

*PTB178-008 WO#021A Wolf Road PSI
Huff & Huff, Inc.*

APPENDIX D

LPC-663 CCDD DOCUMENTS



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-43-08 (221 South Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 170

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.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Refer to Figure 4-1.3 in the Final PSI Report and boring 1120V2-43-08 (Wolf Road Sta. 147+00, 20 Right).

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 Firsts Environmental Laboratories, Inc. report #19-3476. 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))

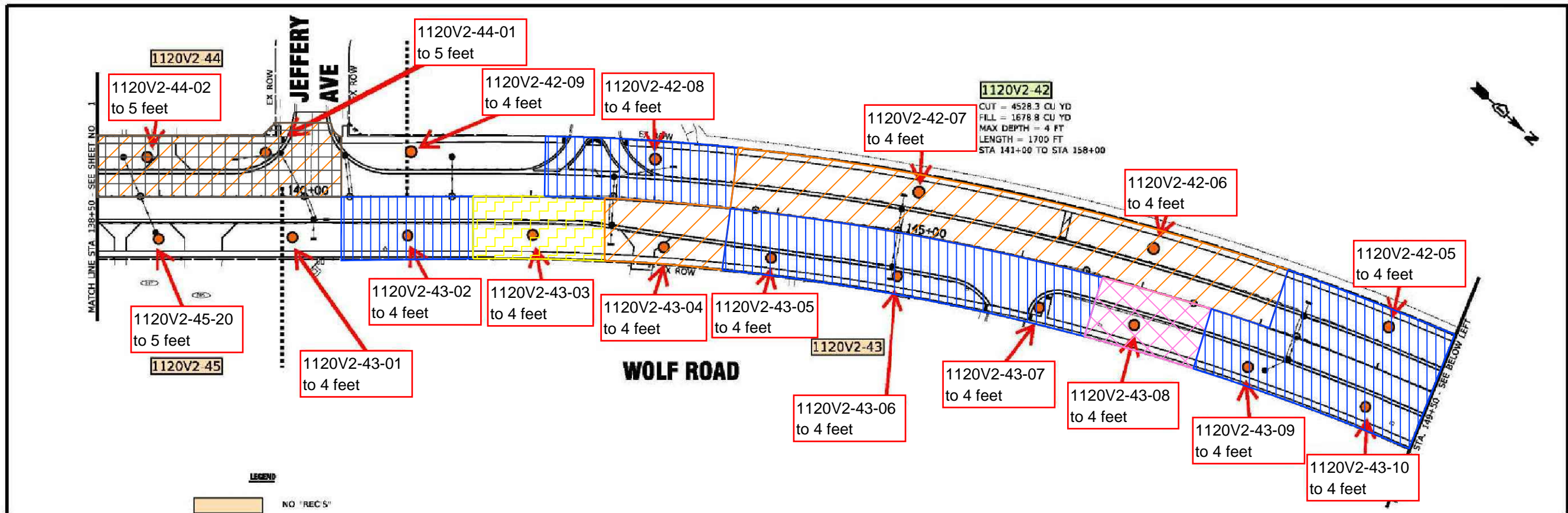
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

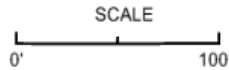


FIGURE 4-1.3 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.D. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 4	
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO.	
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT					
		DATE -	REVISED -								

LPC-663 Results Figure 4-1.3
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties *Excluding* Chicago
Wolf Rd from Hintz Rd to IL 21 (Milwaukee Ave)
Wheeling, IL
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-43-08
Sample Depth, ft				(0-4)
Sample Date				6/5/2019
Excavation Area(s) [ISGS Site No.(s)]				
Parameter				
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.66
VOCs, mg/kg	None Detected			
SVOCs, mg/kg	None Detected			
Benzo(a)anthracene	0.9 / 1.1 / 1.8	170	0.9	0.897
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	1.22
Benzo(b)fluoranthene	0.9 / 1.5 / 2.1	170	0.9	1.18
Benzo(k)fluoranthene	9	1700	9	1.22
Benzo(g,h,i)perylene	---	---	---	0.981
Chrysene	88	17000	88	1.23
Dibenz(a,h)anthracene	0.09 / 0.2 / 0.42	17	0.09	0.25
Fluoranthene	3,100	82,000	3,100	2.49
Indeno(1,2,3-cd)pyrene	0.9 / 0.9 / 1.6	170	0.9	0.86
Phenanthrene	---	---	---	0.686
Pyrene	2,300	61000	2300	1.69
Total Metals, mg/kg				
Antimony	5	82	31	<1.0
Arsenic	11.3 / 13	61	13	2.8
Barium	1,500	14,000	5500	23.8
Beryllium	22	410	160	<0.5
Cadmium	5.2	200	78	<0.5
Calcium	---	---	---	62900
Chromium	21	690	230	16.7
Cobalt	20	12,000	4700	3.9
Copper	2,900	8,200	2900	20.5
Iron	15,000 / 15,900	---	---	11500
Lead	107	700	400	80.1
Magnesium	325,000	730,000	325000	38100
Manganese	630 / 636	4,100	1600	246
Mercury	0.89	0.1	10	<0.05
Nickel	100	4,100	1600	12.2
Potassium	---	---	---	608
Selenium	1.3	1,000	390	<1.0
Silver	4.4	1,000	390	0.2
Sodium	---	---	---	1420
Thallium	2.6	160	6.3	<1.0
Vanadium	550	1,400	550	14.9
Zinc	5,100	61,000	23000	66.3
TCLP Metals, mg/L	Class I Groundwater ^{d/}			
Arsenic		0.05		<0.010
Barium		2		<1.0
Beryllium		0.004		<1.00
Cadmium		0.005		<0.005
Chromium		0.1		<0.005
Cobalt		1		<0.1
Copper		0.65		<0.1
Iron		5		<0.1
Lead		0.0075		0.026
Manganese		0.15		1.5
Mercury		0.002		<0.0005
Nickel		0.1		<0.1
Selenium		0.05		<0.010
Silver		0.05		<0.005
Zinc		5		0.2
SPLP Metals, mg/L	Class I Groundwater ^{d/}			
Arsenic		0.05		<0.010
Barium		2		<1.0
Beryllium		0.004		<0.004
Cadmium		0.005		<0.005
Chromium		0.1		0.052
Cobalt		1		<0.1
Copper		0.65		0.076
Iron		5		25.5
Lead		0.0075		0.508
Manganese		0.15		0.3
Mercury		0.002		<0.0005
Nickel		0.1		<0.1
Selenium		0.05		<0.010
Silver		0.05		<0.005
Zinc		5		0.5

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

 Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:47

Sample ID: 1120V2-43-08 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-027

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	86.24		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-08 (0-4)
Sample No: 19-3476-027

Date Collected: 06/05/19
Time Collected: 11:47
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	897	330	ug/kg	
Benzo(a)pyrene	1,220	90	ug/kg	
Benzo(b)fluoranthene	1,180	330	ug/kg	
Benzo(k)fluoranthene	1,220	330	ug/kg	
Benzo(ghi)perylene	981	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	1,230	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:47

Sample ID: 1120V2-43-08 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-027

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	250	90	ug/kg	
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	2,490	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	860	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:47

Sample ID: 1120V2-43-08 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-027

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	686	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,690	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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.8	1.0	mg/kg	
Barium	23.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,900	50	mg/kg	
Chromium	16.7	0.5	mg/kg	
Cobalt	3.9	0.5	mg/kg	
Copper	20.5	0.5	mg/kg	
Iron	11,500	5.0	mg/kg	
Lead	80.1	0.5	mg/kg	
Magnesium	38,100	50	mg/kg	
Manganese	246	0.5	mg/kg	
Nickel	12.2	0.5	mg/kg	
Potassium	608	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	1,420	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:47

Sample ID: 1120V2-43-08 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-027

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.9	1.0	mg/kg	
Zinc	66.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/11/19 6:45				
pH @ 25°C, 1:2	8.66		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/13/19		Preparation Method 3010A		
		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.026	0.005	mg/L	
Manganese	1.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:47

Sample ID: 1120V2-43-08 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-027

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.052	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.076	0.005	mg/L	
Iron	25.5	0.1	mg/L	
Lead	0.508	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-08 (0-4)
Sample No: 19-3476-027

Date Collected: 06/05/19
Time Collected: 11:47
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 74.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 76.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.6	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-03-04 (300 Block of North Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

EPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 165

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.

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 4-1.7 in the Final PSI Report and boring 1120V2-03-04 (Wolf Road Sta. 193+00, 30 Left).

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 Firsts Environmental Laboratories, Inc. report #19-2555. 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

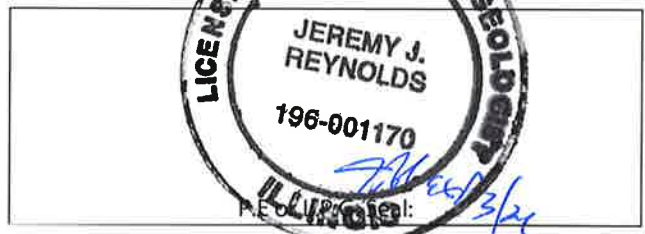
Phone: 630-684-9100

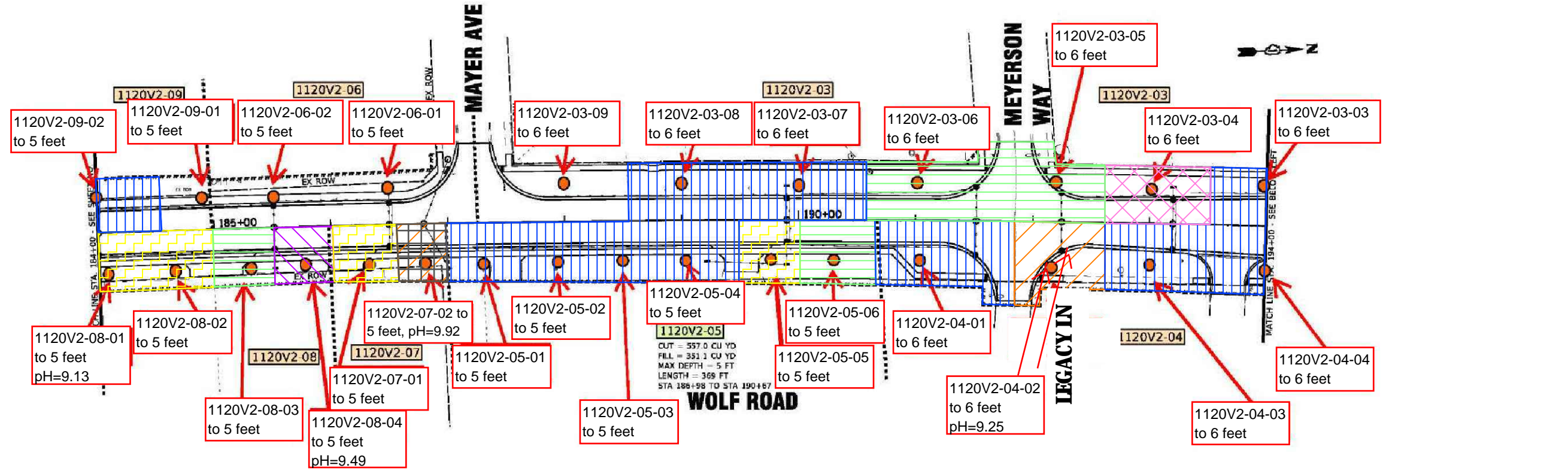
Jeremy J. Reynolds, P.G.

Printed Name:


Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND

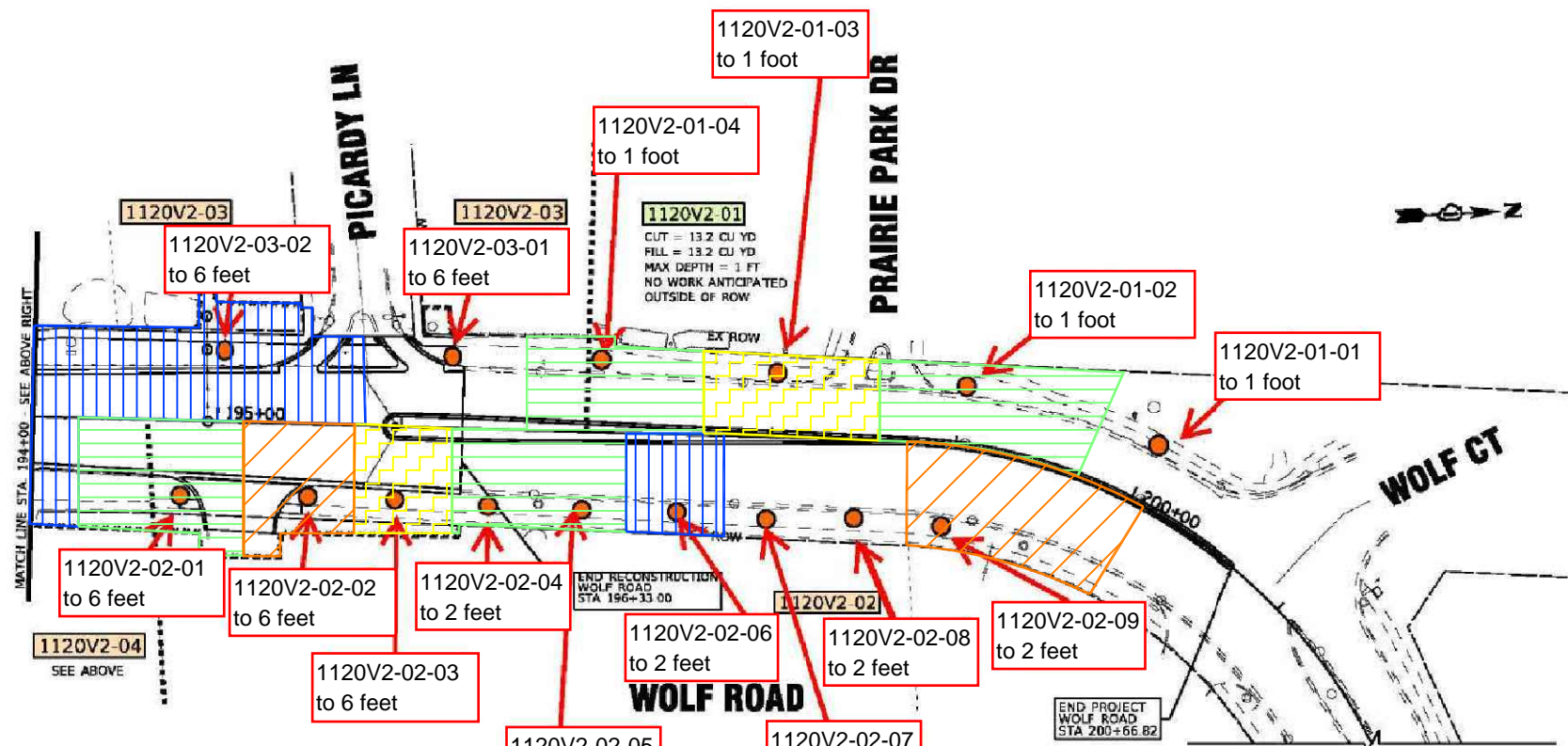
NO "RECS"

"RECS" PSI REQUIRED

LEGEND

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

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



SCALE

0' 100'

FIGURE 4-1.7 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS	WOLF RD PSI REPORT	F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 4	SHE NO 3
		DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	COOK COUNTY, IL					
	PLOT SCALE =	CHECKED -	REVISED -			SCALE: 1" = 100'	SHEET NO. 3 OF 6 SHEETS	CONTRACT NO.		
	PLOT DATE =	DATE -	REVISED -				STA. TO STA.	ILLINOIS FED. AID PROJECT		

LPC-663 Results - Figure 4-1.7
Soils for Reuse or Disposal at CDD Facilities in MSA Counties Excluding Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-03-04	1120V2-03-04
				(0-5) 4/30/2019	(5-6) 4/30/2019
Parameter					
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.14	7.84
VOCs, mg/kg	None Detected				
SVOCs, mg/kg					
Benzo(a)anthracene	0.9 / 1.1 / 1.8	170	0.9	1.18	<0.33
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	0.974	<0.09
Benzo(b)fluoranthene	0.9 / 1.5 / 2.1	170	0.9	0.934	<0.33
Benzo(k)fluoranthene	9	1700	9	0.889	<0.33
Dibenz(a,h)anthracene	0.09 / 0.2 / 0.42	17	0.09	0.145	<0.09
Indeno(1,2,3-cd)pyrene	0.9 / 0.9 / 1.6	170	0.9	0.587	<0.33
Total Metals, mg/kg					
Arsenic	11.3 / 13	61	13	5.7	4
Beryllium	22	410	160	0.6	0.5
Cadmium	5.2	200	78	<0.5	<0.5
Chromium	21	690	230	21.6	27
Cobalt	20	12,000	4700	15.7	20.8
Copper	2,900	8,200	2900	32.5	21.9
Iron	15,000 / 15,900	---	---	20600	21300
Lead	107	700	400	28.5	18
Manganese	630 / 636	4,100	1600	560	372
Nickel	100	4,100	1600	25.8	65.3
TCLP Metals, mg/L	Class I Groundwater ^{d/}				
Arsenic	0.05			<0.010	<0.010
Beryllium	0.004			<1.00	<1.00
Cadmium	0.005			<0.005	<0.005
Chromium	0.1			<0.005	<0.005
Cobalt	1			<0.1	<0.1
Copper	0.65			<0.1	<0.1
Iron	5			0.4	<0.1
Lead	0.0075			<0.005	<0.005
Manganese	0.15			<0.1	0.3
Nickel	0.1			<0.1	<0.1
SPLP Metals, mg/L	Class I Groundwater ^{d/}				
Arsenic	0.05			<0.010	<0.010
Beryllium	0.004			<0.004	<0.004
Cadmium	0.005			<0.005	<0.005
Chromium	0.1			0.006	<0.005
Cobalt	1			<0.1	<0.1
Copper	0.65			0.006	<0.005
Iron	5			2.9	3.5
Lead	0.0075			<0.005	<0.005
Manganese	0.15			<0.1	<0.1
Mercury	0.002			<0.0005	<0.0005
Nickel	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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	81.71		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

