-7 | Byline Bank |
| 2199V2-8 | Mixed-use Building |
| 2199V2-9 | Commercial Buildings |
| 2199V2-10 | Our Lady Fatima Center |
| 2199V2-11 | Commercial Building |
| 2199V2-12 | Commercial Building |
| 2199V2-13 | Jose A. Vasquez General Dentistry |
| 2199V2-14 | A Mother's Touch |
| 2199V2-15 | Columbus Foods and Gifts |
| 2199V2-20 | Pavestone Brick Paving, Inc. |
| 2199V2-21 | Mixed-use Building |
| 2199V2-22 | Ashlbeck & Company Museums International |
| 2199V2-23 | Commercial Building |
| 2199V2-24 | Elk Creek Office Center |
| 2199V2-25 | Residence |
| 2199V2-26 | Residential Building |
| 2199V2-27 | Residence |
| 2199V2-28 | The Catholic Charities of the Archdiocese of Chicago |
| 2199V2-29 | Residence |
| 2199V2-30 | St. George |
| 2199V2-31 | Hawthorne Hill Condominiums |
| 2199V2-32 | Residence |

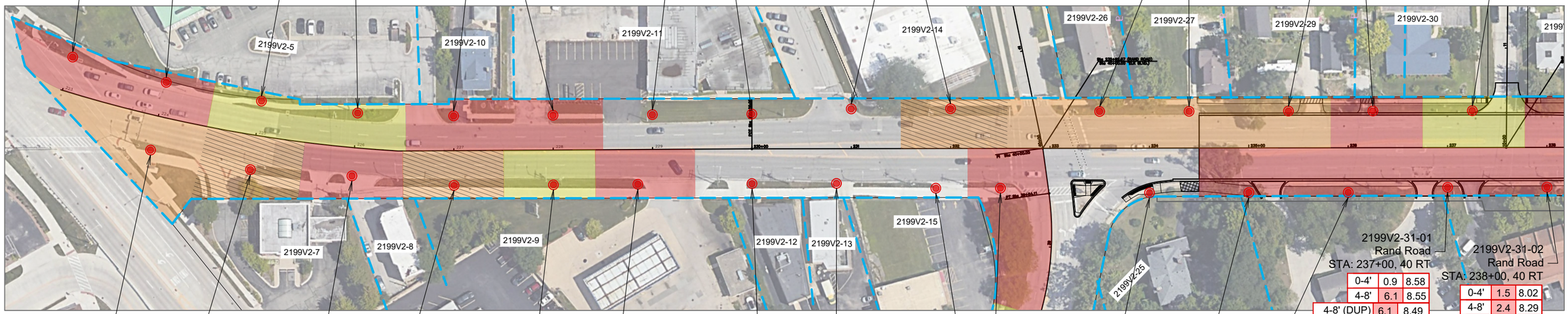
| ISGS Site No. | Name |
|---|---|
| 2199V2-33 | Parking lot |
| 2199V2-34 | Residence |
| 2199V2-35 | Residential Building |
| 2199V2-36 | Residence |
| 2199V2-37 | Residence |
| 2199V2-38 | North Elementary School |
| 2199V2-39 | Residence |
| 2199V2-40 | Chicago Behavioral Hospital |
| 2199V2-41 | Residence |
| 2199V2-42 | Residence |
| 2199V2-49 | Cook County Forest Preserve |
| 2199V2-50 | ROW |
| 2199V2-51 | Vacant lot |

# LPC-663
# Uncontaminated Soil Certification Form
# Attachment

Unrestricted

Below is a list referenced in Section III A (Basis for Certification and Attachments) of the attached LPC-663 Uncontaminated Soil Certification Form, which requests a description of the soil sample points and how they were determined to be sufficient in number and appropriately located:

| ISGS Boring No. | Approximate Stationing |
|---|---|
| 2199V2-11-01 | STA: Rand Rd 230+00, 35 Left |
| 2199V2-11-02 | STA: Rand Rd 229+00, 35 Left |
| 2199V2-12-01 | STA: Rand Rd 230+00, 35 Right |
| 2199V2-13-01 | STA: Rand Rd 230+85, 35 Right |
| 2199V2-14-02 | STA: Rand Rd 228+90, 40 Left |
| 2199V2-15-01 | STA: Rand Rd 231+85, 40 Right |
| 2199V2-22-01 | STA: Elk Blvd 35+85, 30 Right |
| 2199V2-24-02 | STA: Elk Blvd 38+00, 30 Right |
| 2199V2-24-03 | STA: Elk Blvd 39+00, 30 Right |
| 2199V2-25-01 | STA: Rand Rd 234+00, 45 Right |
| 2199V2-34-01 | STA: Rand Rd 239+35, 35 Left |
| 2199V2-35-01 | STA: Rand Rd 239+50, 37 Right |




2199V2-5-04
Rand Road
STA: 223+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 0.0 | 7.56 |

2199V2-5-03
Rand Road
STA: 224+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 1064.0 | 7.69 |

2199V2-5-02
Rand Road
STA: 225+00, 35 LT

| | | |
|---|---|---|
| 0-5' | 0.0 | 7.09 |
| 0-5' (DUP) | 0.0 | 6.99 |

2199V2-5-01
Rand Road
STA: 226+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.27 |
| 0-5' | 0.0 | 7.64 |

2199V2-10-01
Rand Road
STA: 227+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.02 |

2199V2-11-03
Rand Road
STA: 228+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 2.0 | 8.06 |

2199V2-11-02
Rand Road
STA: 229+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.08 |

2199V2-11-01
Rand Road
STA: 230+00, 35 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.53 |

2199V2-14-02
Rand Road
STA: 231+00, 40 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.71 |

2199V2-14-01
Rand Road
STA: 232+00, 40 LT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.92 |

2199V2-27-01
Rand Road
STA: 234+40, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 8.3 |
| 4-7' | 0.0 | 8.29 |

2199V2-26-01
Rand Road
STA: 233+50, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 7.51 |
| 0-4' (DUP) | 0.0 | 7.58 |

2199V2-30-02
Rand Road
STA: 236+25, 37 LT

| | | |
|---|---|---|
| 0-4' | 1.3 | 8.13 |
| 4-7' | 0.5 | 8.25 |

2199V2-29-01
Rand Road
STA: 235+40, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.2 | 8.31 |
| 4-8' | 0.0 | 7.98 |

2199V2-30-01
Rand Road
STA: 237+25, 37 LT

| | | |
|---|---|---|
| 0-4' | 0.0 | 8.04 |
| 4-7' | 0.0 | 8.13 |

2199V2-31-01
Rand Road
STA: 237+00, 40 RT

| | | |
|---|---|---|
| 0-4' | 0.9 | 8.58 |
| 4-8' | 6.1 | 8.55 |
| 4-8' (DUP) | 6.1 | 8.49 |

2199V2-31-02
Rand Road
STA: 238+00, 40 RT

| | | |
|---|---|---|
| 0-4' | 1.5 | 8.02 |
| 4-8' | 2.4 | 8.29 |

2199V2-7-01
Rand Road
STA: 224+00, 35 RT

| | | |
|---|---|---|
| 0-3' | 0.0 | 8.82 |

2199V2-7-02
Rand Road
STA: 225+00, 35 RT

| | | |
|---|---|---|
| 0-3' | 0.0 | 8.45 |

2199V2-8-01
Rand Road
STA: 226+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 8.96 |

2199V2-9-01
Rand Road
STA: 227+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.88 |

2199V2-9-02
Rand Road
STA: 228+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.84 |

2199V2-9-03
Rand Road
STA: 228+85, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.0 | 7.68 |

2199V2-12-01
Rand Road
STA: 230+00, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.2 | 7.67 |
| 0-2.5' (DUP) | 0.2 | 7.53 |