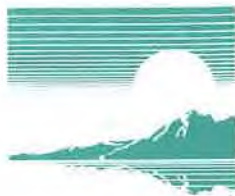
Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	573	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	1,180	330	ug/kg	
Benzo(a)pyrene	974	90	ug/kg	
Benzo(b)fluoranthene	934	330	ug/kg	
Benzo(k)fluoranthene	889	330	ug/kg	
Benzo(ghi)perylene	495	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	1,220	330	ug/kg	
Dibenzo(a,h)anthracene	145	90	ug/kg	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	2,510	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	587	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	2,270	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	2,100	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	80.7	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	42,300	50	mg/kg	
Chromium	21.6	0.5	mg/kg	
Cobalt	15.7	0.5	mg/kg	
Copper	32.5	0.5	mg/kg	
Iron	20,600	5.0	mg/kg	
Lead	28.5	0.5	mg/kg	
Magnesium	22,600	50	mg/kg	
Manganese	560	0.5	mg/kg	
Nickel	25.8	0.5	mg/kg	
Potassium	1,690	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	128	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.9	1.0	mg/kg	
Zinc	78.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.14		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.006	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.006	0.005	mg/L	
Iron	2.9	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (0-5)
Sample No: 19-2555-011

Date Collected: 04/30/19
Time Collected: 9:40
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i>	
			<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.7	86	117
5035A/8260B	d8-Toluene (Surr)	%R: 96.9	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 86.2	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.9	59	131
8270C	2-Fluorobiphenyl (Surr)	%R: 70.1	45	112
8270C	2-Fluorophenol (Surr)	%R: 53.1	41	84
8270C	d14-Terphenyl (Surr)	%R: 81.6	56	120
8270C	d5-Nitrobenzene (Surr)	%R: 70	35	105
8270C	Phenol-d5 (surr)	%R: 65.3	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	80.35		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

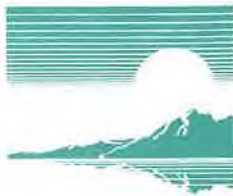
Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.0	1.0	mg/kg	
Barium	67.4	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	18,900	50	mg/kg	
Chromium	27.0	0.5	mg/kg	
Cobalt	20.8	0.5	mg/kg	
Copper	21.9	0.5	mg/kg	
Iron	21,300	5.0	mg/kg	
Lead	18.0	0.5	mg/kg	
Magnesium	11,300	50	mg/kg	
Manganese	372	0.5	mg/kg	
Nickel	65.3	0.5	mg/kg	
Potassium	1,630	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	150	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.9	1.0	mg/kg	
Zinc	72.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.84		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	< 0.005	0.005	mg/L	
Iron	3.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-04 (5-6)
Sample No: 19-2555-012

Date Collected: 04/30/19
Time Collected: 9:41
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	99	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R:	97.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R:	89.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R:	83.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R:	65.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R:	48.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R:	76.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R:	66.2	35 - 105	
8270C	Phenol-d5 (surr)	%R:	59.5	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-45 (285-411 S. Wolf Rd), 1120V2-46 (470 Foxboro Drive), 1120V2-47(460-464 Beech Drive and 482-492 Rustic Drive)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 550

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.

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 in the Final PSI Rpt and borings 1120V2-45-02(Wolf Rd Sta.121+00, 40 Rt), 45-04(Wolf Rd Sta.123+00, 40 Rt), 45-08(Wolf Rd Sta.127+10, 30 Rt), 46-02(Wolf Rd Sta.123+00, 40 Lt), 46-03(Wolf Rd Sta.122+00, 40 Lt), 46-04(Wolf Rd Sta.121+00, 40 Lt), 46-07(Wolf Rd Sta.118+00, 40 Lt), 47-01(Wolf Rd Sta.118+00, 40 Rt), 47-02(Wolf Rd Sta.119+00, 40 Rt).

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. reports #19-3477 and #19-3759. 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))

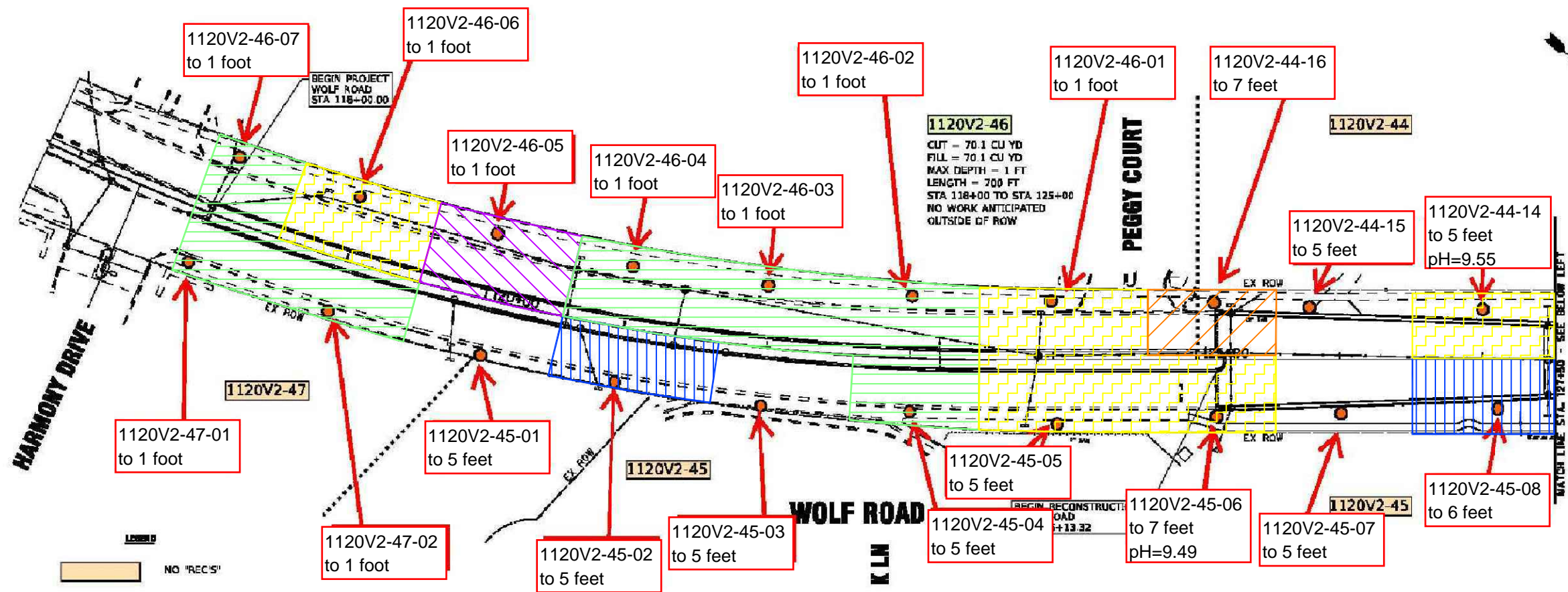
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19 Date:

[Signature] 10/3/21



LEGEND

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

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

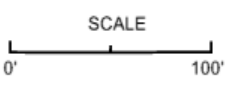


FIGURE 4-1.1 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 1
	PLOT SCALE =	DRAWN -	REVISED -							
	PLOT DATE =	CHECKED -	REVISED -		SCALE: 1" = 100'	SHEET NO. 1 OF 8 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	
		DATE -	REVISED -						CONTRACT NO.	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:55

Sample ID: 1120V2-45-02 0-5'

Date Received: 06/20/19

Sample No: 19-3759-019

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	67.39		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-02 0-5'
Sample No: 19-3759-019

Date Collected: 06/19/19
Time Collected: 11:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:55

Sample ID: 1120V2-45-02 0-5'

Date Received: 06/20/19

Sample No: 19-3759-019

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:55

Sample ID: 1120V2-45-02 0-5'

Date Received: 06/20/19

Sample No: 19-3759-019

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	112	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	4,830	50	mg/kg	
Chromium	18.6	0.5	mg/kg	
Cobalt	10.0	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	20,300	5.0	mg/kg	
Lead	17.0	0.5	mg/kg	
Magnesium	3,350	50	mg/kg	
Manganese	421	0.5	mg/kg	
Nickel	18.8	0.5	mg/kg	
Potassium	1,160	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,150	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-02 0-5'
Sample No: 19-3759-019

Date Collected: 06/19/19
Time Collected: 11:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	32.4	1.0	mg/kg	
Zinc	61.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.07	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.06		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.018	0.005	mg/L	
Manganese	12.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:55

Sample ID: 1120V2-45-02 0-5'

Date Received: 06/20/19

Sample No: 19-3759-019

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.053	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.048	0.005	mg/L	
Iron	48.6	0.1	mg/L	
Lead	0.023	0.005	mg/L	
Manganese	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-02 0-5'
Sample No: 19-3759-019

Date Collected: 06/19/19
Time Collected: 11:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 103	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 68.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:05

Sample ID: 1120V2-45-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-021

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	73.81		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-04 0-5'
Sample No: 19-3759-021

Date Collected: 06/19/19
Time Collected: 12:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
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	91	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:05

Sample ID: 1120V2-45-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-021

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-04 0-5'
Sample No: 19-3759-021

Date Collected: 06/19/19
Time Collected: 12:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	69.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	30,600	50	mg/kg	
Chromium	14.3	0.5	mg/kg	
Cobalt	6.1	0.5	mg/kg	
Copper	21.8	0.5	mg/kg	
Iron	14,400	5.0	mg/kg	
Lead	69.8	0.5	mg/kg	
Magnesium	15,000	50	mg/kg	
Manganese	346	0.5	mg/kg	
Nickel	16.3	0.5	mg/kg	
Potassium	891	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,230	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-04 0-5'
Sample No: 19-3759-021

Date Collected: 06/19/19
Time Collected: 12:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.8	1.0	mg/kg	
Zinc	72.7	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.10		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.011	0.005	mg/L	
Manganese	4.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:05

Sample ID: 1120V2-45-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-021

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.013	0.005	mg/L	
Iron	4.9	0.1	mg/L	
Lead	0.017	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:05

Sample ID: 1120V2-45-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-021

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 68.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-08 0-5'
Sample No: 19-3759-026

Date Collected: 06/19/19
Time Collected: 12:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	75.83		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	32.6	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-08 0-5'
Sample No: 19-3759-026

Date Collected: 06/19/19
Time Collected: 12:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:50

Sample ID: 1120V2-45-08 0-5'

Date Received: 06/20/19

Sample No: 19-3759-026

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-08 0-5'
Sample No: 19-3759-026

Date Collected: 06/19/19
Time Collected: 12:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.6	1.0	mg/kg	
Barium	94.3	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	14,700	50	mg/kg	
Chromium	16.5	0.5	mg/kg	
Cobalt	8.6	0.5	mg/kg	
Copper	23.6	0.5	mg/kg	
Iron	17,400	5.0	mg/kg	
Lead	34.8	0.5	mg/kg	
Magnesium	7,670	50	mg/kg	
Manganese	144	0.5	mg/kg	
Nickel	20.5	0.5	mg/kg	
Potassium	961	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	4,190	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-08 0-5'
Sample No: 19-3759-026

Date Collected: 06/19/19
Time Collected: 12:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.4	1.0	mg/kg	
Zinc	69.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.82		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.012	0.005	mg/L	
Manganese	1.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:50

Sample ID: 1120V2-45-08 0-5'

Date Received: 06/20/19

Sample No: 19-3759-026

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Arsenic	0.018	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	0.018	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.044	0.005	mg/L	
Iron	12.8	0.1	mg/L	
Lead	0.036	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:50

Sample ID: 1120V2-45-08 0-5'

Date Received: 06/20/19

Sample No: 19-3759-026

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 93.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 65.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.90		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	438	330	ug/kg	
Benzo(a)pyrene	399	90	ug/kg	
Benzo(b)fluoranthene	400	330	ug/kg	
Benzo(k)fluoranthene	400	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	506	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	997	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	350	330	ug/kg	
Phenol	< 330	330	ug/kg	



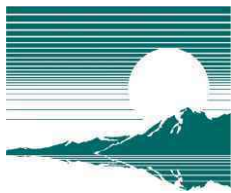
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/12/19		
Pyrene	769	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		
Analysis Date: 06/13/19		Preparation Method 3050B		
		Preparation Date: 06/12/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.1	1.0	mg/kg	
Barium	52.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	52,100	50	mg/kg	
Chromium	14.5	0.5	mg/kg	
Cobalt	7.1	0.5	mg/kg	
Copper	23.2	0.5	mg/kg	
Iron	17,100	5.0	mg/kg	
Lead	31.8	0.5	mg/kg	
Magnesium	29,200	50	mg/kg	
Manganese	451	0.5	mg/kg	
Nickel	18.8	0.5	mg/kg	
Potassium	1,820	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,210	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.8	1.0	mg/kg	
Zinc	54.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	0.08	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.80		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.026	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	0.123	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.125	0.005	mg/L	
Iron	126	0.1	mg/L	
Lead	0.104	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-02 (0-1)
Sample No: 19-3477-024

Date Collected: 06/06/19
Time Collected: 11:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.8	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	76.55		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	400	330	ug/kg	
Benzo(a)pyrene	392	90	ug/kg	
Benzo(b)fluoranthene	350	330	ug/kg	
Benzo(k)fluoranthene	434	330	ug/kg	
Benzo(ghi)perylene	341	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	468	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	923	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	343	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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/12/19		
Pyrene	752	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		
Analysis Date: 06/13/19		Preparation Method 3050B		
		Preparation Date: 06/12/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	88.7	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	11,400	50	mg/kg	
Chromium	25.6	0.5	mg/kg	
Cobalt	7.1	0.5	mg/kg	
Copper	24.8	0.5	mg/kg	
Iron	20,400	5.0	mg/kg	
Lead	24.7	0.5	mg/kg	
Magnesium	6,730	50	mg/kg	
Manganese	408	0.5	mg/kg	
Nickel	20.2	0.5	mg/kg	
Potassium	2,160	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,270	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.4	1.0	mg/kg	
Zinc	76.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.82		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.014	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	0.118	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.100	0.005	mg/L	
Iron	119	0.1	mg/L	
Lead	0.075	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-03 (0-1)
Sample No: 19-3477-025

Date Collected: 06/06/19
Time Collected: 11:05
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.8	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/10/19				
Total Solids	75.76		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/14/19				
Preparation Date: 06/12/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	523	330	ug/kg	
Benzo(a)pyrene	611	90	ug/kg	
Benzo(b)fluoranthene	642	330	ug/kg	
Benzo(k)fluoranthene	627	330	ug/kg	
Benzo(ghi)perylene	401	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	669	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



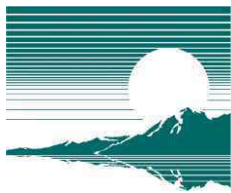
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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	1,370	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	411	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	484	330	ug/kg	
Phenol	< 330	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/14/19				Preparation Date: 06/12/19
Pyrene	1,080	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: 06/13/19				Preparation Date: 06/12/19
Antimony	1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	84.6	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	8,770	50	mg/kg	
Chromium	22.5	0.5	mg/kg	
Cobalt	9.4	0.5	mg/kg	
Copper	23.5	0.5	mg/kg	
Iron	22,000	5.0	mg/kg	
Lead	20.9	0.5	mg/kg	
Magnesium	5,820	50	mg/kg	
Manganese	448	0.5	mg/kg	
Nickel	20.5	0.5	mg/kg	
Potassium	2,280	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	853	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	34.2	1.0	mg/kg	
Zinc	73.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.60		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/14/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Arsenic	0.020	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	0.120	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.120	0.005	mg/L	
Iron	121	0.1	mg/L	
Lead	0.101	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 12
Sample No: 19-3477-033

Date Collected: 06/06/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Manganese	0.9	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	85.32		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



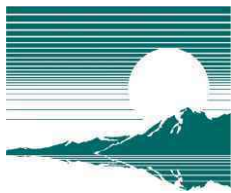
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	377	330	ug/kg	
Benzo(a)pyrene	433	90	ug/kg	
Benzo(b)fluoranthene	432	330	ug/kg	
Benzo(k)fluoranthene	588	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	468	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	899	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	336	330	ug/kg	
Phenol	< 330	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
Preparation Date: 06/12/19				
Pyrene	784	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		
Analysis Date: 06/13/19		Preparation Method 3050B		
Preparation Date: 06/12/19				
Antimony	1.4	1.0	mg/kg	
Arsenic	8.7	1.0	mg/kg	
Barium	69.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	0.6	0.5	mg/kg	
Calcium	36,200	50	mg/kg	
Chromium	15.6	0.5	mg/kg	
Cobalt	8.5	0.5	mg/kg	
Copper	45.1	0.5	mg/kg	
Iron	53,600	5.0	mg/kg	
Lead	22.9	0.5	mg/kg	
Magnesium	20,600	50	mg/kg	
Manganese	406	0.5	mg/kg	
Nickel	24.5	0.5	mg/kg	
Potassium	1,920	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	589	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.8	1.0	mg/kg	
Zinc	51.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.64		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Arsenic	0.024	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	0.088	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.096	0.005	mg/L	
Iron	94.1	0.1	mg/L	
Lead	0.064	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-04 (0-1)
Sample No: 19-3477-026

Date Collected: 06/06/19
Time Collected: 11:07
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/13/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	88.69		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/14/19				
Preparation Date: 06/12/19				
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	163	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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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	
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	



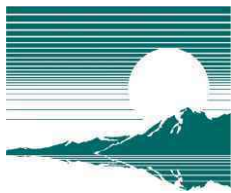
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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: 06/13/19		Preparation Date: 06/12/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.2	1.0	mg/kg	
Barium	66.1	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,640	50	mg/kg	
Chromium	18.6	0.5	mg/kg	
Cobalt	7.8	0.5	mg/kg	
Copper	22.5	0.5	mg/kg	
Iron	22,300	5.0	mg/kg	
Lead	15.3	0.5	mg/kg	
Magnesium	4,660	50	mg/kg	
Manganese	299	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	1,960	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	857	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.4	1.0	mg/kg	
Zinc	56.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.99		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction Method: 1311				
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/14/19 Preparation Date: 06/13/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction Method: 1312				
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/13/19 Preparation Date: 06/11/19				
Arsenic	0.028	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.130	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.141	0.005	mg/L	
Iron	135	0.1	mg/L	
Lead	0.115	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-46-07 (0-1)
Sample No: 19-3477-029