2199V2-13-01
Rand Road
STA: 230+85, 35 RT

| | | |
|---|---|---|
| 0-2.5' | 0.2 | 8.18 |

2199V2-15-01
Rand Road
STA: 231+85, 40 RT

| | | |
|---|---|---|
| 0-2.5' | 0.4 | 7.77 |

2199V2-15-02
Rand Road
STA: 232+50, 40 RT

| | | |
|---|---|---|
| 0-2.5' | 0.4 | 7.6 |

2199V2-25-01
Rand Road
STA: 234+00, 45 RT

| | | |
|---|---|---|
| 0-3' | 0.1 | 7.9 |

2199V2-28-01
Rand Road
STA: 235+00, 45 RT

| | | |
|---|---|---|
| 0-4' | 0.1 | 7.62 |
| 4-8' | 12.8 | 7.61 |

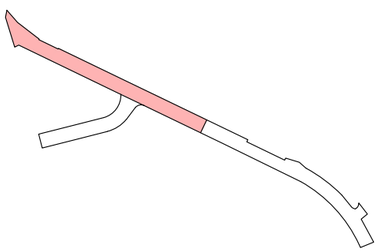
2199V2-28-02
Rand Road
STA: 236+00, 45 RT

| | | |
|---|---|---|
| 0-4' | 6.1 | 7.52 |
| 4-8' | 22.4 | 7.84 |

N

0 50 100 150
SCALE IN FEET

## Location Legend



## Legend

- Soil Boring Location
- PESA Site Boundary
- PID / pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

| | |
|---|---|
| DESIGNED | AK |
| DRAWN | SCC |
| CHECKED | AK |
| APPROVED | |
| DATE | 12/28/2023 |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

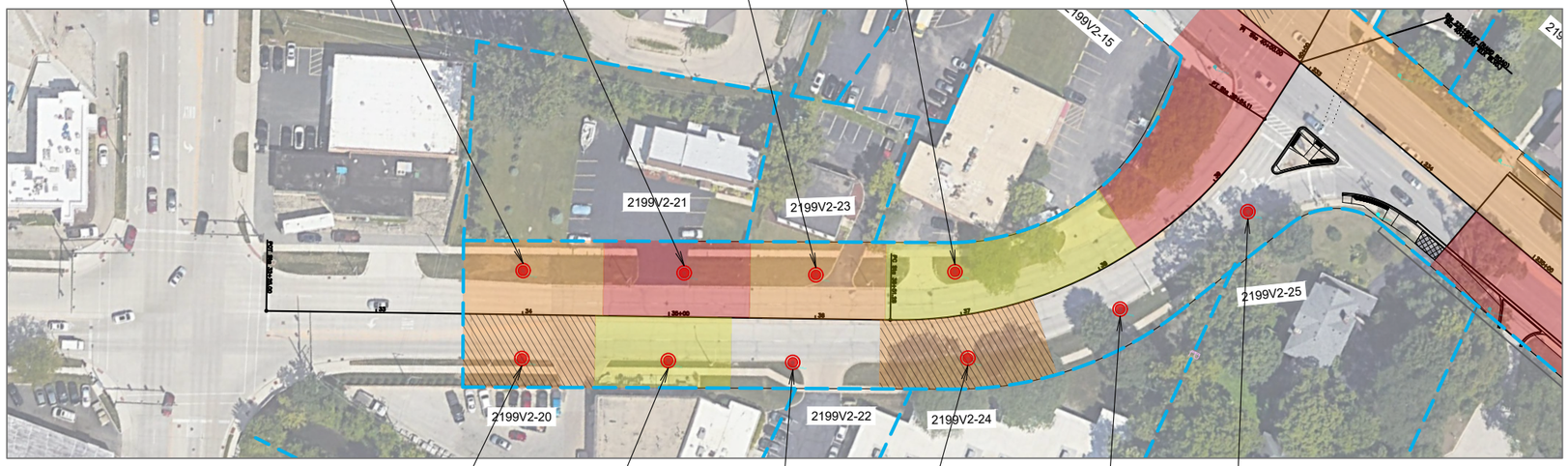
199-014/H&H-2
WO#031

FIGURE 4-1.1
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

Contract No: 60J10
PESA: 2199V2 | Route FAU 3526
IDOT Job No. D-91-117-19 | BDE Sequence No. 15830C
City/County Des Plaines/Cook County

9/16/2022 IDOT_WO#31_20231228.dwg




2199V2-21-01
Elk Blvd
STA: 35+10, 30 LT

| 0-2.5' | 0.0 | 8.37 |
|---|---|---|

2199V2-21-02
Elk Blvd
STA: 34+00, 30 LT

| 0-2.5' | 0.1 | 8.03 |
|---|---|---|

2199V2-15-03
Elk Blvd
STA: 37+00, 30 LT

| 0-2.5' | 0.8 | 8.25 |
|---|---|---|

2199V2-23-01
Elk Blvd
STA: 36+00, 30 LT

| 0-2.5' | 0.0 | 8.61 |
|---|---|---|

2199V2-20-01
Elk Blvd
STA: 34+00, 30 RT

| 0-2.5' | 0.0 | 8.25 |
|---|---|---|

2199V2-20-02
Elk Blvd
STA: 35+00, 30 RT

| 0-2.5' | 0.0 | 8.74 |
|---|---|---|

2199V2-22-01
Elk Blvd
STA: 35+85, 30 RT

| 0-2.5' | 0.0 | 8.74 |
|---|---|---|

2199V2-24-01
Elk Blvd
STA: 37+00, 30 RT

| 0-2.5' | 0.0 | 8.39 |
|---|---|---|

2199V2-24-02
Elk Blvd
STA: 38+00, 30 RT

| 0-2.5' | 0.4 | 8.36 |
|---|---|---|

2199V2-24-03
Elk Blvd
STA: 39+00, 30 RT

| 0-2.5' | 0.6 | 7.74 |
|---|---|---|

N

0 50 100 150
SCALE IN FEET

## Legend

- Soil Boring Location
- PESA Site Boundary
- PID | pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

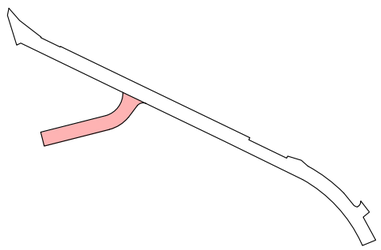
| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

Location Legend



| | |
|---|---|
| DESIGNED | AK |
| DRAWN | SCC |
| CHECKED | AK |
| APPROVED | |
| DATE | 12/28/2023 |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

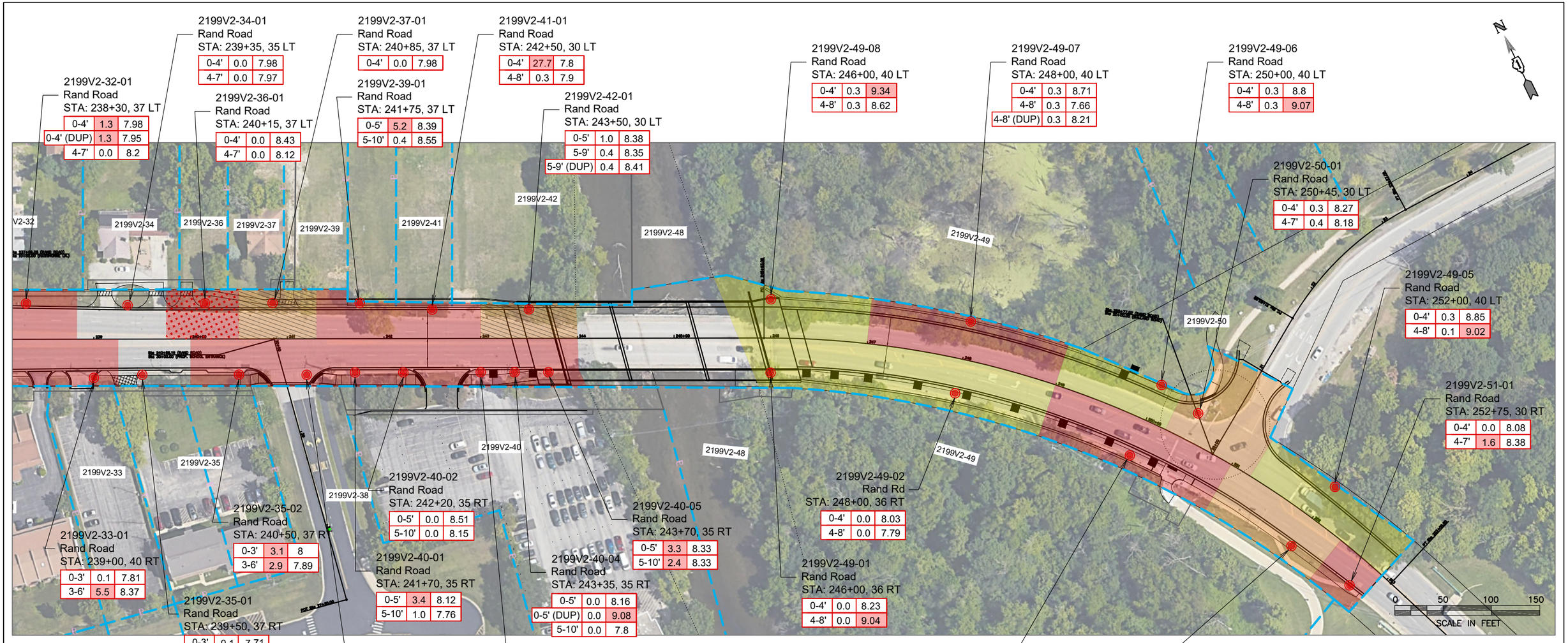
199-014/H&H-2
WO#031

FIGURE 4-1.2
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

Contract No: 60J10
PESA: 2199V2 | Route FAU 3526
IDOT Job No. D-91-117-19 | BDE Sequence No. 15830C
City/County Des Plaines/Cook County