Date Collected: 06/06/19
Time Collected: 11:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/13/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	1.0	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/11/19				
Total Solids	89.57		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/14/19				
Preparation Date: 06/12/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	415	330	ug/kg	
Benzo(a)pyrene	397	90	ug/kg	
Benzo(b)fluoranthene	409	330	ug/kg	
Benzo(k)fluoranthene	376	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	419	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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	1,050	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	511	330	ug/kg	
Phenol	< 330	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/14/19				Preparation Date: 06/12/19
Pyrene	841	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: 06/13/19				Preparation Date: 06/12/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.0	1.0	mg/kg	
Barium	55.2	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	26,200	50	mg/kg	
Chromium	17.0	0.5	mg/kg	
Cobalt	8.6	0.5	mg/kg	
Copper	19.9	0.5	mg/kg	
Iron	18,600	5.0	mg/kg	
Lead	32.2	0.5	mg/kg	
Magnesium	14,900	50	mg/kg	
Manganese	398	0.5	mg/kg	
Nickel	20.1	0.5	mg/kg	
Potassium	1,820	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	698	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.3	1.0	mg/kg	
Zinc	53.4	1.0	mg/kg	

Total Mercury		Method: 7471B	
Analysis Date: 06/12/19			
Mercury	< 0.05	0.05	mg/kg

pH @ 25°C, 1:2		Method: 9045D 2004	
Analysis Date: 06/11/19 10:30			
pH @ 25°C, 1:2	8.90		Units



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/14/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Arsenic	0.027	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	0.114	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.137	0.005	mg/L	
Iron	125	0.1	mg/L	
Lead	0.209	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 13
Sample No: 19-3477-034

Date Collected: 06/06/19
Time Collected: 9:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Manganese	1.2	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-01 0-1'
Sample No: 19-3759-030

Date Collected: 06/19/19
Time Collected: 13:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	82.85		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	14.2	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-47-01 0-1'

Date Received: 06/20/19

Sample No: 19-3759-030

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/26/19				
Preparation Date: 06/24/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	943	330	ug/kg	
Benzo(a)pyrene	1,070	90	ug/kg	
Benzo(b)fluoranthene	1,330	330	ug/kg	
Benzo(k)fluoranthene	1,100	330	ug/kg	
Benzo(ghi)perylene	523	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	1,180	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-01 0-1'
Sample No: 19-3759-030

Date Collected: 06/19/19
Time Collected: 13:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/26/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	134	90	ug/kg	
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	2,240	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	570	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-01 0-1'
Sample No: 19-3759-030

Date Collected: 06/19/19
Time Collected: 13:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/26/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	1,040	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,890	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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.4	1.0	mg/kg	
Barium	88.9	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	15,900	50	mg/kg	
Chromium	22.3	0.5	mg/kg	
Cobalt	7.6	0.5	mg/kg	
Copper	28.1	0.5	mg/kg	
Iron	21,800	5.0	mg/kg	
Lead	27.7	0.5	mg/kg	
Magnesium	9,460	50	mg/kg	
Manganese	300	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	1,360	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	715	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-01 0-1'
Sample No: 19-3759-030

Date Collected: 06/19/19
Time Collected: 13:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/24/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/24/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.1	1.0	mg/kg	
Zinc	79.2	1.0	mg/kg	
Total Mercury Analysis Date: 06/25/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/21/19 6:30		Method: 9045D 2004		
pH @ 25°C, 1:2	8.80		Units	
TCLP Extraction Analysis Date: 06/24/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/26/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/26/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-47-01 0-1'

Date Received: 06/20/19

Sample No: 19-3759-030

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.033	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.029	0.005	mg/L	
Iron	29.6	0.1	mg/L	
Lead	0.026	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-47-01 0-1'

Date Received: 06/20/19

Sample No: 19-3759-030

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 94.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 66.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 69.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	75.27		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/26/19				
Preparation Date: 06/24/19				
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	175	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	12,400	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/26/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	375	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/26/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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	335	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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.1	1.0	mg/kg	
Barium	91.7	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	35,200	50	mg/kg	
Chromium	16.8	0.5	mg/kg	
Cobalt	9.6	0.5	mg/kg	
Copper	26.0	0.5	mg/kg	
Iron	20,900	5.0	mg/kg	
Lead	32.3	0.5	mg/kg	
Magnesium	16,400	50	mg/kg	
Manganese	515	0.5	mg/kg	
Nickel	20.2	0.5	mg/kg	
Potassium	1,360	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	128	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19				Preparation Date: 06/24/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	32.2	1.0	mg/kg	
Zinc	71.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.94		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19				Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-47-02 0-1'
Sample No: 19-3759-031

Date Collected: 06/19/19
Time Collected: 13:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.012	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.010	0.005	mg/L	
Iron	11.2	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:50

Sample ID: 1120V2-47-02 0-1'

Date Received: 06/20/19

Sample No: 19-3759-031

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 72.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.3	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-44 (360-500 S. Wolf Road), 1120V2-45 (285-411 S. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 515

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.

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 4-1.2 in the Final PSI Rpt and borings 1120V2-44-03 (Wolf Rd Sta.138+00, 20 Left), 44-11(Wolf Rd Sta.129+90, 20 Left), 45-10 (Wolf Rd Sta.129+00, 25 Right), 45-19 (Wolf Rd Sta.138+00, 20 Right).

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. reports #19-3476 and #19-3759. 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.

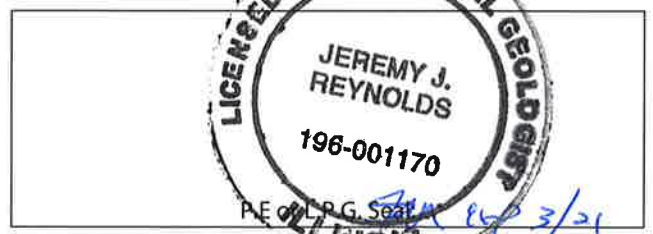
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

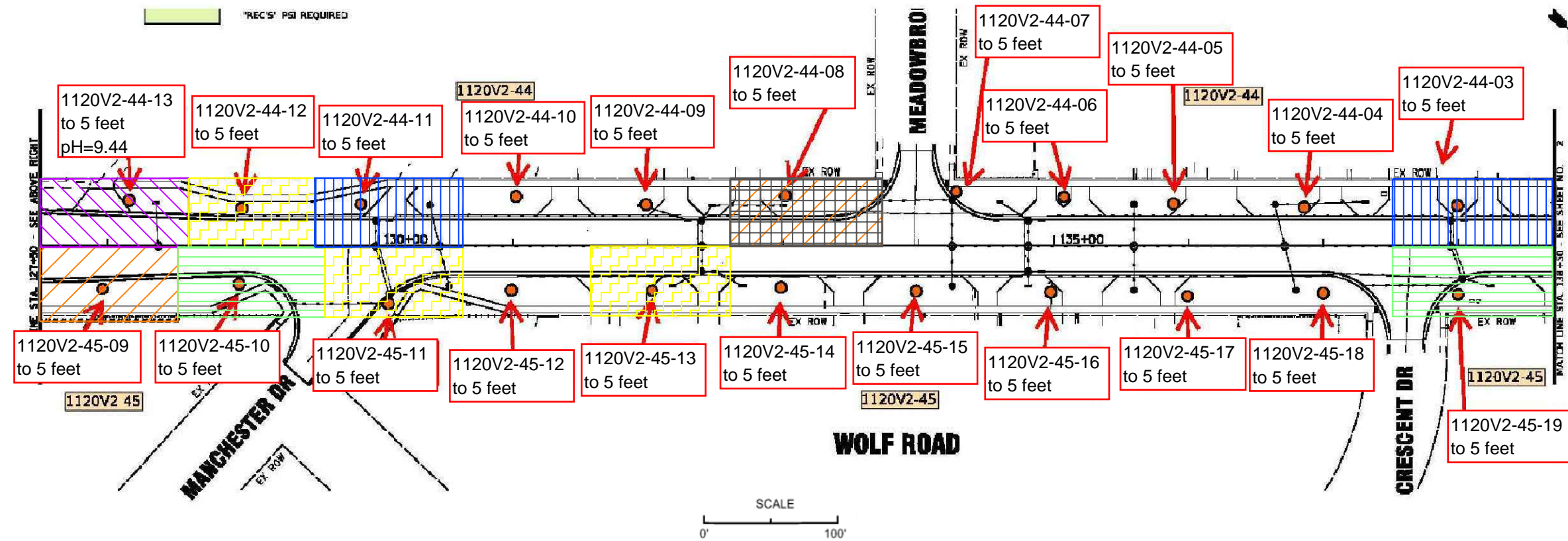
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19 Date:





LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL. CANNOT BE TAKEN TO A CCDD/USFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

FIGURE 4-1.2 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.I.L. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 2		
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 2 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						

LPC-663 Results - Figure 4-1.2
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-44-03	1120V2-44-11	1120V2-45-10	1120V2-45-19
				(0-5)	(0-5)	(0-5)	(0-5)
				6/19/2019	6/19/2019	6/19/2019	6/5/2019
				1120V2-44		1120V2-45	
Parameter							
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.52	7.38	8.54	8.66
VOCs, mg/kg				None Detected			
SVOCs, mg/kg							
Benzo(a)anthracene	0.9 / 1.1 / 1.8	170	0.9	<0.33	<0.33	0.72	<0.33
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	<0.09	<0.09	0.853	0.2
Benzo(b)fluoranthene	0.9 / 1.5 / 2.1	170	0.9	<0.33	<0.33	0.922	<0.33
Benzo(k)fluoranthene	9	1700	9	<0.33	<0.33	0.986	<0.33
Benzo(g,h,i)perylene	---	---	---	<0.33	<0.33	0.427	<0.33
Bis(2-ethylhexyl)phthalate	46	4100	46	<0.33	<0.33	1.23	<0.33
Chrysene	88	17000	88	<0.33	<0.33	0.9	<0.33
Dibenz(a,h)anthracene	0.09 / 0.2 / 0.42	17	0.09	<0.09	<0.09	0.121	<0.09
Fluoranthene	3,100	82,000	3,100	<0.33	<0.33	1.64	0.399
Indeno(1,2,3-cd)pyrene	0.9 / 0.9 / 1.6	170	0.9	<0.33	<0.33	0.472	<0.33
Phenanthrene	---	---	---	<0.33	<0.33	0.741	<0.33
Pyrene	2,300	61000	2300	<0.33	<0.33	1.41	<0.33
Total Metals, mg/kg							
Antimony	5	82	31	<1.0	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	11.7	4.9	4.4	5.4
Barium	1,500	14,000	5500	148	54.5	68.7	65.6
Beryllium	22	410	160	0.9	0.5	<0.5	<0.5
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5
Calcium	---	---	---	3810	1430	22400	40300
Chromium	21	690	230	25.2	15.7	17	17.6
Cobalt	20	12,000	4700	13.8	18.3	8.9	6.4
Copper	2,900	8,200	2900	20.8	29.3	22.6	39.4
Iron	15,000 / 15,900	---	---	32500	19200	15100	16800
Lead	107	700	400	13.6	13.9	69.3	71.9
Magnesium	325,000	730,000	325,000	5980	2590	12400	24100
Manganese	630 / 636	4,100	1600	1530	428	468	429
Mercury	0.89	0.1	10	0.05	0.05	<0.05	<0.05
Nickel	100	4,100	1600	30.5	47.9	16.2	16.8
Potassium	---	---	---	1180	932	999	1260
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	0.4	0.4	0.3	0.3
Sodium	---	---	---	1940	1620	1940	986
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	35.2	23.2	22.2	22.6
Zinc	5,100	61,000	23000	72.5	56.9	74.4	75.6
TCLP Metals, mg/L	Class I Groundwater ^{d/}						
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010
Barium		2		<1.0	<1.0	<1.0	<1.0
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	0.01	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1	<0.1
Copper		0.65		<0.1	<0.1	<0.1	<0.1
Iron		5		<0.1	1.1	<0.1	<0.1
Lead		0.0075		<0.005	0.009	<0.005	<0.005
Manganese		0.15		<0.1	6	0.7	0.5
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005
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	0.015	<0.010	0.031
Barium		2		<1.0	<1.0	<1.0	<1.0
Beryllium		0.004		<0.004	<0.004	<0.004	0.005
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005
Chromium		0.1		0.009	0.065	0.035	0.154
Cobalt		1		<0.1	<0.1	<0.1	<0.1
Copper		0.65		<0.005	0.107	0.047	0.145
Iron		5		5.5	71.9	28.3	166
Lead		0.0075		<0.005	0.033	0.113	0.162
Manganese		0.15		<0.1	1	0.3	0.9
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005
Nickel		0.1		<0.1	0.2	<0.1	0.2
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	0.2	0.2	0.6

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-03 0-5'
Sample No: 19-3759-004

Date Collected: 06/19/19
Time Collected: 9:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	80.95		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-03 0-5'
Sample No: 19-3759-004

Date Collected: 06/19/19
Time Collected: 9:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:45

Sample ID: 1120V2-44-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-004

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:45

Sample ID: 1120V2-44-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-004

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	11.7	1.0	mg/kg	
Barium	148	0.5	mg/kg	
Beryllium	0.9	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	3,810	50	mg/kg	
Chromium	25.2	0.5	mg/kg	
Cobalt	13.8	0.5	mg/kg	
Copper	20.8	0.5	mg/kg	
Iron	32,500	5.0	mg/kg	
Lead	13.6	0.5	mg/kg	
Magnesium	5,980	50	mg/kg	
Manganese	1,530	0.5	mg/kg	
Nickel	30.5	0.5	mg/kg	
Potassium	1,180	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,940	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-03 0-5'
Sample No: 19-3759-004

Date Collected: 06/19/19
Time Collected: 9:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	35.2	1.0	mg/kg	
Zinc	72.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.52		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:45

Sample ID: 1120V2-44-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-004

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.009	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.005	0.005	mg/L	
Iron	5.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:45

Sample ID: 1120V2-44-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-004

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 65.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-11 0-5'
Sample No: 19-3759-012

Date Collected: 06/19/19
Time Collected: 10:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	89.23		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-11 0-5'
Sample No: 19-3759-012

Date Collected: 06/19/19
Time Collected: 10:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:55

Sample ID: 1120V2-44-11 0-5'

Date Received: 06/20/19

Sample No: 19-3759-012

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-11 0-5'
Sample No: 19-3759-012

Date Collected: 06/19/19
Time Collected: 10:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	54.5	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,430	50	mg/kg	
Chromium	15.7	0.5	mg/kg	
Cobalt	18.3	0.5	mg/kg	
Copper	29.3	0.5	mg/kg	
Iron	19,200	5.0	mg/kg	
Lead	13.9	0.5	mg/kg	
Magnesium	2,590	50	mg/kg	
Manganese	428	0.5	mg/kg	
Nickel	47.9	0.5	mg/kg	
Potassium	932	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,620	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-11 0-5'
Sample No: 19-3759-012

Date Collected: 06/19/19
Time Collected: 10:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.2	1.0	mg/kg	
Zinc	56.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.38		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	0.010	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	1.1	0.1	mg/L	
Lead	0.009	0.005	mg/L	
Manganese	6.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:55

Sample ID: 1120V2-44-11 0-5'

Date Received: 06/20/19

Sample No: 19-3759-012

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
Arsenic	0.015	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	0.065	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.107	0.005	mg/L	
Iron	71.9	0.1	mg/L	
Lead	0.033	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:55

Sample ID: 1120V2-44-11 0-5'

Date Received: 06/20/19

Sample No: 19-3759-012

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 80.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 59.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 64.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-10 0-5'
Sample No: 19-3759-028

Date Collected: 06/19/19
Time Collected: 13:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	81.89		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-10 0-5'
Sample No: 19-3759-028

Date Collected: 06/19/19
Time Collected: 13:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	720	330	ug/kg	
Benzo(a)pyrene	853	90	ug/kg	
Benzo(b)fluoranthene	922	330	ug/kg	
Benzo(k)fluoranthene	986	330	ug/kg	
Benzo(ghi)perylene	427	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	1,230	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	900	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:05

Sample ID: 1120V2-45-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-028

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	121	90	ug/kg	
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	1,640	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	472	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-10 0-5'
Sample No: 19-3759-028

Date Collected: 06/19/19
Time Collected: 13:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	741	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,410	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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.4	1.0	mg/kg	
Barium	68.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	22,400	50	mg/kg	
Chromium	17.0	0.5	mg/kg	
Cobalt	8.9	0.5	mg/kg	
Copper	22.6	0.5	mg/kg	
Iron	15,100	5.0	mg/kg	
Lead	69.3	0.5	mg/kg	
Magnesium	12,400	50	mg/kg	
Manganese	468	0.5	mg/kg	
Nickel	16.2	0.5	mg/kg	
Potassium	999	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,940	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-10 0-5'
Sample No: 19-3759-028

Date Collected: 06/19/19
Time Collected: 13:05
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.2	1.0	mg/kg	
Zinc	74.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.54		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:05

Sample ID: 1120V2-45-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-028

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.035	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.047	0.005	mg/L	
Iron	28.3	0.1	mg/L	
Lead	0.113	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 13:05

Sample ID: 1120V2-45-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-028

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 92.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 79.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:24

Sample ID: 1120V2-45-19 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-031

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.62		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-19 (0-5)
Sample No: 19-3476-031

Date Collected: 06/05/19
Time Collected: 10:24
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	200	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:24

Sample ID: 1120V2-45-19 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-031

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	399	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-19 (0-5)
Sample No: 19-3476-031

Date Collected: 06/05/19
Time Collected: 10:24
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	65.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	40,300	50	mg/kg	
Chromium	17.6	0.5	mg/kg	
Cobalt	6.4	0.5	mg/kg	
Copper	39.4	0.5	mg/kg	
Iron	16,800	5.0	mg/kg	
Lead	71.9	0.5	mg/kg	
Magnesium	24,100	50	mg/kg	
Manganese	429	0.5	mg/kg	
Nickel	16.8	0.5	mg/kg	
Potassium	1,260	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	986	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:24

Sample ID: 1120V2-45-19 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-031

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/11/19				Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.6	1.0	mg/kg	
Zinc	75.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 6:45				
pH @ 25°C, 1:2	8.66		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19				Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:24

Sample ID: 1120V2-45-19 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-031

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.031	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.154	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.145	0.005	mg/L	
Iron	166	0.1	mg/L	
Lead	0.162	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.6	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-19 (0-5)
Sample No: 19-3476-031

Date Collected: 06/05/19
Time Collected: 10:24
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.5	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: 89.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 73	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.2	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-42 (222 S. Wolf Road), 1120V2-43 (221 S. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 1,815

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.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

Refer to Figure 4-1.3 in the Final PSI Rpt and borings 1120V2-42-05 (Wolf Rd Sta. 149+00, 25 Left), 42-08(Wolf Rd Sta. 143+00, 25 Left), 43-02 (Wolf Rd Sta. 141+00, 20 Right), 43-05 (Wolf Rd Sta. 144+00, 20 Right), 43-06 (Wolf Rd Sta. 145+00, 20 Right), 43-07 (Wolf Rd Sta. 146+20, 20 Right), 43-09 (Wolf Rd Sta. 148+00, 20 Right), 43-10 (Wolf Rd Sta. 149+00, 20 Right).