9/16/2022 IDOT_WO#31_20231228.dwg




## Legend

- Soil Boring Location
- PESA Site Boundary
- PID | pH — PID Exceeds background value or pH outside acceptable range for CCDD disposal

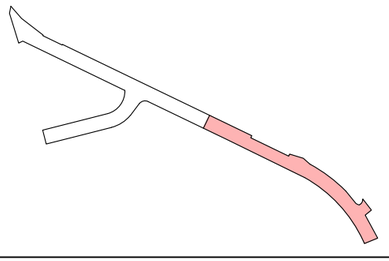
| Depth | PID | pH |
|---|---|---|

- 669.05(a)(1)
- 669.05(a)(2)
- 669.05(a)(3)
- 669.05(a)(4)
- 669.05(a)(5)
- 669.05(a)(6)
- 669.05(b)(1)
- 669.05(b)(2)
- 669.05(c)
- 669.05(d)
- Construction Worker Exposure Exceedance

## Notes:

1. Additional detail and information regarding regulated substances management and disposal classifications can be found in the Standard Specifications for Road and Bridge Construction (SSRBC) Section 669.05.
2. This figure relies on color code depictions for soil management. Please contact the DESU or AE for assistance.

Location Legend



| | | |
|---|---|---|
| DESIGNED | AK | |
| DRAWN | SCC | |
| CHECKED | AK | |
| APPROVED | | |
| DATE | 12/28/2023 | |

A3E CONSULTANTS

3030 WARRENVILLE RD
LISLE, ILLINOIS
60532
PH (630) 507-9002

199-014/H&H-2
WO#031

FIGURE 4-1.3
Regulated Substances Management Area

Location: US 12 (Rand Road) over the Des Plaines River

| | | | |
|---|---|---|---|
| Contract No: 60J10 | | | |
| PESA: | 2199V2 | Route FAU 3526 | |
| IDOT Job No. D-91-117-19 | | BDE Sequence No. 15830C | |
| City/County | Des Plaines/Cook County | | |

9/16/2022 IDOT_WO#31_20231228.dwg

LPC-663 Results (Page 1 of 4)
Unrestricted Soils for Reuse or Disposal
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| Boring ID | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-11-01 | 2199V2-11-02 | 2199V2-12-01 | 2199V2-DUP1 (2199V2-12-01) |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-2.5) | (0-2.5) | (0-2.5) | (0-2.5) |
| **Sample Date** | | | | | | 10/26/2023 | 10/26/2023 | 10/23/2023 | 10/23/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-11 | 2199V2-11 | 2199V2-12 | 2199V2-12 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 7.53 | 8.08 | 7.67 | 7.53 |
| PID Readings (ppm) | | | | | | 0.0 | 0.0 | **0.2** | **0.2** |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | **0.0104** | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **7.8** | **7.6** | **7.4** | **8.1** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **109** | **75.8** | **97.3** | **99.6** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | **0.8** | <0.5 | **0.6** | **0.9** |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | **0.8** | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **2840** | **18600** | **3490** | **3150** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **22.6** | **14.2** | **18.1** | **23.4** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **10.7** | **9.4** | **9.6** | **11.3** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **23.2** | **23.2** | **18.1** | **26.1** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **26500** | **20500** | **23000** | **28700** |
| Lead | 107 | 700 | --- | 400 | --- | **13.9** | **40.6** | **25.4** | **19.9** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **4820** | **12400** | **3870** | **4860** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **566** | **1190** | **605** | **549** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **26.9** | **25.6** | **19.1** | **26.2** |
| Potassium | --- | --- | --- | --- | --- | **1330** | **1210** | **1250** | **1520** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | **1.2** | **1.3** | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **271** | **137** | **159** | **171** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **33.2** | **22.5** | **31.2** | **35.7** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **52.5** | **83.1** | **58.1** | **59.9** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | <0.10 | <0.10 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | **0.017** | **0.025** | <0.010 | <0.010 |
| Beryllium | 0.004 | | | | | **0.004** | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | **0.005** | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.116** | **0.051** | **0.017** | **0.021** |
| Copper | 0.65 | | | | | **0.098** | **0.061** | **0.013** | **0.02** |
| Iron | 5 | | | | | **115** | **60.6** | **13.9** | **20.2** |
| Lead | 0.0075 | | | | | **0.018** | **0.068** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.7** | **0.46** | **0.11** | **0.13** |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | **0.1** | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | **0.3** | **0.3** | <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.
* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

LPC-663 Results (Page 2 of 4)
Unrestricted Soils for Reuse or Disposal
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| Boring ID | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-13-01 | 2199V2-14-02 | 2199V2-15-01 | 2199V2-22-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-2.5) | (0-2.5) | (0-2.5) | (0-2.5) |
| **Sample Date** | | | | | | 10/23/2023 | 10/26/2023 | 10/23/2023 | 10/23/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-13 | 2199V2-14 | 2199V2-15 | 2199V2-22 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.18 | 7.71 | 7.77 | 8.74 |
| PID Readings (ppm) | | | | | | **0.2** | 0.0 | **0.4** | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | **0.0071** | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | <0.005 |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **6** | **3.7** | **3.6** | **6.3** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **58.1** | **93.4** | **99.7** | **50** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | <0.5 | **0.7** | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | <0.5 | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **29100** | **3650** | **5450** | **54400** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **11.3** | **12.7** | **20.1** | **17.4** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **5.9** | **6.8** | **9.5** | **10.1** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **20.8** | **10.4** | **21.2** | **26.8** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **17900** | **13900** | **19700** | **23100** |
| Lead | 107 | 700 | --- | 400 | --- | **70.3** | **15.7** | **12.7** | **14** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **16800** | **2540** | **5310** | **28400** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **361** | **495** | **225** | **655** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | **0.05** | <0.05 | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **18** | **13** | **23.9** | **26.8** |
| Potassium | --- | --- | --- | --- | --- | **978** | **834** | **1410** | **2120** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **277** | **100** | **133** | **350** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **17.9** | **20.3** | **29.4** | **21.9** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **86.1** | **46.1** | **47.2** | **48.5** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | **0.6** | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | **0.007** | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.67** | <0.10 | **1.26** | **7.66** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <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 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.014** | **0.02** | <0.005 | <0.005 |
| Copper | 0.65 | | | | | **0.014** | **0.014** | <0.005 | <0.005 |
| Iron | 5 | | | | | **13.8** | **17** | **1.3** | **1.7** |
| Lead | 0.0075 | | | | | **0.029** | **0.008** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | **0.15** | <0.10 | <0.10 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | **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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