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. reports #19-3476 and #19-3477. 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.

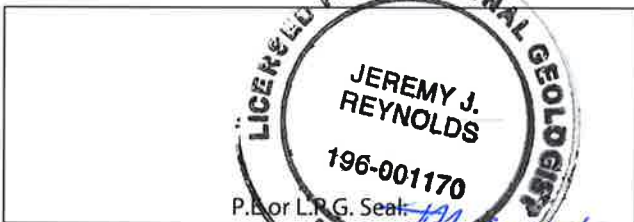
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

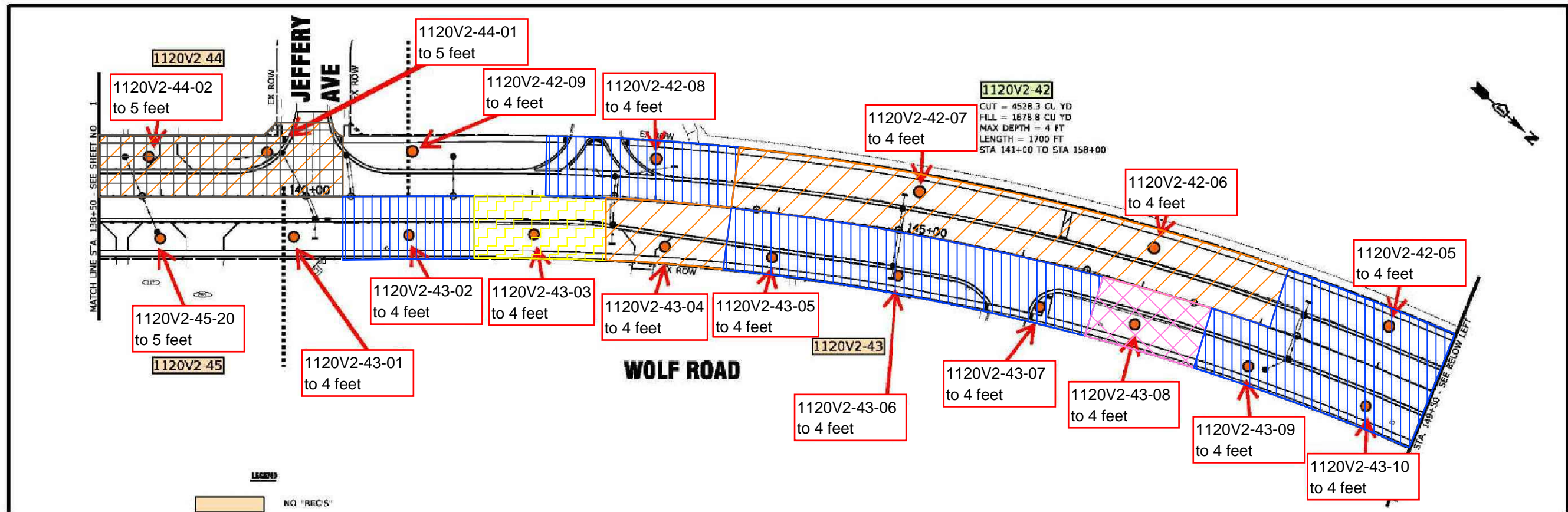
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Handwritten Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDD/USFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

FIGURE 4-1.3 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.D. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 4	
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO.	
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT					
		DATE -	REVISED -								

LPC-663 Results - Figure 4-1.3
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-42-05	1120V2-42-08	1120V2-43-02	1120V2-43-05	1120V2-43-06	1120V2-43-07	1120V2-43-09	1120V2-Dup-07 (1120V2-43-09)	1120V2-43-10	
				(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)
				6/6/2019	6/6/2019	6/5/2019	6/5/2019	6/5/2019	6/5/2019	6/5/2019	6/5/2019	6/5/2019	6/5/2019
Parameter				1120V2-42				1120V2-43					
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.98	7.99	7.99	7.93	8.89	8.68	8.64	8.84	8.24	
VOCs, mg/kg													
Carbon disulfide	9	9	720	<0.005	<0.005	0.0115	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
SVOCS, mg/kg				None Detected									
Total Metals, mg/kg													
Antimony	5	82	31	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Arsenic	11.3 / 13	61	13	2	3.9	7.6	9	7.2	3.4	10.3	2.1	<1.0	
Barium	1,500	14,000	5500	53.2	57.3	101	98.2	59	79.4	67.4	65	53	
Beryllium	22	410	160	0.7	0.5	0.7	0.8	0.5	0.7	0.7	0.5	0.6	
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Calcium	---	---	---	19000	33500	5760	5100	28900	6920	19300	27700	29000	
Chromium	21	690	230	14.7	16.4	19.7	22.6	16.6	20.4	16.2	16.4	14.7	
Cobalt	20	12,000	4700	5.4	6.5	8.9	11.9	8.4	8.2	12.7	6	5.4	
Copper	2,900	8,200	2900	10.4	12.3	19.5	23.5	22.8	14.4	42.5	19.9	22.7	
Iron	15,000 / 15,900	---	---	18100	17700	25800	30400	22700	22900	35200	14100	10800	
Lead	107	700	400	11.6	11	21	19.5	65.5	14.7	24	78.5	16.4	
Magnesium	325,000	730,000	325,000	12700	22400	4320	5790	17500	6830	13400	17800	16000	
Manganese	630 / 636	4,100	1600	77.7	261	209	286	381	412	314	169	186	
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Nickel	---	4,100	1600	13	17.5	21.9	26.2	20.5	20.6	26.9	17.4	15.4	
Potassium	---	---	---	420	1050	853	1180	2040	1050	722	924	603	
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Silver	4.4	1,000	390	0.4	0.4	0.6	0.6	0.5	0.4	0.7	0.3	0.3	
Sodium	---	---	---	1180	1570	3270	3880	2850	3740	3930	4140	2950	
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Vanadium	550	1,400	550	20.8	22.7	33.1	30.3	24.9	26.2	33.1	23.6	22.3	
Zinc	5,100	61,000	23000	35.4	45	51.3	76.3	76.3	58.3	48.6	73	44.4	
TCLP Metals, mg/L		Class I Groundwater ^{d/}											
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Barium	2			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Beryllium	0.004			<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chromium	0.1			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Copper	0.65			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Iron	5			0.1	0.3	0.2	0.5	<0.1	0.7	0.2	0.1	0.2	
Lead	0.0075			<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	
Manganese	0.15			0.4	0.8	0.2	0.3	2.1	8	0.9	1.9	0.4	
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	0.011	0.012	<0.010	<0.010	<0.010	
Silver	0.05			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Zinc	5			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
SPLP Metals, mg/L		Class I Groundwater ^{d/}											
Arsenic	0.05			0.061	0.012	<0.010	0.034	0.026	0.012	0.028	0.011	0.013	
Barium	2			<1.0	<1.0	<1.0	1.3	<1.0	1	<1.0	<1.0	<1.0	
Beryllium	0.004			<0.004	<0.004	<0.004	0.011	0.006	0.01	0.008	0.007	0.006	
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chromium	0.1			0.074	0.062	0.114	0.311	0.184	0.283	0.224	0.217	0.197	
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Copper	0.65			0.037	0.031	0.072	0.205	0.179	0.119	0.216	0.207	0.129	
Iron	5			183	60.2	97	268	199	222	227	194	175	
Lead	0.0075			0.061	0.018	0.037	0.154	1.22	0.136	0.141	0.158	0.102	
Manganese	0.15			0.2	0.2	0.5	1	1	2.7	0.8	0.7	0.7	
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Nickel	0.1			<0.1	<0.1	<0.1	0.2	0.2	0.2	0.2	0.2	0.1	
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Silver	0.05			<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	
Zinc	5			<0.1	0.1	0.3	0.8	1	0.6	0.5	0.5	0.4	

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.77		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



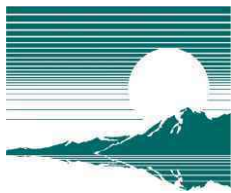
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/11/19		
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.0	1.0	mg/kg	
Barium	53.2	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	19,000	50	mg/kg	
Chromium	14.7	0.5	mg/kg	
Cobalt	5.4	0.5	mg/kg	
Copper	10.4	0.5	mg/kg	
Iron	18,100	5.0	mg/kg	
Lead	11.6	0.5	mg/kg	
Magnesium	12,700	50	mg/kg	
Manganese	77.7	0.5	mg/kg	
Nickel	13.0	0.5	mg/kg	
Potassium	420	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,180	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.8	1.0	mg/kg	
Zinc	35.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	7.98		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.061	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	0.074	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.037	0.005	mg/L	
Iron	183	0.1	mg/L	
Lead	0.061	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-05 (0-4)
Sample No: 19-3477-015

Date Collected: 06/06/19
Time Collected: 9:45
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



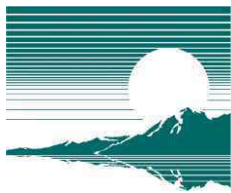
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	80.68		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
Preparation Date: 06/12/19				
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
Preparation Date: 06/11/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.9	1.0	mg/kg	
Barium	57.3	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	33,500	50	mg/kg	
Chromium	16.4	0.5	mg/kg	
Cobalt	6.5	0.5	mg/kg	
Copper	12.3	0.5	mg/kg	
Iron	17,700	5.0	mg/kg	
Lead	11.0	0.5	mg/kg	
Magnesium	22,400	50	mg/kg	
Manganese	261	0.5	mg/kg	
Nickel	17.5	0.5	mg/kg	
Potassium	1,050	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,570	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.7	1.0	mg/kg	
Zinc	45.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	7.99		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction Method: 1311				
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/13/19 Preparation Date: 06/13/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction Method: 1312				
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/12/19 Preparation Date: 06/11/19				
Arsenic	0.012	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	0.062	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.031	0.005	mg/L	
Iron	60.2	0.1	mg/L	
Lead	0.018	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-08 (0-4)
Sample No: 19-3477-018

Date Collected: 06/06/19
Time Collected: 10:02
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-43-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-021

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	80.27		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	11.5	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-02 (0-4)
Sample No: 19-3476-021

Date Collected: 06/05/19
Time Collected: 10:50
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/11/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-43-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-021

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/11/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-02 (0-4)
Sample No: 19-3476-021

Date Collected: 06/05/19
Time Collected: 10:50
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/11/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.6	1.0	mg/kg	
Barium	101	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,760	50	mg/kg	
Chromium	19.7	0.5	mg/kg	
Cobalt	8.9	0.5	mg/kg	
Copper	19.5	0.5	mg/kg	
Iron	25,800	5.0	mg/kg	
Lead	21.0	0.5	mg/kg	
Magnesium	4,320	50	mg/kg	
Manganese	209	0.5	mg/kg	
Nickel	21.9	0.5	mg/kg	
Potassium	853	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	3,270	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-43-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-021

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.1	1.0	mg/kg	
Zinc	51.3	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	7.99		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-43-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-021

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.114	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.072	0.005	mg/L	
Iron	97.0	0.1	mg/L	
Lead	0.037	0.005	mg/L	
Manganese	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-02 (0-4)
Sample No: 19-3476-021

Date Collected: 06/05/19
Time Collected: 10:50
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 66.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 52.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	80.10		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/11/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/11/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/11/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.0	1.0	mg/kg	
Barium	98.2	0.5	mg/kg	
Beryllium	0.8	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,100	50	mg/kg	
Chromium	22.6	0.5	mg/kg	
Cobalt	11.9	0.5	mg/kg	
Copper	23.5	0.5	mg/kg	
Iron	30,400	5.0	mg/kg	
Lead	19.5	0.5	mg/kg	
Magnesium	5,790	50	mg/kg	
Manganese	286	0.5	mg/kg	
Nickel	26.2	0.5	mg/kg	
Potassium	1,180	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	3,880	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	30.3	1.0	mg/kg	
Zinc	76.3	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	7.93		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:10

Sample ID: 1120V2-43-05 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-024

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.034	0.010	mg/L	
Barium	1.3	1.0	mg/L	
Beryllium	0.011	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.311	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.205	0.005	mg/L	
Iron	268	0.1	mg/L	
Lead	0.154	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.006	0.005	mg/L	
Zinc	0.8	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-05 (0-4)
Sample No: 19-3476-024

Date Collected: 06/05/19
Time Collected: 11:10
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 85.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 72.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:25

Sample ID: 1120V2-43-06 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-025

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	85.43		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:25

Sample ID: 1120V2-43-06 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-025

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/11/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:25

Sample ID: 1120V2-43-06 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-025

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/11/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-06 (0-4)
Sample No: 19-3476-025

Date Collected: 06/05/19
Time Collected: 11:25
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/11/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.2	1.0	mg/kg	
Barium	59.0	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	28,900	50	mg/kg	
Chromium	16.6	0.5	mg/kg	
Cobalt	8.4	0.5	mg/kg	
Copper	22.8	0.5	mg/kg	
Iron	22,700	5.0	mg/kg	
Lead	65.5	0.5	mg/kg	
Magnesium	17,500	50	mg/kg	
Manganese	381	0.5	mg/kg	
Nickel	20.5	0.5	mg/kg	
Potassium	2,040	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,850	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:25

Sample ID: 1120V2-43-06 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-025

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.9	1.0	mg/kg	
Zinc	76.3	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.89		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:25

Sample ID: 1120V2-43-06 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-025

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.026	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.184	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.179	0.005	mg/L	
Iron	199	0.1	mg/L	
Lead	1.22	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	1.0	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-06 (0-4)
Sample No: 19-3476-025

Date Collected: 06/05/19
Time Collected: 11:25
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 73.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:40

Sample ID: 1120V2-43-07 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-026

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	84.89		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:40

Sample ID: 1120V2-43-07 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-026

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:40

Sample ID: 1120V2-43-07 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-026

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-07 (0-4)
Sample No: 19-3476-026

Date Collected: 06/05/19
Time Collected: 11:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.4	1.0	mg/kg	
Barium	79.4	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	6,920	50	mg/kg	
Chromium	20.4	0.5	mg/kg	
Cobalt	8.2	0.5	mg/kg	
Copper	14.4	0.5	mg/kg	
Iron	22,900	5.0	mg/kg	
Lead	14.7	0.5	mg/kg	
Magnesium	6,830	50	mg/kg	
Manganese	412	0.5	mg/kg	
Nickel	20.6	0.5	mg/kg	
Potassium	1,050	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	3,740	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:40

Sample ID: 1120V2-43-07 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-026

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.2	1.0	mg/kg	
Zinc	58.3	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45		Method: 9045D 2004		
pH @ 25°C, 1:2	8.68		Units	
TCLP Extraction Analysis Date: 06/10/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.7	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	8.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.012	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:40

Sample ID: 1120V2-43-07 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-026

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.012	0.010	mg/L	
Barium	1.0	1.0	mg/L	
Beryllium	0.010	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.283	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.119	0.005	mg/L	
Iron	222	0.1	mg/L	
Lead	0.136	0.005	mg/L	
Manganese	2.7	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.6	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-07 (0-4)
Sample No: 19-3476-026

Date Collected: 06/05/19
Time Collected: 11:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 92	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 69.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 73.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 71	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-43-09 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-028

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	86.28		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-43-09 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-028

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-43-09 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-028

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-09 (0-4)
Sample No: 19-3476-028

Date Collected: 06/05/19
Time Collected: 11:50
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	10.3	1.0	mg/kg	
Barium	67.4	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	19,300	50	mg/kg	
Chromium	16.2	0.5	mg/kg	
Cobalt	12.7	0.5	mg/kg	
Copper	42.5	0.5	mg/kg	
Iron	35,200	5.0	mg/kg	
Lead	24.0	0.5	mg/kg	
Magnesium	13,400	50	mg/kg	
Manganese	314	0.5	mg/kg	
Nickel	26.9	0.5	mg/kg	
Potassium	722	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	3,930	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-43-09 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-028

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.1	1.0	mg/kg	
Zinc	48.6	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.64		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-43-09 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-028

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.028	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.008	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.224	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.216	0.005	mg/L	
Iron	227	0.1	mg/L	
Lead	0.141	0.005	mg/L	
Manganese	0.8	0.1	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: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-09 (0-4)
Sample No: 19-3476-028

Date Collected: 06/05/19
Time Collected: 11:50
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: DUP-07
Sample No: 19-3476-033

Date Collected: 06/05/19
Time Collected: 11:55
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	87.06		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:55

Sample ID: DUP-07

Date Received: 06/07/19

Sample No: 19-3476-033

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: DUP-07
Sample No: 19-3476-033

Date Collected: 06/05/19
Time Collected: 11:55
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



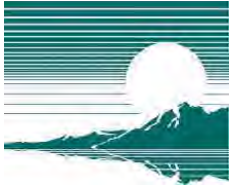
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: DUP-07
Sample No: 19-3476-033

Date Collected: 06/05/19
Time Collected: 11:55
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.1	1.0	mg/kg	
Barium	65.0	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	27,700	50	mg/kg	
Chromium	16.4	0.5	mg/kg	
Cobalt	6.0	0.5	mg/kg	
Copper	19.9	0.5	mg/kg	
Iron	14,100	5.0	mg/kg	
Lead	78.5	0.5	mg/kg	
Magnesium	17,800	50	mg/kg	
Manganese	169	0.5	mg/kg	
Nickel	17.4	0.5	mg/kg	
Potassium	924	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	4,140	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: DUP-07
Sample No: 19-3476-033

Date Collected: 06/05/19
Time Collected: 11:55
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.6	1.0	mg/kg	
Zinc	73.0	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45		Method: 9045D 2004		
pH @ 25°C, 1:2	8.84		Units	
TCLP Extraction Analysis Date: 06/10/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 11:55

Sample ID: DUP-07

Date Received: 06/07/19

Sample No: 19-3476-033

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.011	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.007	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.217	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.207	0.005	mg/L	
Iron	194	0.1	mg/L	
Lead	0.158	0.005	mg/L	
Manganese	0.7	0.1	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: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: DUP-07
Sample No: 19-3476-033

Date Collected: 06/05/19
Time Collected: 11:55
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 95.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 75.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 85.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 72.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	81.84		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	< 1.0	1.0	mg/kg	
Barium	53.0	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	29,000	50	mg/kg	
Chromium	14.7	0.5	mg/kg	
Cobalt	5.4	0.5	mg/kg	
Copper	22.7	0.5	mg/kg	
Iron	10,800	5.0	mg/kg	
Lead	16.4	0.5	mg/kg	
Magnesium	16,000	50	mg/kg	
Manganese	186	0.5	mg/kg	
Nickel	15.4	0.5	mg/kg	
Potassium	603	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	2,950	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.3	1.0	mg/kg	
Zinc	44.4	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.24		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-43-10 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-029

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.013	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.197	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.129	0.005	mg/L	
Iron	175	0.1	mg/L	
Lead	0.102	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-10 (0-4)
Sample No: 19-3476-029

Date Collected: 06/05/19
Time Collected: 12:00
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 66.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 73.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.2	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-40 (62 S. Wolf Road), 1120V2-41 (57-193 S. Wolf Road), 1120V2-42 (222 S. Wolf Road), 1120V2-43 (221 S. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 3,555

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.