LPC-663 Results (Page 3 of 4)
Unrestricted Soils for Reuse or Disposal
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| Boring ID | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-24-02 | 2199V2-24-03 | 2199V2-25-01 | 2199V2-34-01 |
|---|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (0-2.5) | (0-2.5) | (0-3') | (0-4) |
| **Sample Date** | | | | | | 10/23/2023 | 10/23/2023 | 10/24/2023 | 10/26/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-24 | 2199V2-24 | 2199V2-25 | 2199V2-34 |
| **Parameter** | | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 8.36 | 7.74 | 7.9 | 7.98 |
| PID Readings (ppm) | | | | | | **0.4** | **0.6** | **0.1** | 0.0 |
| **VOCs, mg/kg** | | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | **0.0132** | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | <0.005 | **0.0072** |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | **0.131** | **0.17** | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **6.7** | **5.7** | **7.1** | **4.3** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **72** | **78.6** | **98** | **107** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | <0.5 | **0.6** | **0.7** | **0.7** |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | <0.5 | <0.5 | <0.5 | **0.8** |
| Calcium | --- | --- | --- | --- | --- | **39300** | **14600** | **2770** | **26300** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **14.1** | **17.2** | **20.9** | **20.6** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **7.8** | **6.4** | **9** | **7.7** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **23.8** | **18.9** | **25.9** | **23.8** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **18400** | **20600** | **23700** | **21300** |
| Lead | 107 | 700 | --- | 400 | --- | **97.9** | **11.9** | **16.8** | **21.4** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **24500** | **11600** | **4240** | **17300** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **567** | **390** | **446** | **333** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | **0.07** | **0.06** | <0.05 | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **17.7** | **21.4** | **26.8** | **24.6** |
| Potassium | --- | --- | --- | --- | --- | **1190** | **1170** | **1410** | **1260** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **262** | **105** | **393** | **188** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **22.3** | **25.4** | **29.9** | **26.7** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **85.2** | **43.3** | **49.2** | **57.5** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | **0.007** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | **0.2** | **0.61** | <0.10 | **0.59** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <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 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | **0.009** | **0.009** | **0.011** | <0.005 |
| Copper | 0.65 | | | | | **0.011** | **0.011** | **0.012** | <0.005 |
| Iron | 5 | | | | | **9.8** | **8.2** | **9.6** | **1.9** |
| Lead | 0.0075 | | | | | **0.008** | **0.023** | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | <0.10 | <0.10 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | <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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

LPC-663 Results (Page 4 of 4)
Unrestricted Soils for Reuse or Disposal
US 12 Over Des Plaines River, Des Plaines, Cook County, IL
BDE Sequence No.: 15830C
PTB: 199-014/HH-2, Work Order No.: 31A

| **Boring ID** | Soil Reference Concentrations [a/] | Soil Remediation Objective for Construction Workers [b/] | | Soil Remediation Objective for Residential Exposure [c/] | | 2199V2-34-01 | 2199V2-35-01 | 2199V2-35-01 |
|---|---|---|---|---|---|---|---|---|
| **Sample Depth, ft** | | | | | | (4-7) | (0'-3') | (3'-6') |
| **Sample Date** | | | | | | 10/26/2023 | 10/24/2023 | 10/24/2023 |
| **Excavation Area(s) [ISGS Site No.(s)]** | | Ingestion Exposure Route | Inhalation Exposure Route | Ingestion Exposure Route | Inhalation Exposure Route | 2199V2-34 | 2199V2-35 | 2199V2-35 |
| **Parameter** | | | | | | | | |
| Laboratory soil pH (s.u.) | 6.25 - 9.0 | --- | --- | --- | --- | 7.97 | 7.71 | 8.19 |
| PID Readings (ppm) | | | | | | 0.0 | **0.1** | 0.0 |
| **VOCs, mg/kg** | | | | | | | | |
| Acetone | 25 | --- | 100,000 | 70,000 | 100,000 | <0.2 | <0.2 | <0.2 |
| Benzene | 0.03 | 2,300 | 2.2 | 12 | 0.8 | <0.005 | <0.005 | <0.005 |
| Bromomethane | 0.2 | 1000 | 3.9 | 110 | 10 | <0.01 | <0.01 | <0.01 |
| Carbon disulfide | 9 | 20,000 | 9 | 7800 | 720 | <0.005 | <0.005 | <0.005 |
| Toluene | 12 | 410,000 | 42 | 16,000 | 650 | <0.005 | <0.005 | **0.0061** |
| Xylenes, Total | 5.6 | 41,000 | 5.6 | 16,000 | 320 | <0.005 | <0.005 | <0.005 |
| **SVOCs, mg/kg** | | | | | | | | |
| Acenaphthene | 570 | 120,000 | --- | 4,700 | --- | <0.33 | <0.33 | <0.33 |
| Acenaphthylene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Analine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Benzidine | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Benzo(a)anthracene | 0.9 / 10.9* / 1.8 | 170 | --- | 1 | --- | <0.09 | <0.09 | <0.09 |
| Benzo(a)pyrene | 0.09 / 11.4* / 2.1 | 17 | --- | 2.1 | --- | <0.33 | <0.33 | <0.33 |
| Benzo(b)fluoranthene | 0.9 / 13.1* / 2.1 | 170 | --- | 1 | --- | <0.33 | <0.33 | <0.33 |
| Benzo(k)fluoranthene | 9 | 1,700 | --- | 9 | --- | <0.33 | <0.33 | <0.33 |
| Bis(2-ethylhexyl)phthalate | 46 | 4,100 | 31,000 | 46 | 31000 | <0.33 | <0.33 | <0.33 |
| Carbazole | 0.6 | 6,200 | --- | 32 | --- | <0.33 | <0.33 | <0.33 |
| Chrysene | 88 | 17,000 | --- | 88 | --- | <0.33 | <0.33 | <0.33 |
| Dibenz(a,h)anthracene | 0.09 / 1.03* / 0.42 | 17 | --- | 0.42 | --- | <0.09 | <0.09 | <0.09 |
| Dibenzofuran | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Fluoranthene | 3,100 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 |
| Fluorene | 560 | 82,000 | --- | 3,100 | --- | <0.33 | <0.33 | <0.33 |
| Indeno(1,2,3-cd)pyrene | 0.9 / 5.77* / 1.6 | 170 | --- | 1.6 | --- | <0.33 | <0.33 | <0.33 |
| 2-Methylnaphthalene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Naphthalene | 1.8 | 4100 | 1.8 | 1,600 | 170 | <0.33 | <0.33 | <0.33 |
| Phenanthrene | --- | --- | --- | --- | --- | <0.33 | <0.33 | <0.33 |
| Pyrene | 2,300 | 61,000 | 61,000 | 2,300 | --- | <0.33 | <0.33 | <0.33 |
| **Total Metals, mg/kg** | | | | | | | | |
| Antimony | 5 | 82 | --- | 31 | --- | <1.0 | <1.0 | <1.0 |
| Arsenic | 11.3 / 13 | 61 | 25,000 | --- | 750 | **5.6** | **7.8** | **8** |
| Barium | 1,500 | 14,000 | 870,000 | 5,500 | 690,000 | **103** | **95.5** | **33.6** |
| Beryllium | 22 | 410 | 44,000 | 160 | 1,300 | **0.6** | **0.8** | <0.5 |
| Cadmium | 5.2 | 200 | 59,000 | 78 | 1,800 | **0.9** | <0.5 | <0.5 |
| Calcium | --- | --- | --- | --- | --- | **23800** | **3090** | **49400** |
| Chromium | 21 | 4100 | 690 | 230 | 270 | **18.6** | **23.3** | **11.9** |
| Cobalt | 20 | 12000 | --- | 4,700 | --- | **11.8** | **11** | **6.3** |
| Copper | 2,900 | 8,200 | --- | 2,900 | --- | **18.5** | **22.4** | **22.2** |
| Iron | 15,000 / 15,900 | --- | --- | --- | --- | **21600** | **26500** | **18900** |
| Lead | 107 | 700 | --- | 400 | --- | **13.9** | **16.1** | **10.1** |
| Magnesium | 325,000 | 730,000 | --- | 325,000 | --- | **18100** | **4940** | **32300** |
| Manganese | 630 / 636 | 4100 | 8,700 | 1,600 | --- | **1120** | **620** | **478** |
| Mercury | 0.89 | 61 | 0.1 | 23 | 10 | <0.05 | **0.05** | <0.05 |
| Nickel | 100 | 4100 | 440,000 | 1,600 | 13,000 | **26.5** | **28.4** | **19.4** |
| Potassium | --- | --- | --- | --- | --- | **1050** | **2000** | **1300** |
| Selenium | 1.3 | 1000 | --- | 390 | --- | <1.0 | <1.0 | <1.0 |
| Silver | 4.4 | 1000 | --- | 390 | --- | <0.2 | <0.2 | <0.2 |
| Sodium | --- | --- | --- | --- | --- | **167** | **437** | **313** |
| Thallium | 2.6 | 160 | --- | 6.3 | --- | <1.0 | <1.0 | <1.0 |
| Vanadium | 550 | 1400 | --- | 550 | --- | **27.4** | **32.2** | **21.8** |
| Zinc | 5,100 | 61,000 | --- | 23,000 | --- | **47.9** | **63.4** | **36.6** |
| **TCLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | <0.005 | <0.005 |
| Iron | 5 | | | | | <0.1 | <0.1 | <0.1 |
| Lead | 0.0075 | | | | | <0.005 | <0.005 | <0.005 |
| Manganese | 0.15 | | | | | <0.10 | <0.10 | **1.09** |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 |
| Selenium | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Silver | 0.05 | | | | | <0.005 | <0.005 | <0.005 |
| Zinc | 5 | | | | | <0.1 | <0.1 | <0.1 |
| **SPLP Metals, mg/L** | Class I Groundwater [d/] | | | | | | | |
| Arsenic | 0.05 | | | | | <0.010 | <0.010 | <0.010 |
| Beryllium | 0.004 | | | | | <0.004 | <0.004 | <0.004 |
| Cadmium | 0.005 | | | | | <0.005 | <0.005 | <0.005 |
| Chromium | 0.1 | | | | | <0.005 | **0.055** | **0.016** |
| Copper | 0.65 | | | | | <0.005 | **0.05** | **0.017** |
| Iron | 5 | | | | | **3.6** | **57.7** | **16.8** |
| Lead | 0.0075 | | | | | <0.005 | **0.01** | **0.006** |
| Manganese | 0.15 | | | | | <0.10 | **0.32** | <0.10 |
| Mercury | 0.002 | | | | | <0.0005 | <0.0005 | <0.0005 |
| Nickel | 0.1 | | | | | <0.1 | <0.1 | <0.1 |
| Zinc | 5 | | | | | <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.

* Soil Reference Concentration based on IEPA Corrected City of Chicago Polynuclear Aromatic Hydrocarbon Background Concentrations Memorandum, Dated November 2022.

**Bold** indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:20 |
| **Sample ID:** | 2199V2 - 11-01 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-023 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 78.10 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-01 (0-2.5)
**Sample No:** 23-9643-023

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-01 (0-2.5)
**Sample No:** 23-9643-023

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-01 (0-2.5)
**Sample No:** 23-9643-023

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.8 | 1.0 | mg/kg | |
| Barium | 109 | 0.5 | mg/kg | |
| Beryllium | 0.8 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 2,840 | 50 | mg/kg | |
| Chromium | 22.6 | 0.5 | mg/kg | |
| Cobalt | 10.7 | 0.5 | mg/kg | |
| Copper | 23.2 | 0.5 | mg/kg | |
| Iron | 26,500 | 5.0 | mg/kg | |
| Lead | 13.9 | 0.5 | mg/kg | |
| Magnesium | 4,820 | 50 | mg/kg | |
| Manganese | 566 | 0.5 | mg/kg | |
| Nickel | 26.9 | 0.5 | mg/kg | |
| Potassium | 1,330 | 50 | mg/kg | |
| Selenium | 1.2 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 271 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 33.2 | 1.0 | mg/kg | |
| Zinc | 52.5 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:20 |
| **Sample ID:** | 2199V2 - 11-01 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-023 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.53 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.017 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-01 (0-2.5)
**Sample No:** 23-9643-023

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | 0.004 | 0.004 | mg/L | |
| Cadmium | 0.005 | 0.005 | mg/L | |
| Chromium | 0.116 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.098 | 0.005 | mg/L | |
| Iron | 115 | 0.1 | mg/L | |
| Lead | 0.018 | 0.005 | mg/L | |
| Manganese | 0.70 | 0.10 | 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: 11/07/23 | | | | |
| 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: 103.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.9* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 115* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 72* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 48* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 87* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 70* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 63.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-02 (0-2.5)
**Sample No:** 23-9643-024

**Date Collected:** 10/26/23
**Time Collected:** 12:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 82.90 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 10.4 | 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 | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:30 |
| **Sample ID:** | 2199V2 - 11-02 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-024 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/06/23 Preparation Date: 11/02/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-02 (0-2.5)
**Sample No:** 23-9643-024

**Date Collected:** 10/26/23
**Time Collected:** 12:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-02 (0-2.5)
**Sample No:** 23-9643-024

**Date Collected:** 10/26/23
**Time Collected:** 12:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.6 | 1.0 | mg/kg | |
| Barium | 75.8 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | 0.8 | 0.5 | mg/kg | |
| Calcium | 18,600 | 50 | mg/kg | |
| Chromium | 14.2 | 0.5 | mg/kg | |
| Cobalt | 9.4 | 0.5 | mg/kg | |
| Copper | 23.2 | 0.5 | mg/kg | |
| Iron | 20,500 | 5.0 | mg/kg | |
| Lead | 40.6 | 0.5 | mg/kg | |
| Magnesium | 12,400 | 50 | mg/kg | |
| Manganese | 1,190 | 0.5 | mg/kg | |
| Nickel | 25.6 | 0.5 | mg/kg | |
| Potassium | 1,210 | 50 | mg/kg | |
| Selenium | 1.3 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 137 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 22.5 | 1.0 | mg/kg | |
| Zinc | 83.1 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:30 |
| **Sample ID:** | 2199V2 - 11-02 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-024 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.08 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/01/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/03/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | 0.025 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 11-02 (0-2.5)
**Sample No:** 23-9643-024

**Date Collected:** 10/26/23
**Time Collected:** 12:30
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.051 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.061 | 0.005 | mg/L | |
| Iron | 60.6 | 0.1 | mg/L | |
| Lead | 0.068 | 0.005 | mg/L | |
| Manganese | 0.46 | 0.10 | 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: 11/07/23 | | | | |
| 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: 99.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.5* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 105.4* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 77* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 77* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 58.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 81* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 77* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 12:20 |
| **Sample ID:** | 2199V2-12-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-010 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 78.32 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-12-01
**Sample No:** 23-9514-010

**Date Collected:** 10/23/23
**Time Collected:** 12:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/27/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-12-01
**Sample No:** 23-9514-010

**Date Collected:** 10/23/23
**Time Collected:** 12:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-12-01
**Sample No:** 23-9514-010

**Date Collected:** 10/23/23
**Time Collected:** 12:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/25/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.4 | 1.0 | mg/kg | |
| Barium | 97.3 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 3,490 | 50 | mg/kg | |
| Chromium | 18.1 | 0.5 | mg/kg | |
| Cobalt | 9.6 | 0.5 | mg/kg | |
| Copper | 18.1 | 0.5 | mg/kg | |
| Iron | 23,000 | 5.0 | mg/kg | |
| Lead | 25.4 | 0.5 | mg/kg | |
| Magnesium | 3,870 | 50 | mg/kg | |
| Manganese | 605 | 0.5 | mg/kg | |
| Nickel | 19.1 | 0.5 | mg/kg | |
| Potassium | 1,250 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 159 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 31.2 | 1.0 | mg/kg | |
| Zinc | 58.1 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-12-01
**Sample No:** 23-9514-010

**Date Collected:** 10/23/23
**Time Collected:** 12:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.67 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-12-01
**Sample No:** 23-9514-010

**Date Collected:** 10/23/23
**Time Collected:** 12:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.013 | 0.005 | mg/L | |
| Iron | 13.9 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.11 | 0.10 | 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: 10/26/23 | | | | |
| 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: 101.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.1* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 111* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 73* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 67* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 53.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 68* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 62.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:20 |
| **Sample ID:** | 2199V2-DUP1 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-011 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 78.55 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-DUP1
**Sample No:** 23-9514-011

**Date Collected:** 10/23/23
**Time Collected:** 11:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/28/23 Preparation Date: 10/25/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-DUP1
**Sample No:** 23-9514-011

**Date Collected:** 10/23/23
**Time Collected:** 11:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-DUP1
**Sample No:** 23-9514-011

**Date Collected:** 10/23/23
**Time Collected:** 11:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.1 | 1.0 | mg/kg | |
| Barium | 99.6 | 0.5 | mg/kg | |
| Beryllium | 0.9 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 3,150 | 50 | mg/kg | |
| Chromium | 23.4 | 0.5 | mg/kg | |
| Cobalt | 11.3 | 0.5 | mg/kg | |
| Copper | 26.1 | 0.5 | mg/kg | |
| Iron | 28,700 | 5.0 | mg/kg | |
| Lead | 19.9 | 0.5 | mg/kg | |
| Magnesium | 4,860 | 50 | mg/kg | |
| Manganese | 549 | 0.5 | mg/kg | |
| Nickel | 26.2 | 0.5 | mg/kg | |
| Potassium | 1,520 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 171 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 35.7 | 1.0 | mg/kg | |
| Zinc | 59.9 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:20 |
| **Sample ID:** | 2199V2-DUP1 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-011 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.53 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-DUP1
**Sample No:** 23-9514-011