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 4-1.4 in the Final PSI Rpt and borings 1120V2-40-02 (Wolf Rd Sta.165+00, 20 Lt), 40-04 (Wolf Rd Sta.163+00, 20 Lt), 41-02(Wolf Rd Sta.152+00, 20 Rt), 41-03(Wolf Rd Sta.153+00, 20 Rt), 41-05(Wolf Rd Sta.155+00, 20 Rt), 41-06(Wolf Rd Sta.156+00, 20 Rt), 41-08(Wolf Rd Sta.158+00, 20 Rt), 41-09(Wolf Rd Sta.159+00, 20 Rt), 42-01(Wolf Rd Sta. 157+00, 25 Lt), 42-02(Wolf Rd Sta. 155+00, 25 Lt), 42-03(Wolf Rd Sta. 153+00, 25 Lt), 42-04(Wolf Rd Sta. 151+00, 25 Lt), 43-11(Wolf Rd Sta. 149+90, 20 Rt)

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. reports #19-3476 and #19-3477. 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))

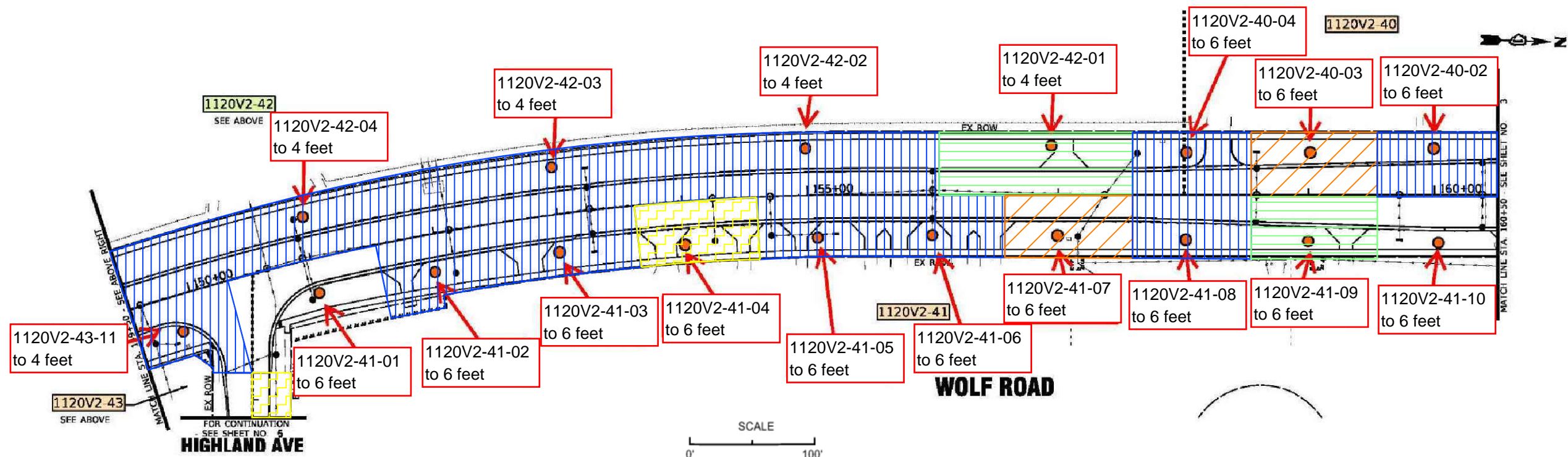
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Handwritten Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON-SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDDIUSFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

**FIGURE 4-1.4 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.I. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 5
		DRAWN -	REVISED -							
		CHECKED -	REVISED -							
		DATE -	REVISED -							
					SCALE: 1" = 100'		SHEET NO. 5 OF 8 SHEETS	STA.		TO STA.
								CONTRACT NO. (ILLINOIS) FED. AID PROJECT		



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	81.74		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	45.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,440	50	mg/kg	
Chromium	13.9	0.5	mg/kg	
Cobalt	6.2	0.5	mg/kg	
Copper	16.0	0.5	mg/kg	
Iron	17,100	5.0	mg/kg	
Lead	32.3	0.5	mg/kg	
Magnesium	2,910	50	mg/kg	
Manganese	296	0.5	mg/kg	
Nickel	15.4	0.5	mg/kg	
Potassium	857	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	145	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/20/19				Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.4	1.0	mg/kg	
Zinc	46.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.22		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:31

Sample ID: 1120V2-40-02 0-5

Date Received: 06/17/19

Sample No: 19-3668-016

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.005	0.005	mg/L	
Iron	4.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 0-5
Sample No: 19-3668-016

Date Collected: 06/14/19
Time Collected: 9:31
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:33

Sample ID: 1120V2-40-02 5-6

Date Received: 06/17/19

Sample No: 19-3668-017

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	85.16		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 5-6
Sample No: 19-3668-017

Date Collected: 06/14/19
Time Collected: 9:33
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 5-6
Sample No: 19-3668-017

Date Collected: 06/14/19
Time Collected: 9:33
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 5-6
Sample No: 19-3668-017

Date Collected: 06/14/19
Time Collected: 9:33
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/19/19		Preparation Method 3540C		
		Preparation Date: 06/18/19		
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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		
Analysis Date: 06/20/19		Preparation Method 3050B		
		Preparation Date: 06/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	12.2	1.0	mg/kg	
Barium	50.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,300	50	mg/kg	
Chromium	17.9	0.5	mg/kg	
Cobalt	13.1	0.5	mg/kg	
Copper	27.4	0.5	mg/kg	
Iron	28,100	5.0	mg/kg	
Lead	18.5	0.5	mg/kg	
Magnesium	14,500	50	mg/kg	
Manganese	744	0.5	mg/kg	
Nickel	29.8	0.5	mg/kg	
Potassium	928	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	245	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 5-6
Sample No: 19-3668-017

Date Collected: 06/14/19
Time Collected: 9:33
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/20/19				Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	35.8	1.0	mg/kg	
Zinc	66.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.23		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/21/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/14/19
Project ID:	81.022.0509.42 Wolf Rd WO21	Time Collected:	9:33
Sample ID:	1120V2-40-02 5-6	Date Received:	06/17/19
Sample No:	19-3668-017	Date Reported:	06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	< 0.005	0.005	mg/L	
Iron	2.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-02 5-6
Sample No: 19-3668-017

Date Collected: 06/14/19
Time Collected: 9:33
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.95		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

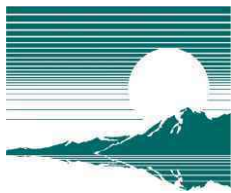
Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.5	1.0	mg/kg	
Barium	39.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,590	50	mg/kg	
Chromium	16.0	0.5	mg/kg	
Cobalt	6.2	0.5	mg/kg	
Copper	17.8	0.5	mg/kg	
Iron	33,900	5.0	mg/kg	
Lead	20.6	0.5	mg/kg	
Magnesium	2,770	50	mg/kg	
Manganese	96.9	0.5	mg/kg	
Nickel	16.1	0.5	mg/kg	
Potassium	628	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	1,500	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.2	1.0	mg/kg	
Zinc	51.9	1.0	mg/kg	

Total Mercury		Method: 7471B	
Analysis Date: 06/11/19			
Mercury	< 0.05	0.05	mg/kg

pH @ 25°C, 1:2		Method: 9045D 2004	
Analysis Date: 06/10/19 10:30			
pH @ 25°C, 1:2	8.34		Units



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.060	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.220	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.159	0.005	mg/L	
Iron	366	0.1	mg/L	
Lead	0.135	0.005	mg/L	



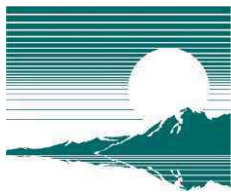
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (0-5)
Sample No: 19-3477-001

Date Collected: 06/06/19
Time Collected: 9:19
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.6	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.007	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	0.0006	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	85.16		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/14/19				
Preparation Date: 06/12/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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: 06/13/19		Preparation Date: 06/12/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	10.0	1.0	mg/kg	
Barium	30.5	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	14,700	50	mg/kg	
Chromium	14.4	0.5	mg/kg	
Cobalt	5.2	0.5	mg/kg	
Copper	14.9	0.5	mg/kg	
Iron	28,800	5.0	mg/kg	
Lead	22.5	0.5	mg/kg	
Magnesium	9,340	50	mg/kg	
Manganese	107	0.5	mg/kg	
Nickel	14.9	0.5	mg/kg	
Potassium	687	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	1,280	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.4	1.0	mg/kg	
Zinc	44.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/11/19 10:30				
pH @ 25°C, 1:2	8.84		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/14/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.014	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Arsenic	0.012	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	0.090	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.086	0.005	mg/L	
Iron	77.2	0.1	mg/L	
Lead	0.120	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 9
Sample No: 19-3477-030

Date Collected: 06/06/19
Time Collected: 11:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (5-6)
Sample No: 19-3477-002

Date Collected: 06/06/19
Time Collected: 9:21
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	82.00		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



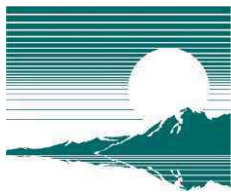
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (5-6)
Sample No: 19-3477-002

Date Collected: 06/06/19
Time Collected: 9:21
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (5-6)
Sample No: 19-3477-002

Date Collected: 06/06/19
Time Collected: 9:21
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (5-6)
Sample No: 19-3477-002

Date Collected: 06/06/19
Time Collected: 9:21
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	< 1.0	1.0	mg/kg	
Barium	19.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	54,200	50	mg/kg	
Chromium	11.4	0.5	mg/kg	
Cobalt	2.8	0.5	mg/kg	
Copper	10.7	0.5	mg/kg	
Iron	7,710	5.0	mg/kg	
Lead	14.4	0.5	mg/kg	
Magnesium	33,900	50	mg/kg	
Manganese	200	0.5	mg/kg	
Nickel	9.6	0.5	mg/kg	
Potassium	698	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	542	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	12.8	1.0	mg/kg	
Zinc	37.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.56		Units	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/06/19
Project ID:	IDOT Wheeling #21 - 81.0220509.42	Time Collected:	9:21
Sample ID:	1120V2-40-04 (5-6)	Date Received:	06/07/19
Sample No:	19-3477-002	Date Reported:	06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.041	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.032	0.005	mg/L	
Iron	33.7	0.1	mg/L	
Lead	0.051	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-40-04 (5-6)
Sample No: 19-3477-002

Date Collected: 06/06/19
Time Collected: 9:21
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:40

Sample ID: 1120V2-41-02 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-005

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.93		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:40

Sample ID: 1120V2-41-02 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-005

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-02 (0-6)
Sample No: 19-3476-005

Date Collected: 06/05/19
Time Collected: 12:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:40

Sample ID: 1120V2-41-02 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-005

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.5	1.0	mg/kg	
Barium	53.3	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	22,200	50	mg/kg	
Chromium	16.0	0.5	mg/kg	
Cobalt	6.7	0.5	mg/kg	
Copper	22.6	0.5	mg/kg	
Iron	21,700	5.0	mg/kg	
Lead	19.6	0.5	mg/kg	
Magnesium	11,900	50	mg/kg	
Manganese	303	0.5	mg/kg	
Nickel	19.4	0.5	mg/kg	
Potassium	867	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,390	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:40

Sample ID: 1120V2-41-02 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-005

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.4	1.0	mg/kg	
Zinc	64.5	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.63		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:40

Sample ID: 1120V2-41-02 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-005

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.011	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	0.099	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.096	0.005	mg/L	
Iron	102	0.1	mg/L	
Lead	0.108	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-02 (0-6)
Sample No: 19-3476-005

Date Collected: 06/05/19
Time Collected: 12:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.2	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: 88.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	86.54		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.4	1.0	mg/kg	
Barium	73.7	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	16,100	50	mg/kg	
Chromium	19.2	0.5	mg/kg	
Cobalt	9.8	0.5	mg/kg	
Copper	22.0	0.5	mg/kg	
Iron	22,900	5.0	mg/kg	
Lead	16.9	0.5	mg/kg	
Magnesium	10,300	50	mg/kg	
Manganese	615	0.5	mg/kg	
Nickel	24.9	0.5	mg/kg	
Potassium	2,040	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	4,330	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.4	1.0	mg/kg	
Zinc	65.4	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.97		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	6.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:48

Sample ID: 1120V2-41-03 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-006

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.034	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.139	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.169	0.005	mg/L	
Iron	163	0.1	mg/L	
Lead	0.150	0.005	mg/L	
Manganese	1.4	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-03 (0-6)
Sample No: 19-3476-006

Date Collected: 06/05/19
Time Collected: 12:48
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 97.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 77.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 64.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 70.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:20

Sample ID: 1120V2-41-05 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-009

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	84.00		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:20

Sample ID: 1120V2-41-05 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-009

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:20

Sample ID: 1120V2-41-05 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-009

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-05 (0-5)
Sample No: 19-3476-009

Date Collected: 06/05/19
Time Collected: 13:20
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	51.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	20,300	50	mg/kg	
Chromium	13.8	0.5	mg/kg	
Cobalt	4.8	0.5	mg/kg	
Copper	20.3	0.5	mg/kg	
Iron	15,600	5.0	mg/kg	
Lead	14.1	0.5	mg/kg	
Magnesium	10,600	50	mg/kg	
Manganese	225	0.5	mg/kg	
Nickel	14.5	0.5	mg/kg	
Potassium	476	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	3,370	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:20

Sample ID: 1120V2-41-05 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-009

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.0	1.0	mg/kg	
Zinc	52.4	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.44		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:20

Sample ID: 1120V2-41-05 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-009

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.007	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.173	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.168	0.005	mg/L	
Iron	105	0.1	mg/L	
Lead	0.149	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-05 (0-5)
Sample No: 19-3476-009

Date Collected: 06/05/19
Time Collected: 13:20
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 98.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 77	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 86.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:22

Sample ID: 1120V2-41-05 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-010

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	83.24		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-05 (5-6)
Sample No: 19-3476-010

Date Collected: 06/05/19
Time Collected: 13:22
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:22

Sample ID: 1120V2-41-05 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-010

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:22

Sample ID: 1120V2-41-05 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-010

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	18.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,800	50	mg/kg	
Chromium	10.2	0.5	mg/kg	
Cobalt	5.6	0.5	mg/kg	
Copper	18.3	0.5	mg/kg	
Iron	9,130	5.0	mg/kg	
Lead	9.9	0.5	mg/kg	
Magnesium	39,400	50	mg/kg	
Manganese	202	0.5	mg/kg	
Nickel	15.7	0.5	mg/kg	
Potassium	983	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	864	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:22

Sample ID: 1120V2-41-05 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-010

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.9	1.0	mg/kg	
Zinc	36.6	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.52		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:22

Sample ID: 1120V2-41-05 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-010

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.084	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.153	0.005	mg/L	
Iron	55.6	0.1	mg/L	
Lead	0.068	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-05 (5-6)
Sample No: 19-3476-010

Date Collected: 06/05/19
Time Collected: 13:22
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 68.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 81.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:42

Sample ID: 1120V2-41-06 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-011

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	88.22		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	15.8	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:42

Sample ID: 1120V2-41-06 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-011

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:42

Sample ID: 1120V2-41-06 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-011

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-06 (0-5)
Sample No: 19-3476-011

Date Collected: 06/05/19
Time Collected: 13:42
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	1.7	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	4,350	50	mg/kg	
Chromium	12.8	0.5	mg/kg	
Cobalt	2.9	0.5	mg/kg	
Copper	16.3	0.5	mg/kg	
Iron	12,800	5.0	mg/kg	
Lead	12.9	0.5	mg/kg	
Magnesium	2,410	50	mg/kg	
Manganese	76.5	0.5	mg/kg	
Nickel	11.5	0.5	mg/kg	
Potassium	405	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	3,580	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:42

Sample ID: 1120V2-41-06 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-011

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.4	1.0	mg/kg	
Zinc	39.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.54		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:42

Sample ID: 1120V2-41-06 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-011

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.165	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.107	0.005	mg/L	
Iron	133	0.1	mg/L	
Lead	0.075	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-06 (0-5)
Sample No: 19-3476-011

Date Collected: 06/05/19
Time Collected: 13:42
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 72.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-41-06 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-012

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	84.75		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-41-06 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-012

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-41-06 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-012

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-06 (5-6)
Sample No: 19-3476-012

Date Collected: 06/05/19
Time Collected: 13:45
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	< 1.0	1.0	mg/kg	
Barium	30.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,310	50	mg/kg	
Chromium	14.8	0.5	mg/kg	
Cobalt	3.7	0.5	mg/kg	
Copper	14.9	0.5	mg/kg	
Iron	8,820	5.0	mg/kg	
Lead	12.8	0.5	mg/kg	
Magnesium	2,790	50	mg/kg	
Manganese	56.2	0.5	mg/kg	
Nickel	11.6	0.5	mg/kg	
Potassium	716	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	2,270	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-41-06 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-012