**Date Collected:** 10/23/23
**Time Collected:** 11:20
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.021 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.020 | 0.005 | mg/L | |
| Iron | 20.2 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | 0.13 | 0.10 | 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: 10/26/23 | | | | |
| 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: 101.8* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.4* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 105.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 77* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 68* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 56.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 90* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 71* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 66.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 83.06 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/28/23 Preparation Date: 10/25/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.0 | 1.0 | mg/kg | |
| Barium | 58.1 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 29,100 | 50 | mg/kg | |
| Chromium | 11.3 | 0.5 | mg/kg | |
| Cobalt | 5.9 | 0.5 | mg/kg | |
| Copper | 20.8 | 0.5 | mg/kg | |
| Iron | 17,900 | 5.0 | mg/kg | |
| Lead | 70.3 | 0.5 | mg/kg | |
| Magnesium | 16,800 | 50 | mg/kg | |
| Manganese | 361 | 0.5 | mg/kg | |
| Nickel | 18.0 | 0.5 | mg/kg | |
| Potassium | 978 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 277 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 17.9 | 1.0 | mg/kg | |
| Zinc | 86.1 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 8.18 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.007 | 0.005 | mg/L | |
| Manganese | 0.67 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-13-01
**Sample No:** 23-9514-012

**Date Collected:** 10/23/23
**Time Collected:** 12:25
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.014 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.014 | 0.005 | mg/L | |
| Iron | 13.8 | 0.1 | mg/L | |
| Lead | 0.029 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 102.4* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 109.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 67* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 77* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 81* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 76* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 66.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-02 (0-2.5)
**Sample No:** 23-9643-028

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 82.57 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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 | 7.1 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-02 (0-2.5)
**Sample No:** 23-9643-028

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| 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: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-02 (0-2.5)
**Sample No:** 23-9643-028

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-02 (0-2.5)
**Sample No:** 23-9643-028

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/02/23 | | |
| 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: 11/02/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 3.7 | 1.0 | mg/kg | |
| Barium | 93.4 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 3,650 | 50 | mg/kg | |
| Chromium | 12.7 | 0.5 | mg/kg | |
| Cobalt | 6.8 | 0.5 | mg/kg | |
| Copper | 10.4 | 0.5 | mg/kg | |
| Iron | 13,900 | 5.0 | mg/kg | |
| Lead | 15.7 | 0.5 | mg/kg | |
| Magnesium | 2,540 | 50 | mg/kg | |
| Manganese | 495 | 0.5 | mg/kg | |
| Nickel | 13.0 | 0.5 | mg/kg | |
| Potassium | 834 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 100 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 20.3 | 1.0 | mg/kg | |
| Zinc | 46.1 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 12:20 |
| **Sample ID:** | 2199V2 - 14-02 (0-2.5) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-028 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 11/01/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.71 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 11/02/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/06/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.6 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/06/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/03/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 14-02 (0-2.5)
**Sample No:** 23-9643-028

**Date Collected:** 10/26/23
**Time Collected:** 12:20
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/07/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.020 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.014 | 0.005 | mg/L | |
| Iron | 17.0 | 0.1 | mg/L | |
| Lead | 0.008 | 0.005 | mg/L | |
| Manganese | 0.15 | 0.10 | 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: 11/07/23 | | | | |
| 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: 102.7* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 98.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 108.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 78* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 76* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 53.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 86* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 72* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 67.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 80.34 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 3.6 | 1.0 | mg/kg | |
| Barium | 99.7 | 0.5 | mg/kg | |
| Beryllium | 0.7 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 5,450 | 50 | mg/kg | |
| Chromium | 20.1 | 0.5 | mg/kg | |
| Cobalt | 9.5 | 0.5 | mg/kg | |
| Copper | 21.2 | 0.5 | mg/kg | |
| Iron | 19,700 | 5.0 | mg/kg | |
| Lead | 12.7 | 0.5 | mg/kg | |
| Magnesium | 5,310 | 50 | mg/kg | |
| Manganese | 225 | 0.5 | mg/kg | |
| Nickel | 23.9 | 0.5 | mg/kg | |
| Potassium | 1,410 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 133 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 29.4 | 1.0 | mg/kg | |
| Zinc | 47.2 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.77 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 1.26 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-15-01
**Sample No:** 23-9514-013

**Date Collected:** 10/23/23
**Time Collected:** 12:30
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 1.3 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 100.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 106.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 71* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 64* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 50.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 81* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 64* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 63* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:45 |
| **Sample ID:** | 2199V2-22-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-006 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 85.28 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-22-01
**Sample No:** 23-9514-006

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-22-01
**Sample No:** 23-9514-006

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-22-01
**Sample No:** 23-9514-006

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.3 | 1.0 | mg/kg | |
| Barium | 50.0 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 54,400 | 50 | mg/kg | |
| Chromium | 17.4 | 0.5 | mg/kg | |
| Cobalt | 10.1 | 0.5 | mg/kg | |
| Copper | 26.8 | 0.5 | mg/kg | |
| Iron | 23,100 | 5.0 | mg/kg | |
| Lead | 14.0 | 0.5 | mg/kg | |
| Magnesium | 28,400 | 50 | mg/kg | |
| Manganese | 655 | 0.5 | mg/kg | |
| Nickel | 26.8 | 0.5 | mg/kg | |
| Potassium | 2,120 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 350 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.9 | 1.0 | mg/kg | |
| Zinc | 48.5 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 11:45 |
| **Sample ID:** | 2199V2-22-01 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-006 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.74 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 7.66 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-22-01
**Sample No:** 23-9514-006

**Date Collected:** 10/23/23
**Time Collected:** 11:45
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 1.7 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 102.9* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.3* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.9* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 75* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 59* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 94* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 73* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-02
**Sample No:** 23-9514-008

**Date Collected:** 10/23/23
**Time Collected:** 12:00
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 89.67 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | 13.2 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-02
**Sample No:** 23-9514-008

**Date Collected:** 10/23/23
**Time Collected:** 12:00
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 131 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-02
**Sample No:** 23-9514-008

**Date Collected:** 10/23/23
**Time Collected:** 12:00
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-02
**Sample No:** 23-9514-008

**Date Collected:** 10/23/23
**Time Collected:** 12:00
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 6.7 | 1.0 | mg/kg | |
| Barium | 72.0 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 39,300 | 50 | mg/kg | |
| Chromium | 14.1 | 0.5 | mg/kg | |
| Cobalt | 7.8 | 0.5 | mg/kg | |
| Copper | 23.8 | 0.5 | mg/kg | |
| Iron | 18,400 | 5.0 | mg/kg | |
| Lead | 97.9 | 0.5 | mg/kg | |
| Magnesium | 24,500 | 50 | mg/kg | |
| Manganese | 567 | 0.5 | mg/kg | |
| Nickel | 17.7 | 0.5 | mg/kg | |
| Potassium | 1,190 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 262 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 22.3 | 1.0 | mg/kg | |
| Zinc | 85.2 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 12:00 |
| **Sample ID:** | 2199V2-24-02 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-008 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | 0.07 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/24/23 10:30 | | | | |
| pH @ 25°C, 1:2 | 8.36 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.20 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-02
**Sample No:** 23-9514-008

**Date Collected:** 10/23/23
**Time Collected:** 12:00
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.009 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.011 | 0.005 | mg/L | |
| Iron | 9.8 | 0.1 | mg/L | |
| Lead | 0.008 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 102.3* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 110.4* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 71.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 80* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 95* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 73* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 70* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/23/23 |
| **Project ID:** | IDOT 199-014 WO#31A US12 DesPlaines | **Time Collected:** | 12:05 |
| **Sample ID:** | 2199V2-24-03 | **Date Received:** | 10/23/23 |
| **Sample No:** | 23-9514-009 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 88.70 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-03
**Sample No:** 23-9514-009

**Date Collected:** 10/23/23
**Time Collected:** 12:05
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | 170 | 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-03
**Sample No:** 23-9514-009

**Date Collected:** 10/23/23
**Time Collected:** 12:05
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-03
**Sample No:** 23-9514-009

**Date Collected:** 10/23/23
**Time Collected:** 12:05
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/26/23 | | Preparation Date: 10/24/23 | | |
| 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: 10/26/23 | | Preparation Date: 10/25/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.7 | 1.0 | mg/kg | |
| Barium | 78.6 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 14,600 | 50 | mg/kg | |
| Chromium | 17.2 | 0.5 | mg/kg | |
| Cobalt | 6.4 | 0.5 | mg/kg | |
| Copper | 18.9 | 0.5 | mg/kg | |
| Iron | 20,600 | 5.0 | mg/kg | |
| Lead | 11.9 | 0.5 | mg/kg | |
| Magnesium | 11,600 | 50 | mg/kg | |
| Manganese | 390 | 0.5 | mg/kg | |
| Nickel | 21.4 | 0.5 | mg/kg | |
| Potassium | 1,170 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 105 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 25.4 | 1.0 | mg/kg | |
| Zinc | 43.3 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-03
**Sample No:** 23-9514-009

**Date Collected:** 10/23/23
**Time Collected:** 12:05
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | 0.06 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.74 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/24/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | 0.007 | 0.005 | mg/L | |
| Manganese | 0.61 | 0.10 | 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: 10/26/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/24/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** IDOT 199-014 WO#31A US12 DesPlaines
**Sample ID:** 2199V2-24-03
**Sample No:** 23-9514-009

**Date Collected:** 10/23/23
**Time Collected:** 12:05
**Date Received:** 10/23/23
**Date Reported:** 11/01/23

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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.009 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.011 | 0.005 | mg/L | |
| Iron | 8.2 | 0.1 | mg/L | |
| Lead | 0.023 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/26/23 | | | | |
| 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: 102.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 99* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 107.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 75* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 80* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 59.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 91* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 81* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 74.5* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 86.95 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** Analysis Date: 10/28/23 | | **Preparation Method 3540C** Preparation Date: 10/25/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/28/23 | | Preparation Date: 10/25/23 | | |
| 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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.1 | 1.0 | mg/kg | |
| Barium | 98.0 | 0.5 | mg/kg | |
| Beryllium | 0.7 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 2,770 | 50 | mg/kg | |
| Chromium | 20.9 | 0.5 | mg/kg | |
| Cobalt | 9.0 | 0.5 | mg/kg | |
| Copper | 25.9 | 0.5 | mg/kg | |
| Iron | 23,700 | 5.0 | mg/kg | |
| Lead | 16.8 | 0.5 | mg/kg | |
| Magnesium | 4,240 | 50 | mg/kg | |
| Manganese | 446 | 0.5 | mg/kg | |
| Nickel | 26.8 | 0.5 | mg/kg | |
| Potassium | 1,410 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 393 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 29.9 | 1.0 | mg/kg | |
| Zinc | 49.2 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/26/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 7.90 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/25/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/31/23 | | Preparation Date: 10/30/23 | | |
| 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 | < 0.10 | 0.10 | 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: 10/27/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/25/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-25-01
**Sample No:** 23-9546-001

**Date Collected:** 10/24/23
**Time Collected:** 9:35
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

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: 10/31/23 | | Preparation Date: 10/30/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.011 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.012 | 0.005 | mg/L | |
| Iron | 9.6 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/27/23 | | | | |
| 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: 101.9* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 93.4* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 104.7* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 71* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 51.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 65* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 63* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 (0-4)
**Sample No:** 23-9643-009

**Date Collected:** 10/26/23
**Time Collected:** 10:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 82.40 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 7.2 | 5.0 | ug/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 (0-4)
**Sample No:** 23-9643-009

**Date Collected:** 10/26/23
**Time Collected:** 10:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 (0-4)
**Sample No:** 23-9643-009

**Date Collected:** 10/26/23
**Time Collected:** 10:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/01/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 (0-4)
**Sample No:** 23-9643-009

**Date Collected:** 10/26/23
**Time Collected:** 10:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/01/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 4.3 | 1.0 | mg/kg | |
| Barium | 107 | 0.5 | mg/kg | |
| Beryllium | 0.7 | 0.5 | mg/kg | |
| Cadmium | 0.8 | 0.5 | mg/kg | |
| Calcium | 26,300 | 50 | mg/kg | |
| Chromium | 20.6 | 0.5 | mg/kg | |
| Cobalt | 7.7 | 0.5 | mg/kg | |
| Copper | 23.8 | 0.5 | mg/kg | |
| Iron | 21,300 | 5.0 | mg/kg | |
| Lead | 21.4 | 0.5 | mg/kg | |
| Magnesium | 17,300 | 50 | mg/kg | |
| Manganese | 333 | 0.5 | mg/kg | |
| Nickel | 24.6 | 0.5 | mg/kg | |
| Potassium | 1,260 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 188 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 26.7 | 1.0 | mg/kg | |
| Zinc | 57.5 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 10:55 |
| **Sample ID:** | 2199V2 - 34-01 (0-4) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-009 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.98 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/31/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | 0.59 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/02/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 (0-4)
**Sample No:** 23-9643-009

**Date Collected:** 10/26/23
**Time Collected:** 10:55
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/06/23 | | |
| 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 | 1.9 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/07/23 | | | | |
| 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: 106.4* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 97.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 119.2* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 76.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 77* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 57* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 84* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 73* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 69.5* | *50* | *100* |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:00 |
| **Sample ID:** | 2199V2 - 34-01 ((4-7) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-010 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/27/23 | | | | |
| Total Solids | 82.99 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 ((4-7)
**Sample No:** 23-9643-010

**Date Collected:** 10/26/23
**Time Collected:** 11:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 11/05/23 Preparation Date: 11/01/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 ((4-7)
**Sample No:** 23-9643-010

**Date Collected:** 10/26/23
**Time Collected:** 11:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** Analysis Date: 11/05/23 | | **Preparation Method 3540C** Preparation Date: 11/01/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 ((4-7)
**Sample No:** 23-9643-010

**Date Collected:** 10/26/23
**Time Collected:** 11:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 11/05/23 | | Preparation Date: 11/01/23 | | |
| 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: 11/01/23 | | Preparation Date: 10/31/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 5.6 | 1.0 | mg/kg | |
| Barium | 103 | 0.5 | mg/kg | |
| Beryllium | 0.6 | 0.5 | mg/kg | |
| Cadmium | 0.9 | 0.5 | mg/kg | |
| Calcium | 23,800 | 50 | mg/kg | |
| Chromium | 18.6 | 0.5 | mg/kg | |
| Cobalt | 11.8 | 0.5 | mg/kg | |
| Copper | 18.5 | 0.5 | mg/kg | |
| Iron | 21,600 | 5.0 | mg/kg | |
| Lead | 13.9 | 0.5 | mg/kg | |
| Magnesium | 18,100 | 50 | mg/kg | |
| Manganese | 1,120 | 0.5 | mg/kg | |
| Nickel | 26.5 | 0.5 | mg/kg | |
| Potassium | 1,050 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 167 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 27.4 | 1.0 | mg/kg | |
| Zinc | 47.9 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/26/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A US | **Time Collected:** | 11:00 |
| **Sample ID:** | 2199V2 - 34-01 ((4-7) | **Date Received:** | 10/26/23 |
| **Sample No:** | 23-9643-010 | **Date Reported:** | 11/09/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/30/23 9:00 | | | | |
| pH @ 25°C, 1:2 | 7.97 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/31/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 11/07/23 | | Preparation Date: 11/03/23 | | |
| 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 | < 0.10 | 0.10 | 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: 11/02/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 11/02/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A US
**Sample ID:** 2199V2 - 34-01 ((4-7)
**Sample No:** 23-9643-010

**Date Collected:** 10/26/23
**Time Collected:** 11:00
**Date Received:** 10/26/23
**Date Reported:** 11/09/23

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: 11/08/23 | | Preparation Date: 11/06/23 | | |
| 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 | 3.6 | 0.1 | mg/L | |
| Lead | < 0.005 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 11/07/23 | | | | |
| 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: 101.1* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 101.6* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 102.3* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 64* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 69* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 44* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 81* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 68* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 60* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (0'-3')
**Sample No:** 23-9546-013

**Date Collected:** 10/24/23
**Time Collected:** 11:00
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 80.90 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (0'-3')
**Sample No:** 23-9546-013

**Date Collected:** 10/24/23
**Time Collected:** 11:00
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/30/23 | | | | |
| 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: 10/27/23 Preparation Date: 10/26/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (0'-3')
**Sample No:** 23-9546-013