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.2	1.0	mg/kg	
Zinc	53.0	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.33		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 13:45

Sample ID: 1120V2-41-06 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-012

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.226	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.165	0.005	mg/L	
Iron	131	0.1	mg/L	
Lead	0.117	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	0.0007	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-06 (5-6)
Sample No: 19-3476-012

Date Collected: 06/05/19
Time Collected: 13:45
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 100.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 85.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:20

Sample ID: 1120V2-41-08 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-015

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	85.32		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:20

Sample ID: 1120V2-41-08 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-015

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:20

Sample ID: 1120V2-41-08 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-015

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-08 (0-5)
Sample No: 19-3476-015

Date Collected: 06/05/19
Time Collected: 14:20
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.3	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	13,300	50	mg/kg	
Chromium	13.9	0.5	mg/kg	
Cobalt	6.0	0.5	mg/kg	
Copper	13.9	0.5	mg/kg	
Iron	25,300	5.0	mg/kg	
Lead	11.0	0.5	mg/kg	
Magnesium	9,010	50	mg/kg	
Manganese	180	0.5	mg/kg	
Nickel	14.5	0.5	mg/kg	
Potassium	571	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,340	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:20

Sample ID: 1120V2-41-08 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-015

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.7	1.0	mg/kg	
Zinc	37.7	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45		Method: 9045D 2004		
pH @ 25°C, 1:2	8.32		Units	
TCLP Extraction Analysis Date: 06/10/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:20

Sample ID: 1120V2-41-08 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-015

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.042	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.208	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.122	0.005	mg/L	
Iron	281	0.1	mg/L	
Lead	0.059	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.006	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-08 (0-5)
Sample No: 19-3476-015

Date Collected: 06/05/19
Time Collected: 14:20
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	86.77		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	143	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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	41.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	29,600	50	mg/kg	
Chromium	12.6	0.5	mg/kg	
Cobalt	5.8	0.5	mg/kg	
Copper	21.1	0.5	mg/kg	
Iron	16,000	5.0	mg/kg	
Lead	63.8	0.5	mg/kg	
Magnesium	17,000	50	mg/kg	
Manganese	399	0.5	mg/kg	
Nickel	15.8	0.5	mg/kg	
Potassium	757	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	659	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.4	1.0	mg/kg	
Zinc	78.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45		Method: 9045D 2004		
pH @ 25°C, 1:2	8.82		Units	
TCLP Extraction Analysis Date: 06/10/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.012	0.005	mg/L	
Manganese	1.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:35

Sample ID: 1120V2-41-09 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-016

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.018	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	0.063	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.078	0.005	mg/L	
Iron	65.7	0.1	mg/L	
Lead	0.640	0.005	mg/L	
Manganese	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-09 (0-5)
Sample No: 19-3476-016

Date Collected: 06/05/19
Time Collected: 14:35
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 79.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 78.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:40

Sample ID: 1120V2-41-09 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-017

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	87.12		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-09 (5-6)
Sample No: 19-3476-017

Date Collected: 06/05/19
Time Collected: 14:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:40

Sample ID: 1120V2-41-09 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-017

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-09 (5-6)
Sample No: 19-3476-017

Date Collected: 06/05/19
Time Collected: 14:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	26.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	30,300	50	mg/kg	
Chromium	12.4	0.5	mg/kg	
Cobalt	5.4	0.5	mg/kg	
Copper	17.8	0.5	mg/kg	
Iron	16,800	5.0	mg/kg	
Lead	17.7	0.5	mg/kg	
Magnesium	17,400	50	mg/kg	
Manganese	289	0.5	mg/kg	
Nickel	13.4	0.5	mg/kg	
Potassium	590	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	463	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:40

Sample ID: 1120V2-41-09 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-017

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.3	1.0	mg/kg	
Zinc	58.0	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.53		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:40

Sample ID: 1120V2-41-09 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-017

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.045	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.040	0.005	mg/L	
Iron	43.4	0.1	mg/L	
Lead	0.028	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-09 (5-6)
Sample No: 19-3476-017

Date Collected: 06/05/19
Time Collected: 14:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 72.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	84.04		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	377	330	ug/kg	
Benzo(a)pyrene	371	90	ug/kg	
Benzo(b)fluoranthene	361	330	ug/kg	
Benzo(k)fluoranthene	369	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	375	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	860	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	505	330	ug/kg	
Phenol	< 330	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/13/19				Preparation Date: 06/11/19
Pyrene	811	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: 06/11/19				Preparation Date: 06/11/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.7	1.0	mg/kg	
Barium	37.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,440	50	mg/kg	
Chromium	14.7	0.5	mg/kg	
Cobalt	4.2	0.5	mg/kg	
Copper	10.7	0.5	mg/kg	
Iron	14,900	5.0	mg/kg	
Lead	12.5	0.5	mg/kg	
Magnesium	2,610	50	mg/kg	
Manganese	78.7	0.5	mg/kg	
Nickel	11.4	0.5	mg/kg	
Potassium	673	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	782	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.3	1.0	mg/kg	
Zinc	45.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.35		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.009	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.094	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.065	0.005	mg/L	
Iron	91.5	0.1	mg/L	
Lead	0.076	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-01 (0-4)
Sample No: 19-3477-011

Date Collected: 06/06/19
Time Collected: 9:27
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	81.99		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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: 06/11/19		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.1	1.0	mg/kg	
Barium	65.5	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,860	50	mg/kg	
Chromium	17.6	0.5	mg/kg	
Cobalt	6.6	0.5	mg/kg	
Copper	20.7	0.5	mg/kg	
Iron	19,600	5.0	mg/kg	
Lead	18.7	0.5	mg/kg	
Magnesium	2,300	50	mg/kg	
Manganese	203	0.5	mg/kg	
Nickel	18.0	0.5	mg/kg	
Potassium	988	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	949	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.5	1.0	mg/kg	
Zinc	99.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.16		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction Method: 1311				
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/13/19 Preparation Date: 06/13/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction Method: 1312				
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/12/19 Preparation Date: 06/11/19				
Arsenic	0.029	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	0.072	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.082	0.005	mg/L	
Iron	93.0	0.1	mg/L	
Lead	0.058	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-02 (0-4)
Sample No: 19-3477-012

Date Collected: 06/06/19
Time Collected: 9:31
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	1.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



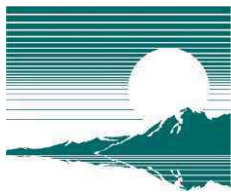
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	90.13		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/11/19		
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.9	1.0	mg/kg	
Barium	60.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	25,000	50	mg/kg	
Chromium	12.3	0.5	mg/kg	
Cobalt	7.7	0.5	mg/kg	
Copper	20.7	0.5	mg/kg	
Iron	20,400	5.0	mg/kg	
Lead	16.5	0.5	mg/kg	
Magnesium	14,100	50	mg/kg	
Manganese	366	0.5	mg/kg	
Nickel	18.9	0.5	mg/kg	
Potassium	938	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,030	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.0	1.0	mg/kg	
Zinc	56.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.81		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	6.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.022	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.032	0.005	mg/L	
Iron	28.4	0.1	mg/L	
Lead	0.041	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-03 (0-4)
Sample No: 19-3477-013

Date Collected: 06/06/19
Time Collected: 9:36
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



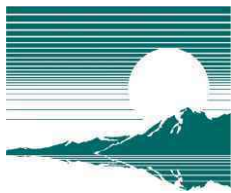
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	76.43		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/14/19				
Preparation Date: 06/12/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

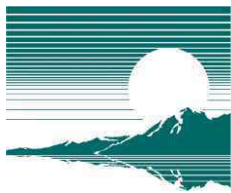
Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/14/19		Preparation Date: 06/12/19		
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: 06/13/19		Preparation Date: 06/12/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.8	1.0	mg/kg	
Barium	98.4	0.5	mg/kg	
Beryllium	0.8	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	8,270	50	mg/kg	
Chromium	20.4	0.5	mg/kg	
Cobalt	9.3	0.5	mg/kg	
Copper	20.9	0.5	mg/kg	
Iron	23,100	5.0	mg/kg	
Lead	16.1	0.5	mg/kg	
Magnesium	5,970	50	mg/kg	
Manganese	279	0.5	mg/kg	
Nickel	22.4	0.5	mg/kg	
Potassium	1,120	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,120	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	31.0	1.0	mg/kg	
Zinc	57.6	1.0	mg/kg	

Total Mercury		Method: 7471B	
Analysis Date: 06/12/19			
Mercury	< 0.05	0.05	mg/kg

pH @ 25°C, 1:2		Method: 9045D 2004	
Analysis Date: 06/10/19 10:30			
pH @ 25°C, 1:2	7.92		Units



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/14/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.0	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	5.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
Arsenic	0.012	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	0.081	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.065	0.005	mg/L	
Iron	82.4	0.1	mg/L	
Lead	0.037	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-DUP 10
Sample No: 19-3477-031

Date Collected: 06/06/19
Time Collected: 10:00
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/13/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-04 (0-4)
Sample No: 19-3477-014

Date Collected: 06/06/19
Time Collected: 9:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	80.15		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-04 (0-4)
Sample No: 19-3477-014

Date Collected: 06/06/19
Time Collected: 9:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-04 (0-4)
Sample No: 19-3477-014

Date Collected: 06/06/19
Time Collected: 9:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-04 (0-4)
Sample No: 19-3477-014

Date Collected: 06/06/19
Time Collected: 9:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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: 06/11/19		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.7	1.0	mg/kg	
Barium	48.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	36,600	50	mg/kg	
Chromium	12.4	0.5	mg/kg	
Cobalt	4.9	0.5	mg/kg	
Copper	14.8	0.5	mg/kg	
Iron	11,600	5.0	mg/kg	
Lead	11.4	0.5	mg/kg	
Magnesium	23,200	50	mg/kg	
Manganese	150	0.5	mg/kg	
Nickel	13.0	0.5	mg/kg	
Potassium	872	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,690	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	16.8	1.0	mg/kg	
Zinc	43.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.62		Units	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/06/19
Project ID:	IDOT Wheeling #21 - 81.0220509.42	Time Collected:	9:42
Sample ID:	1120V2-42-04 (0-4)	Date Received:	06/07/19
Sample No:	19-3477-014	Date Reported:	06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	2.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.023	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.021	0.005	mg/L	
Iron	20.4	0.1	mg/L	
Lead	0.008	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-42-04 (0-4)
Sample No: 19-3477-014

Date Collected: 06/06/19
Time Collected: 9:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:12

Sample ID: 1120V2-43-11 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-030

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	82.71		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:12

Sample ID: 1120V2-43-11 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-030

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:12

Sample ID: 1120V2-43-11 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-030

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:12

Sample ID: 1120V2-43-11 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-030

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.1	1.0	mg/kg	
Barium	39.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	58,800	50	mg/kg	
Chromium	11.6	0.5	mg/kg	
Cobalt	7.0	0.5	mg/kg	
Copper	16.2	0.5	mg/kg	
Iron	14,800	5.0	mg/kg	
Lead	11.8	0.5	mg/kg	
Magnesium	33,800	50	mg/kg	
Manganese	401	0.5	mg/kg	
Nickel	16.5	0.5	mg/kg	
Potassium	691	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	734	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:12

Sample ID: 1120V2-43-11 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-030

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.1	1.0	mg/kg	
Zinc	37.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.79		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/05/19
Project ID:	IDOT Wheeling #21 - 81.0220509.42	Time Collected:	12:12
Sample ID:	1120V2-43-11 (0-4)	Date Received:	06/07/19
Sample No:	19-3476-030	Date Reported:	06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.030	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	0.052	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.047	0.005	mg/L	
Iron	88.4	0.1	mg/L	
Lead	0.035	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-11 (0-4)
Sample No: 19-3476-030

Date Collected: 06/05/19
Time Collected: 12:12
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 86.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 72.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.9	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-21 (60-180 N. Wolf Rd), 1120V2-27(77-95 N. Wolf Rd), 1120V2-28 (63-69 N. Wolf Rd), 1120V2-34(31 N. Wolf Rd), 1120V2-38(11-35 W. Dundee), 1120V2-39(11 E. Dundee)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 1,000

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.

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 Fig 4-1.5 in the PSI Report and borings 1120V2-21-07(Wolf Road Sta. 169+00, 20 Left), 21-08 (Wolf Road Sta. 168+20, 25 Left), 27-01 (Wolf Road Sta. 168+25, 20 Right), 28-01 (Wolf Road Sta. 168+00, 20 Right), 34-01 (Wolf Road Sta. 165+80, 20 Right), 34-02 (Wolf Road Sta. 166+40, 20 Right), 38-03 (Wolf Road Sta. 162+50, 20 Left), 39-01 (Wolf Road Sta. 160+90, 20 Right), 39-04 (Wolf Road Sta. 162+40, 20 Right), and 39-05 (Wolf Road Sta. 163+00, 20 Right).

- 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. reports #19-4573, 19-4718, 19-4691, and 19-3476. 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.

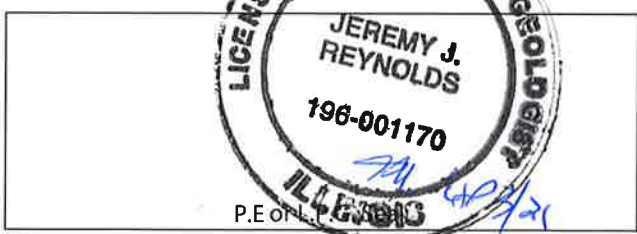
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

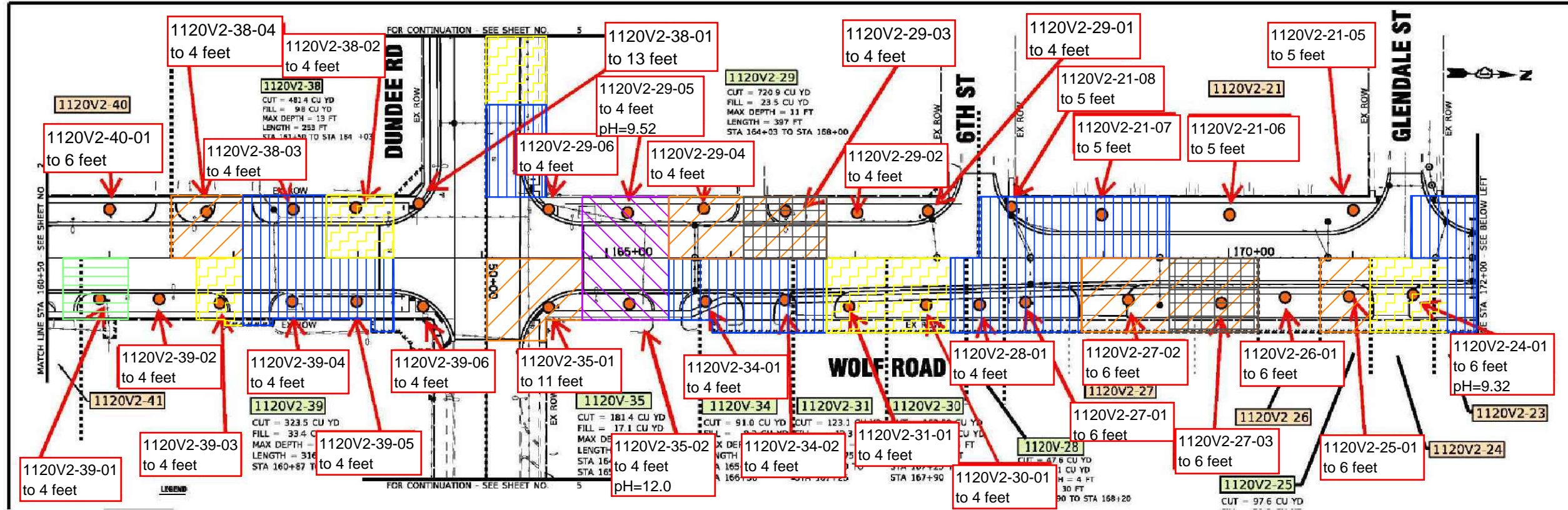
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
 Street Address: 915 Harger Road, Suite 330
 City: Oak Brook State: IL Zip Code: 60523
 Phone: 630-684-9100

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

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:

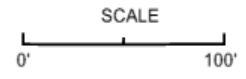




LEGEND

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

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



**FIGURE 4-1.5 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REWISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.M. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 6		
	PLOT SCALE =	DRAWN -	REWISED -			SCALE: 1" = 100'	SHEET NO. 6 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REWISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REWISED -									

LPC-663 Results - Figure 4-1.5
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{af}	Soil Remediation Objective for Construction Workers ^{af}	Soil Remediation Objective for Residential Exposure ^{af}	1120V2-21-07	1120V2-21-08	1120V2-27-01	1120V2-27-01	1120V2-28-01	1120V2-34-01	1120V2-34-02	1120V2-38-03	1120V2-39-01	1120V2-39-04	1120V2-39-05		
				(0-5)	(0-5)	(0-5)	(5-6)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)
				7/30/2019	7/30/2019	8/5/2019	8/5/2019	8/5/2019	8/5/2019	8/5/2019	8/2/2019	6/5/2019	8/2/2019	8/2/2019		
				1120V2-21	1120V2-27	1120V2-28	1120V2-34	1120V2-38	1120V2-39							
Parameter																
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.1	8.08	8.62	8.9	8.22	8.95	8.92	8.8	8.76	8.45	8.95		
VOCs, mg/kg				None Detected												
SVOCS, mg/kg																
Benzo(a)anthracene	0.9 / 1.1 / 1.8	170	0.9	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	0.16	<0.09	<0.09		
Benzo(b)fluoranthene	0.9 / 1.5 / 2.1	170	0.9	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
Benzo(k)fluoranthene	9	1700	9	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
Carbazole	0.6	6200	32	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
Dibenz(a,h)anthracene	0.09 / 0.2 / 0.42	17	0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09		
Indeno(1,2,3-cd)pyrene	0.9 / 0.9 / 1.6	170	0.9	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33		
Total Metals, mg/kg																
Arsenic	11.3 / 13	61	13	7.5	6.1	5.4	2.6	3.3	13.0	3.7	11.7	5.8	8	6.1		
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Chromium	21	690	230	13.7	5.6	12.1	9.1	12.1	15.7	11.1	15.6	10.3	11.9	9.8		
Cobalt	20	12,000	4700	7.2	4.8	7.4	4.5	7.2	9.2	5.1	7.4	6.2	9.3	10.1		
Iron	15,000 / 15,900	---	---	20300	13300	17800	12200	16100	24900	14900	26500	15000	19700	18600		
Lead	107	700	400	12.4	11.3	17.1	10.4	8	38.9	24.9	20.6	16.8	13.4	17		
Manganese	630 / 636	4,100	1600	468	578	572	372	514	516	368	104	385	477	582		
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Zinc	5,100	61,000	23000	67.9	47.8	63.5	52.1	35.9	158	1080	47.3	59.9	62.5	67		
TCLP Metals, mg/L		Class I Groundwater ^{af}														
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Chromium	0.1			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Iron	5			<0.1	<0.1	0.4	<0.1	<0.1	0.1	1.1	<0.1	<0.1	0.4	0.5		
Lead	0.0075			<0.005	<0.005	0.008	0.007	<0.005	0.028	0.022	<0.005	<0.005	0.005	<0.005		
Manganese	0.15			4.1	3.3	8.3	5.6	6.2	5	6.9	<0.1	2.2	11.9	13.1		
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	0.013	0.01		
Zinc	5			<0.1	<0.1	<0.1	<0.1	<0.1	0.8	6.8	<0.1	<0.1	0.1	<0.1		
SPLP Metals, mg/L		Class I Groundwater ^{af}														
Arsenic	0.05			0.016	<0.010	<0.010	<0.010	<0.010	0.016	<0.010	0.015	<0.010	<0.010	0.012		
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Chromium	0.1			0.051	0.015	0.027	0.022	0.02	0.063	0.025	0.083	0.051	0.016	0.064		
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Iron	5			66.8	15.1	23.7	25.3	17.7	76.6	25.3	80.3	52.8	10.6	67.9		
Lead	0.0075			0.027	0.025	0.006	0.033	0.013	0.182	0.042	0.046	0.152	<0.005	0.034		
Manganese	0.15			0.7	0.2	0.3	0.2	0.3	0.9	0.3	0.2	0.4	0.2	1.1		
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		
Zinc	5			0.2	<0.1	<0.1	0.1	<0.1	0.7	1.7	0.2	0.3	<0.1	0.2		

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

^{af} 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.