**Date Collected:** 10/24/23
**Time Collected:** 11:00
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (0'-3')
**Sample No:** 23-9546-013

**Date Collected:** 10/24/23
**Time Collected:** 11:00
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 7.8 | 1.0 | mg/kg | |
| Barium | 95.5 | 0.5 | mg/kg | |
| Beryllium | 0.8 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 3,090 | 50 | mg/kg | |
| Chromium | 23.3 | 0.5 | mg/kg | |
| Cobalt | 11.0 | 0.5 | mg/kg | |
| Copper | 22.4 | 0.5 | mg/kg | |
| Iron | 26,500 | 5.0 | mg/kg | |
| Lead | 16.1 | 0.5 | mg/kg | |
| Magnesium | 4,940 | 50 | mg/kg | |
| Manganese | 620 | 0.5 | mg/kg | |
| Nickel | 28.4 | 0.5 | mg/kg | |
| Potassium | 2,000 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 437 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 32.2 | 1.0 | mg/kg | |
| Zinc | 63.4 | 1.0 | mg/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/24/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A, US | **Time Collected:** | 11:00 |
| **Sample ID:** | 2199V2-35-01 (0'-3') | **Date Received:** | 10/24/23 |
| **Sample No:** | 23-9546-013 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Mercury | 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/26/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 7.71 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/25/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/31/23 | | Preparation Date: 10/30/23 | | |
| 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 | < 0.10 | 0.10 | 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: 10/27/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/25/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (0'-3')
**Sample No:** 23-9546-013

**Date Collected:** 10/24/23
**Time Collected:** 11:00
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

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: 10/31/23 | | Preparation Date: 10/30/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.055 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.050 | 0.005 | mg/L | |
| Iron | 57.7 | 0.1 | mg/L | |
| Lead | 0.010 | 0.005 | mg/L | |
| Manganese | 0.32 | 0.10 | 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: 10/27/23 | | | | |
| 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: 102.2* | *86* | *117* |
| *5035A/8260B* | *d8-Toluene (Surr)* | *%R: 100.8* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 102.1* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 68.5* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 69* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 54* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 88* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 73* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 67* | *50* | *100* |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (3'-6')
**Sample No:** 23-9546-014

**Date Collected:** 10/24/23
**Time Collected:** 11:05
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Solids, Total** **Method: 2540G 2011** | | | | |
| Analysis Date: 10/25/23 | | | | |
| Total Solids | 81.97 | | % | |
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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 | 6.1 | 5.0 | ug/kg | |

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# Analytical Report

| | | | |
|---|---|---|---|
| **Client:** | HUFF & HUFF INC. | **Date Collected:** | 10/24/23 |
| **Project ID:** | 81.0220714.56, IDOT 199-014 WO #31A, US | **Time Collected:** | 11:05 |
| **Sample ID:** | 2199V2-35-01 (3'-6') | **Date Received:** | 10/24/23 |
| **Sample No:** | 23-9546-014 | **Date Reported:** | 11/01/23 |

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Volatile Organic Compounds** **Method: 5035A/8260B** | | | | |
| Analysis Date: 10/31/23 | | | | |
| 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: 10/27/23 Preparation Date: 10/26/23 | | | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (3'-6')
**Sample No:** 23-9546-014

**Date Collected:** 10/24/23
**Time Collected:** 11:05
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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 | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (3'-6')
**Sample No:** 23-9546-014

**Date Collected:** 10/24/23
**Time Collected:** 11:05
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Semi-Volatile Compounds** **Method: 8270C** | | **Preparation Method 3540C** | | |
| Analysis Date: 10/27/23 | | Preparation Date: 10/26/23 | | |
| 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: 10/27/23 | | Preparation Date: 10/26/23 | | |
| Antimony | < 1.0 | 1.0 | mg/kg | |
| Arsenic | 8.0 | 1.0 | mg/kg | |
| Barium | 33.6 | 0.5 | mg/kg | |
| Beryllium | < 0.5 | 0.5 | mg/kg | |
| Cadmium | < 0.5 | 0.5 | mg/kg | |
| Calcium | 49,400 | 50 | mg/kg | |
| Chromium | 11.9 | 0.5 | mg/kg | |
| Cobalt | 6.3 | 0.5 | mg/kg | |
| Copper | 22.2 | 0.5 | mg/kg | |
| Iron | 18,900 | 5.0 | mg/kg | |
| Lead | 10.1 | 0.5 | mg/kg | |
| Magnesium | 32,300 | 50 | mg/kg | |
| Manganese | 478 | 0.5 | mg/kg | |
| Nickel | 19.4 | 0.5 | mg/kg | |
| Potassium | 1,300 | 50 | mg/kg | |
| Selenium | < 1.0 | 1.0 | mg/kg | |
| Silver | < 0.2 | 0.2 | mg/kg | |
| Sodium | 313 | 50 | mg/kg | |
| Thallium | < 1.0 | 1.0 | mg/kg | |
| Vanadium | 21.8 | 1.0 | mg/kg | |
| Zinc | 36.6 | 1.0 | mg/kg | |

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (3'-6')
**Sample No:** 23-9546-014

**Date Collected:** 10/24/23
**Time Collected:** 11:05
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

Results are reported on a dry weight basis.

| Analyte | Result | R.L. | Units | Flags |
|---|---|---|---|---|
| **Total Mercury** **Method: 7471B** | | | | |
| Analysis Date: 10/26/23 | | | | |
| Mercury | < 0.05 | 0.05 | mg/kg | |
| **pH @ 25°C, 1:2** **Method: 9045D** | | | | |
| Analysis Date: 10/26/23 11:00 | | | | |
| pH @ 25°C, 1:2 | 8.19 | | Units | |
| **TCLP Extraction** **Method: 1311** | | | | |
| Analysis Date: 10/25/23 | | | | |
| TCLP Extraction | Complete | | | |
| **TCLP Metals Method 1311** **Method: 6010C** | | **Preparation Method 3010A** | | |
| Analysis Date: 10/31/23 | | Preparation Date: 10/30/23 | | |
| 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 | 1.09 | 0.10 | 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: 10/27/23 | | | | |
| Mercury | < 0.0005 | 0.0005 | mg/L | |
| **SPLP Extraction** **Method: 1312** | | | | |
| Analysis Date: 10/25/23 | | | | |
| SPLP Metals Extraction | Complete | | | |
| Arsenic | < 0.010 | 0.010 | mg/L | |

**First Environmental Laboratories, Inc**

IL ELAP / NELAC Certification # 100292

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# Analytical Report

**Client:** HUFF & HUFF INC.
**Project ID:** 81.0220714.56, IDOT 199-014 WO #31A, US
**Sample ID:** 2199V2-35-01 (3'-6')
**Sample No:** 23-9546-014

**Date Collected:** 10/24/23
**Time Collected:** 11:05
**Date Received:** 10/24/23
**Date Reported:** 11/01/23

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: 10/31/23 | | Preparation Date: 10/30/23 | | |
| Barium | < 1.0 | 1.0 | mg/L | |
| Beryllium | < 0.004 | 0.004 | mg/L | |
| Cadmium | < 0.005 | 0.005 | mg/L | |
| Chromium | 0.016 | 0.005 | mg/L | |
| Cobalt | < 0.1 | 0.1 | mg/L | |
| Copper | 0.017 | 0.005 | mg/L | |
| Iron | 16.8 | 0.1 | mg/L | |
| Lead | 0.006 | 0.005 | mg/L | |
| Manganese | < 0.10 | 0.10 | 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: 10/27/23 | | | | |
| 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: 100.7* | *90* | *110* |
| *5035A/8260B* | *Dibromofluoromethane (Surr)* | *%R: 102* | *77* | *120* |
| *8270C* | *2,4,6-Tribromophenol (Surr)* | *%R: 70* | *59* | *131* |
| *8270C* | *2-Fluorobiphenyl (Surr)* | *%R: 65* | *45* | *112* |
| *8270C* | *2-Fluorophenol (Surr)* | *%R: 52.5* | *41* | *84* |
| *8270C* | *d14-Terphenyl (Surr)* | *%R: 85* | *56* | *120* |
| *8270C* | *d5-Nitrobenzene (Surr)* | *%R: 71* | *35* | *105* |
| *8270C* | *Phenol-d5 (surr)* | *%R: 65.5* | *50* | *100* |


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