^{af} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{af} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{af} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Shaded indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	78.76		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.5	1.0	mg/kg	
Barium	37.5	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	30,700	50	mg/kg	
Chromium	13.7	0.5	mg/kg	
Cobalt	7.2	0.5	mg/kg	
Copper	22.8	0.5	mg/kg	
Iron	20,300	5.0	mg/kg	
Lead	12.4	0.5	mg/kg	
Magnesium	17,700	50	mg/kg	
Manganese	468	0.5	mg/kg	
Nickel	18.1	0.5	mg/kg	
Potassium	693	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,120	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/01/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/01/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.3	1.0	mg/kg	
Zinc	67.9	1.0	mg/kg	
Total Mercury Analysis Date: 08/01/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/05/19 11:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.10		Units	
TCLP Extraction Analysis Date: 08/01/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/05/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/05/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/02/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
Arsenic	0.016	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	0.051	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.062	0.005	mg/L	
Iron	66.8	0.1	mg/L	
Lead	0.027	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-07 (0-5)
Sample No: 19-4573-006

Date Collected: 07/30/19
Time Collected: 10:21
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 105	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	93.70		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 10:24

Sample ID: 1120V2-21-08 (0-5)

Date Received: 07/30/19

Sample No: 19-4573-007

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.1	1.0	mg/kg	
Barium	14.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	169,000	50	mg/kg	
Chromium	5.6	0.5	mg/kg	
Cobalt	4.8	0.5	mg/kg	
Copper	13.7	0.5	mg/kg	
Iron	13,300	5.0	mg/kg	
Lead	11.3	0.5	mg/kg	
Magnesium	81,700	50	mg/kg	
Manganese	578	0.5	mg/kg	
Nickel	12.7	0.5	mg/kg	
Potassium	807	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	919	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/01/19		Preparation Method 3050B		
		Preparation Date: 08/01/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.6	1.0	mg/kg	
Zinc	47.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/05/19 11:00				
pH @ 25°C, 1:2	8.08		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/01/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/05/19				Preparation Date: 08/05/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.015	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.016	0.005	mg/L	
Iron	15.1	0.1	mg/L	
Lead	0.025	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-08 (0-5)
Sample No: 19-4573-007

Date Collected: 07/30/19
Time Collected: 10:24
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 95.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 73.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	84.15		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	35.5	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	61,000	50	mg/kg	
Chromium	12.1	0.5	mg/kg	
Cobalt	7.4	0.5	mg/kg	
Copper	23.0	0.5	mg/kg	
Iron	17,800	5.0	mg/kg	
Lead	17.1	0.5	mg/kg	
Magnesium	33,000	50	mg/kg	
Manganese	572	0.5	mg/kg	
Nickel	19.6	0.5	mg/kg	
Potassium	1,160	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	931	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/09/19		Preparation Method 3050B		
		Preparation Date: 08/08/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.0	1.0	mg/kg	
Zinc	63.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/08/19 13:00				
pH @ 25°C, 1:2	8.62		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/09/19				Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	0.008	0.005	mg/L	
Manganese	8.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	0.027	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.019	0.005	mg/L	
Iron	23.7	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (0-5)
Sample No: 19-4718-011

Date Collected: 08/05/19
Time Collected: 11:33
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 98	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 75.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 64.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 91.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 78.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 73	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	88.65		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.6	1.0	mg/kg	
Barium	26.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	43,100	50	mg/kg	
Chromium	9.1	0.5	mg/kg	
Cobalt	4.5	0.5	mg/kg	
Copper	13.9	0.5	mg/kg	
Iron	12,200	5.0	mg/kg	
Lead	10.4	0.5	mg/kg	
Magnesium	22,800	50	mg/kg	
Manganese	372	0.5	mg/kg	
Nickel	11.8	0.5	mg/kg	
Potassium	497	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	718	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/09/19				Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.7	1.0	mg/kg	
Zinc	52.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/08/19 13:00				
pH @ 25°C, 1:2	8.90		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/09/19				Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	0.022	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.048	0.005	mg/L	
Iron	25.3	0.1	mg/L	
Lead	0.033	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-27-01 (5-6)
Sample No: 19-4718-012

Date Collected: 08/05/19
Time Collected: 11:34
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 106	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 102.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 76.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 89.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 77.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 71	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	89.24		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/13/19				
Preparation Date: 08/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/13/19		Preparation Date: 08/11/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/13/19				Preparation Date: 08/11/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.3	1.0	mg/kg	
Barium	34.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	59,100	50	mg/kg	
Chromium	12.1	0.5	mg/kg	
Cobalt	7.2	0.5	mg/kg	
Copper	15.1	0.5	mg/kg	
Iron	16,100	5.0	mg/kg	
Lead	8.0	0.5	mg/kg	
Magnesium	28,300	50	mg/kg	
Manganese	514	0.5	mg/kg	
Nickel	19.2	0.5	mg/kg	
Potassium	1,840	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	864	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/09/19				Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	16.5	1.0	mg/kg	
Zinc	35.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/13/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/09/19 13:00				
pH @ 25°C, 1:2	8.22		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/12/19				Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	6.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.012	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: 08/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/12/19		Preparation Date: 08/08/19		
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	0.020	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.024	0.005	mg/L	
Iron	17.7	0.1	mg/L	
Lead	0.013	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-28-01 (0-4)
Sample No: 19-4718-017

Date Collected: 08/05/19
Time Collected: 11:30
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 65.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	85.50		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/13/19				
Preparation Date: 08/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/13/19		Preparation Date: 08/11/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/13/19				Preparation Date: 08/11/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	13.0	1.0	mg/kg	
Barium	49.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	60,400	50	mg/kg	
Chromium	15.7	0.5	mg/kg	
Cobalt	9.2	0.5	mg/kg	
Copper	28.0	0.5	mg/kg	
Iron	24,900	5.0	mg/kg	
Lead	38.9	0.5	mg/kg	
Magnesium	32,900	50	mg/kg	
Manganese	516	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	1,160	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,010	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/09/19	Method: 6010C	Preparation Method 3050B Preparation Date: 08/08/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.0	1.0	mg/kg	
Zinc	158	1.0	mg/kg	
Total Mercury Analysis Date: 08/13/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/09/19 13:00	Method: 9045D 2004			
pH @ 25°C, 1:2	8.95		Units	
TCLP Extraction Analysis Date: 08/07/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 08/09/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.028	0.005	mg/L	
Manganese	5.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.8	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/12/19		Preparation Date: 08/08/19		
Arsenic	0.016	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	0.063	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.105	0.005	mg/L	
Iron	76.6	0.1	mg/L	
Lead	0.182	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.7	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-01 (0-4)
Sample No: 19-4718-020

Date Collected: 08/05/19
Time Collected: 10:48
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 66.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	90.37		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/13/19				
Preparation Date: 08/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/13/19		Preparation Date: 08/11/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/13/19				Preparation Date: 08/11/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/09/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.7	1.0	mg/kg	
Barium	34.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	42,500	50	mg/kg	
Chromium	11.1	0.5	mg/kg	
Cobalt	5.1	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	14,900	5.0	mg/kg	
Lead	24.9	0.5	mg/kg	
Magnesium	23,700	50	mg/kg	
Manganese	368	0.5	mg/kg	
Nickel	13.9	0.5	mg/kg	
Potassium	764	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,320	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/09/19				Preparation Date: 08/09/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.6	1.0	mg/kg	
Zinc	1,080	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/13/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/09/19 13:00				
pH @ 25°C, 1:2	8.92		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/12/19				Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.1	0.1	mg/L	
Lead	0.022	0.005	mg/L	
Manganese	6.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	6.8	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/12/19		Preparation Date: 08/08/19		
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	0.025	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.034	0.005	mg/L	
Iron	25.3	0.1	mg/L	
Lead	0.042	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	1.7	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-34-02 (0-4)
Sample No: 19-4718-021

Date Collected: 08/05/19
Time Collected: 10:56
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 100.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 95.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 85.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-03 (0-4)
Sample No: 19-4691-023

Date Collected: 08/02/19
Time Collected: 11:47
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	82.62		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:47

Sample ID: 1120V2-38-03 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-023

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-03 (0-4)
Sample No: 19-4691-023

Date Collected: 08/02/19
Time Collected: 11:47
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-03 (0-4)
Sample No: 19-4691-023

Date Collected: 08/02/19
Time Collected: 11:47
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	11.7	1.0	mg/kg	
Barium	32.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	3,150	50	mg/kg	
Chromium	15.6	0.5	mg/kg	
Cobalt	7.4	0.5	mg/kg	
Copper	33.1	0.5	mg/kg	
Iron	26,500	5.0	mg/kg	
Lead	20.6	0.5	mg/kg	
Magnesium	3,500	50	mg/kg	
Manganese	104	0.5	mg/kg	
Nickel	22.9	0.5	mg/kg	
Potassium	672	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,460	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-03 (0-4)
Sample No: 19-4691-023

Date Collected: 08/02/19
Time Collected: 11:47
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.1	1.0	mg/kg	
Zinc	47.3	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.80		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:47

Sample ID: 1120V2-38-03 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-023

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
Arsenic	0.015	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	0.083	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.060	0.005	mg/L	
Iron	80.3	0.1	mg/L	
Lead	0.046	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-03 (0-4)
Sample No: 19-4691-023

Date Collected: 08/02/19
Time Collected: 11:47
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 57.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 49.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64	35 - 105	
8270C	Phenol-d5 (surr)	%R: 58.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:12

Sample ID: 1120V2-39-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-001

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
---------	--------	------	-------	-------

Solids, Total **Method: 2540B**

Analysis Date: 06/07/19

Total Solids	88.15		%	
--------------	-------	--	---	--

Volatile Organic Compounds **Method: 5035A/8260B**

Analysis Date: 06/10/19

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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:12

Sample ID: 1120V2-39-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-001

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	160	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-39-01 (0-4)
Sample No: 19-3476-001

Date Collected: 06/05/19
Time Collected: 15:12
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-39-01 (0-4)
Sample No: 19-3476-001

Date Collected: 06/05/19
Time Collected: 15:12
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.8	1.0	mg/kg	
Barium	23.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	31,800	50	mg/kg	
Chromium	10.3	0.5	mg/kg	
Cobalt	6.2	0.5	mg/kg	
Copper	17.7	0.5	mg/kg	
Iron	15,000	5.0	mg/kg	
Lead	16.8	0.5	mg/kg	
Magnesium	19,000	50	mg/kg	
Manganese	385	0.5	mg/kg	
Nickel	14.7	0.5	mg/kg	
Potassium	810	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	331	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:12

Sample ID: 1120V2-39-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-001

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.7	1.0	mg/kg	
Zinc	59.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 6:45				
pH @ 25°C, 1:2	8.76		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/13/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/11/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:12

Sample ID: 1120V2-39-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-001

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.051	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.061	0.005	mg/L	
Iron	52.8	0.1	mg/L	
Lead	0.152	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-39-01 (0-4)
Sample No: 19-3476-001

Date Collected: 06/05/19
Time Collected: 15:12
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 97.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 81.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 69.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 87.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 79.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 71.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	86.57		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/09/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/09/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/09/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.0	1.0	mg/kg	
Barium	30.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	66,900	50	mg/kg	
Chromium	11.9	0.5	mg/kg	
Cobalt	9.3	0.5	mg/kg	
Copper	28.7	0.5	mg/kg	
Iron	19,700	5.0	mg/kg	
Lead	13.4	0.5	mg/kg	
Magnesium	38,400	50	mg/kg	
Manganese	477	0.5	mg/kg	
Nickel	19.7	0.5	mg/kg	
Potassium	1,030	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,310	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C	Preparation Method 3050B Preparation Date: 08/07/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.5	1.0	mg/kg	
Zinc	62.5	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.45		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C	Preparation Method 3010A Preparation Date: 08/07/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	0.005	0.005	mg/L	
Manganese	11.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.013	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 12:00

Sample ID: 1120V2-39-04 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-028

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.016	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.008	0.005	mg/L	
Iron	10.6	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-04 (0-4)
Sample No: 19-4691-028

Date Collected: 08/02/19
Time Collected: 12:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 106.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	88.36		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	5.1	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/09/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/09/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/09/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/08/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.1	1.0	mg/kg	
Barium	22.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	55,100	50	mg/kg	
Chromium	9.8	0.5	mg/kg	
Cobalt	10.1	0.5	mg/kg	
Copper	36.5	0.5	mg/kg	
Iron	18,600	5.0	mg/kg	
Lead	17.0	0.5	mg/kg	
Magnesium	31,400	50	mg/kg	
Manganese	582	0.5	mg/kg	
Nickel	26.1	0.5	mg/kg	
Potassium	645	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	683	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/08/19				Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.8	1.0	mg/kg	
Zinc	67.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.95		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19				Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	13.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 12:07

Sample ID: 1120V2-39-05 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-029

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
Arsenic	0.012	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	0.064	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.086	0.005	mg/L	
Iron	67.9	0.1	mg/L	
Lead	0.034	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-39-05 (0-4)
Sample No: 19-4691-029

Date Collected: 08/02/19
Time Collected: 12:07
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 96.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66.5	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-9 (312 N. Wolf), 1120V2-17 (223-249 N. Wolf), 1120V2-21 (60-180 N. Wolf), 1120V2-23 (125 N. Wolf)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 930

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.

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 Fig 4-1.6 in the PSI Rpt and borings 1120V2-9-02 (Wolf Road Sta. 184+00, 20 Left), 17-03 (Wolf Road Sta. 179+80, 20 Right), 21-01 (Wolf Road Sta. 175+00, 20 Left), 21-03 (Wolf Road Sta. 173+00, 20 Left), 21-04 (Wolf Road Sta. 172+00, 20 Left), and 23-01 (Wolf Road Sta. 172+20, 20 Right).

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. reports #19-4573, 19-4718, 19-4691, and 19-3476. 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.

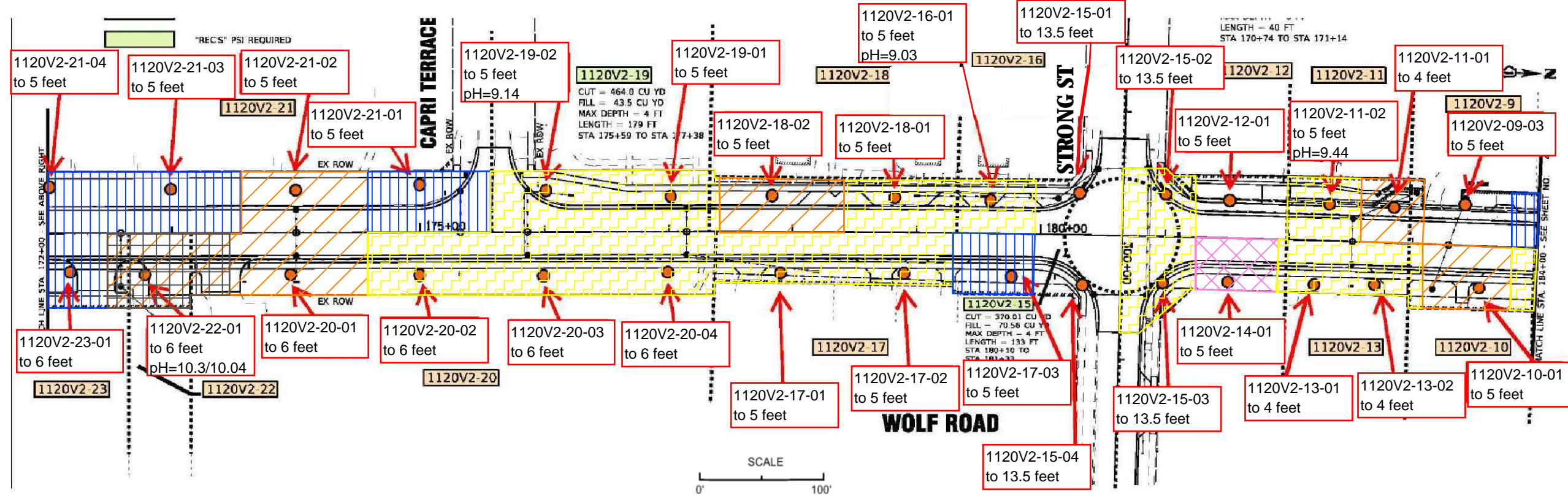
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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:

[Handwritten Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19 Date:
[Professional Seal: LICENSED PROFESSIONAL GEOLOGIST, JEREMY J. REYNOLDS, 196-001170, ILLINOIS]



LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON-SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CDDIUSFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CDDIUSFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CDDIUSFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL. CANNOT BE TAKEN TO A CDDIUSFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

**FIGURE 4-1.6 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 7		
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 7 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

LPC-663 Results - Figure 4-1.6
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-09-02	1120V2-17-03	1120V2-21-01	1120V2-21-03	1120V2-21-04	1120V2-23-01	1120V2-23-01
				(0-5) 5/6/2019 1120V2-09	(0-5) 4/25/2019 1120V2-17	(0-5) 5/6/2019	(0-5) 7/30/2019	(0-5) 7/30/2019	(0-5) 8/5/2019	(5-6) 8/5/2019 1120V2-23
Parameter										
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.4	8.73	8.35	8.48	8.95	8.76	8.03
VOCs, mg/kg				None Detected						
SVOCs, mg/kg				None Detected						
Total Metals, mg/kg										
Arsenic	11.3 / 13	61	13	4.2	4.9	5	6	4.4	6.3	12.6
Beryllium	22	410	160	0.7	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Chromium	21	690	230	16.7	9.7	31	13.5	9.4	11.5	6.9
Iron	15,000 / 15,900	---	---	18800	14000	19800	17300	14600	18200	18400
Lead	107	700	400	17.1	51.5	19.8	12	11.8	13.6	11.6
Manganese	630 / 636	4,100	1600	324	449	272	453	501	571	742
Mercury	0.89	0.1	10	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	17.5	15.7	19	15.3	14.8	19.5	17.5
TCLP Metals, mg/L		Class I Groundwater ^{d/}								
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium		0.1		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Iron		5		<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Lead		0.0075		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese		0.15		0.6	4.8	0.2	1.1	2.9	0.9	3.1
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel		0.1		<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPLP Metals, mg/L		Class I Groundwater ^{d/}								
Arsenic		0.05		<0.010	0.048	0.015	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<0.004	0.005	<0.004	<0.004	<0.004	<0.004	<0.004
Chromium		0.1		0.029	0.146	0.119	0.076	0.042	0.007	<0.005
Iron		5		21.5	134	74	68.3	44.8	7.7	1.3
Lead		0.0075		0.011	0.064	0.05	0.02	0.037	0.006	<0.005
Manganese		0.15		0.2	0.9	0.5	0.3	0.5	<0.1	<0.1
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel		0.1		<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1

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

^{a/} Soil reference concentrations from MAC table. Background values for MSA counties are included as applicable.

Organic Soil Reference Concentrations (XX.XX / XX.XX / XX.XX) Include the Most Stringent Values from the MAC Table / The Chicago Corporate Limit / and The MSA County Excluding Chicago Values From the MAC Table.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	76.12		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				
Preparation Date: 05/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/09/19		Preparation Date: 05/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				Preparation Date: 05/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	89.5	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,500	50	mg/kg	
Chromium	16.7	0.5	mg/kg	
Cobalt	6.7	0.5	mg/kg	
Copper	24.4	0.5	mg/kg	
Iron	18,800	5.0	mg/kg	
Lead	17.1	0.5	mg/kg	
Magnesium	14,600	50	mg/kg	
Manganese	324	0.5	mg/kg	
Nickel	17.5	0.5	mg/kg	
Potassium	763	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	3,850	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/08/19		Method: 6010C	Preparation Method 3050B Preparation Date: 05/08/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	31.2	1.0	mg/kg	
Zinc	68.0	1.0	mg/kg	
Total Mercury Analysis Date: 05/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 05/13/19		Method: 9045D 2004		
pH @ 25°C, 1:2	7.40		Units	
TCLP Extraction Analysis Date: 05/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/09/19		Method: 6010C	Preparation Method 3010A Preparation Date: 05/08/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/09/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.029	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.024	0.005	mg/L	
Iron	21.5	0.1	mg/L	
Lead	0.011	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 95.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 91.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 71.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 61.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	87.79		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/01/19				
Preparation Date: 04/29/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/01/19		Preparation Date: 04/29/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/01/19				Preparation Date: 04/29/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	29.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	44,500	50	mg/kg	
Chromium	9.7	0.5	mg/kg	
Cobalt	6.0	0.5	mg/kg	
Copper	24.6	0.5	mg/kg	
Iron	14,000	5.0	mg/kg	
Lead	51.5	0.5	mg/kg	
Magnesium	25,600	50	mg/kg	
Manganese	449	0.5	mg/kg	
Nickel	15.7	0.5	mg/kg	
Potassium	810	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	167	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 05/01/19		Preparation Method 3050B		
		Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	18.6	1.0	mg/kg	
Zinc	82.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.73		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 05/01/19		Preparation Method 3010A		
		Preparation Date: 04/30/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.8	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/02/19		Preparation Date: 04/30/19		
Arsenic	0.048	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.146	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.179	0.005	mg/L	
Iron	134	0.1	mg/L	
Lead	0.064	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-17-03 (0-5)
Sample No: 19-2374-026

Date Collected: 04/25/19
Time Collected: 12:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 83.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 69	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	84.64		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/10/19				
Preparation Date: 05/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/10/19		Preparation Date: 05/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



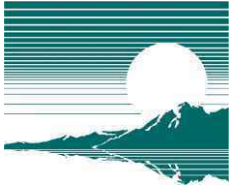
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/10/19				Preparation Date: 05/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/09/19				Preparation Date: 05/09/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.0	1.0	mg/kg	
Barium	73.2	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	11,200	50	mg/kg	
Chromium	31.0	0.5	mg/kg	
Cobalt	7.0	0.5	mg/kg	
Copper	22.4	0.5	mg/kg	
Iron	19,800	5.0	mg/kg	
Lead	19.8	0.5	mg/kg	
Magnesium	6,730	50	mg/kg	
Manganese	272	0.5	mg/kg	
Nickel	19.0	0.5	mg/kg	
Potassium	988	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	694	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/09/19		Method: 6010C	Preparation Method 3050B Preparation Date: 05/09/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.3	1.0	mg/kg	
Zinc	90.2	1.0	mg/kg	
Total Mercury Analysis Date: 05/09/19		Method: 7471B		
Mercury	0.17	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 05/13/19		Method: 9045D 2004		
pH @ 25°C, 1:2	8.35		Units	
TCLP Extraction Analysis Date: 05/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/09/19		Method: 6010C	Preparation Method 3010A Preparation Date: 05/08/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/09/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
Arsenic	0.015	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	0.119	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.068	0.005	mg/L	
Iron	74.0	0.1	mg/L	
Lead	0.050	0.005	mg/L	
Manganese	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-21-01 (0-5)
Sample No: 19-2676-014

Date Collected: 05/06/19
Time Collected: 11:42
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 91.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 95.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 89.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 86.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 68.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 50.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 77.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 58.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	79.40		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 10:07

Sample ID: 1120V2-21-03 (0-5)

Date Received: 07/30/19

Sample No: 19-4573-002

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.0	1.0	mg/kg	
Barium	62.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	56,200	50	mg/kg	
Chromium	13.5	0.5	mg/kg	
Cobalt	6.5	0.5	mg/kg	
Copper	15.9	0.5	mg/kg	
Iron	17,300	5.0	mg/kg	
Lead	12.0	0.5	mg/kg	
Magnesium	32,600	50	mg/kg	
Manganese	453	0.5	mg/kg	
Nickel	15.3	0.5	mg/kg	
Potassium	1,000	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	4,820	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/01/19		Preparation Method 3050B		
		Preparation Date: 08/01/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.8	1.0	mg/kg	
Zinc	50.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/05/19 11:00				
pH @ 25°C, 1:2	8.48		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/01/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 08/05/19		Preparation Method 3010A		
		Preparation Date: 08/05/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.076	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.043	0.005	mg/L	
Iron	68.3	0.1	mg/L	
Lead	0.020	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-03 (0-5)
Sample No: 19-4573-002

Date Collected: 07/30/19
Time Collected: 10:07
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 105.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 52.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 10:10

Sample ID: 1120V2-21-04 (0-5)

Date Received: 07/30/19

Sample No: 19-4573-003

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	87.86		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.4	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	82,100	50	mg/kg	
Chromium	9.4	0.5	mg/kg	
Cobalt	5.0	0.5	mg/kg	
Copper	16.6	0.5	mg/kg	
Iron	14,600	5.0	mg/kg	
Lead	11.8	0.5	mg/kg	
Magnesium	45,300	50	mg/kg	
Manganese	501	0.5	mg/kg	
Nickel	14.8	0.5	mg/kg	
Potassium	819	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,740	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/01/19				Preparation Date: 08/01/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.5	1.0	mg/kg	
Zinc	46.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/05/19 11:00				
pH @ 25°C, 1:2	8.95		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/01/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/05/19				Preparation Date: 08/05/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.042	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.058	0.005	mg/L	
Iron	44.8	0.1	mg/L	
Lead	0.037	0.005	mg/L	
Manganese	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-04 (0-5)
Sample No: 19-4573-003

Date Collected: 07/30/19
Time Collected: 10:10
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 100.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 97.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 74.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 73.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	87.54		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/08/19				
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	



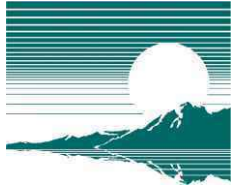
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/08/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.3	1.0	mg/kg	
Barium	30.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	65,600	50	mg/kg	
Chromium	11.5	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	24.4	0.5	mg/kg	
Iron	18,200	5.0	mg/kg	
Lead	13.6	0.5	mg/kg	
Magnesium	34,400	50	mg/kg	
Manganese	571	0.5	mg/kg	
Nickel	19.5	0.5	mg/kg	
Potassium	809	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	814	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/09/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.5	1.0	mg/kg	
Zinc	78.5	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/08/19 13:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.76		Units	
TCLP Extraction Analysis Date: 08/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/09/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.012	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/12/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.013	0.005	mg/L	
Iron	7.7	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (0-5)
Sample No: 19-4718-003

Date Collected: 08/05/19
Time Collected: 12:08
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 92.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 75.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 52.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 92.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 73.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	86.00		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/08/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	12.6	1.0	mg/kg	
Barium	15.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	132,000	50	mg/kg	
Chromium	6.9	0.5	mg/kg	
Cobalt	6.6	0.5	mg/kg	
Copper	29.0	0.5	mg/kg	
Iron	18,400	5.0	mg/kg	
Lead	11.6	0.5	mg/kg	
Magnesium	63,400	50	mg/kg	
Manganese	742	0.5	mg/kg	
Nickel	17.5	0.5	mg/kg	
Potassium	711	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	556	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/09/19		Method: 6010C	Preparation Method 3050B Preparation Date: 08/08/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.4	1.0	mg/kg	
Zinc	194	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/08/19 13:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.03		Units	
TCLP Extraction Analysis Date: 08/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/09/19		Method: 6010C	Preparation Method 3010A Preparation Date: 08/09/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.012	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/12/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	< 0.005	0.005	mg/L	
Iron	1.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-23-01 (5-6)
Sample No: 19-4718-004

Date Collected: 08/05/19
Time Collected: 12:09
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 103.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 78.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 98.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66.2	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street): 1120V2-01(700 N. Wolf Rd), 1120V2-02(501-565 N. Wolf Rd), 1120V2-03(300 block N. Wolf Rd) 1120V2-03(300 block N. Wolf Rd), 1120V2-04(Wolf Rd and Legacy Lane), 1120V2-05(411-415 N. Wolf Rd), 1120V2-08(345 N. Wolf Rd), 1120V2-09(312 N. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

EPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 2,000

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.

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 Fig 4-1.7 in the Final PSI Rpt and borings 1120V2-01-02(Wolf Rd Sta 199+00,30 Lt), 01-04(Wolf Rd Sta 197+00,35 Lt), 02-01(Wolf Rd Sta.194+80,34 Rt), 02-04(Wolf Rd Sta.196+50,34 Rt), 02-06(Wolf Rd Sta.197+50,40 Rt), 03-02(Wolf Rd Sta.195+00,35 Lt), 03-03(Wolf Rd Sta.194+00,35 Lt), 03-05(Wolf Rd Sta.192+15,35 Lt), 03-06(Wolf Rd Sta.191+00,30 Lt), 03-07(Wolf Rd Sta 190+00,30 Lt), 03-08(Wolf Rd Sta.189+00,30 Lt), 04-01(Wolf Rd Sta 191+00,25 Rt), 04-03(Wolf Rd Sta.193+00,30 Rt), 04-04(Wolf Rd Sta 194+00,35 Rt), 05-01(Wolf Rd Sta.187+25,20 Rt), 05-02(Wolf Rd Sta.188+95.20 Rt), 05-03(Wolf Rd Sta 189+50,20 Rt), 05-04(Wolf Rd Sta 189+00,20 Rt), 05-06(Wolf Rd Sta.190+50,25 Rt), 08-03(Wolf Rd Sta.185+20,20 Rt), 09-02(Wolf Rd Sta.184+00,20 Lt)

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. reports #19-2374, 19-2676, and #19-2555. 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:

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	73.26		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 05/02/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	621	330	ug/kg	
Benzo(a)pyrene	543	90	ug/kg	
Benzo(b)fluoranthene	592	330	ug/kg	
Benzo(k)fluoranthene	622	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	679	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 05/02/19		
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	1,360	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	618	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,500	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 05/06/19		Preparation Method 3540C		
Preparation Date: 05/02/19				
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3050B		
Preparation Date: 05/03/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	91.7	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,510	50	mg/kg	
Chromium	13.7	0.5	mg/kg	
Cobalt	10.4	0.5	mg/kg	
Copper	19.5	0.5	mg/kg	
Iron	19,600	5.0	mg/kg	
Lead	29.1	0.5	mg/kg	
Magnesium	3,570	50	mg/kg	
Manganese	857	0.5	mg/kg	
Nickel	18.2	0.5	mg/kg	
Potassium	831	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	755	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.2	1.0	mg/kg	
Zinc	64.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	0.06	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.41		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.5	0.1	mg/L	
Lead	0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.034	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.028	0.005	mg/L	
Iron	35.2	0.1	mg/L	
Lead	0.011	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-02 (0-1)
Sample No: 19-2555-002

Date Collected: 04/30/19
Time Collected: 9:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
Method	Analyte	QC Result		Low	High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	96.1	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	98.5	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	90.3	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R:	89.7	59	131
8270C	2-Fluorobiphenyl (Surr)	%R:	71.8	45	112
8270C	2-Fluorophenol (Surr)	%R:	60.5	41	84
8270C	d14-Terphenyl (Surr)	%R:	105.4	56	120
8270C	d5-Nitrobenzene (Surr)	%R:	75.2	35	105
8270C	Phenol-d5 (surr)	%R:	70.2	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	86.30		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	5.8	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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	622	330	ug/kg	
Benzo(a)pyrene	685	90	ug/kg	
Benzo(b)fluoranthene	707	330	ug/kg	
Benzo(k)fluoranthene	596	330	ug/kg	
Benzo(ghi)perylene	453	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	740	330	ug/kg	
Dibenzo(a,h)anthracene	108	90	ug/kg	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds				
Analysis Date: 05/07/19				
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	1,260	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	495	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	401	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,070	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	73.1	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	16,400	50	mg/kg	
Chromium	17.1	0.5	mg/kg	
Cobalt	8.6	0.5	mg/kg	
Copper	20.6	0.5	mg/kg	
Iron	18,900	5.0	mg/kg	
Lead	36.4	0.5	mg/kg	
Magnesium	10,400	50	mg/kg	
Manganese	521	0.5	mg/kg	
Nickel	18.9	0.5	mg/kg	
Potassium	1,440	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	302	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.5	1.0	mg/kg	
Zinc	77.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.18		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	0.021	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.016	0.005	mg/L	
Iron	17.9	0.1	mg/L	
Lead	0.018	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-04 (0-1)
Sample No: 19-2555-004

Date Collected: 04/30/19
Time Collected: 9:17
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

<i>Sample QC Summary: Surrogate Recovery</i>		<i>%R Limits</i>	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>Low High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R 97.6	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R 97.6	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R 87.8	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R 98	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R 75.9	45 - 112
8270C	2-Fluorophenol (Surr)	%R 62.6	41 - 84
8270C	d14-Terphenyl (Surr)	%R 79.2	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R 75.2	35 - 105
8270C	Phenol-d5 (surr)	%R 73.2	50 - 100



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/26/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 9:45

Sample ID: 1120V2-02-01 (0-5)

Date Received: 04/26/19

Sample No: 19-2374-038

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	85.39		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-01 (0-5)
Sample No: 19-2374-038

Date Collected: 04/26/19
Time Collected: 9:45
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/03/19				
Preparation Date: 04/30/19				
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	163	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	698	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-01 (0-5)
Sample No: 19-2374-038

Date Collected: 04/26/19
Time Collected: 9:45
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/03/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	351	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-01 (0-5)
Sample No: 19-2374-038

Date Collected: 04/26/19
Time Collected: 9:45
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/03/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.8	1.0	mg/kg	
Barium	76.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	59,500	50	mg/kg	
Chromium	19.1	0.5	mg/kg	
Cobalt	8.7	0.5	mg/kg	
Copper	203	0.5	mg/kg	
Iron	22,400	5.0	mg/kg	
Lead	34.9	0.5	mg/kg	
Magnesium	31,200	50	mg/kg	
Manganese	515	0.5	mg/kg	
Nickel	21.6	0.5	mg/kg	
Potassium	1,220	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	259	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-01 (0-5)
Sample No: 19-2374-038

Date Collected: 04/26/19
Time Collected: 9:45
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/01/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	30.7	1.0	mg/kg	
Zinc	106	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.23		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/03/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/30/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/01/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/26/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 9:45

Sample ID: 1120V2-02-01 (0-5)

Date Received: 04/26/19

Sample No: 19-2374-038

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/02/19		Preparation Date: 04/30/19		
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	0.021	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.200	0.005	mg/L	
Iron	21.6	0.1	mg/L	
Lead	0.020	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-01 (0-5)
Sample No: 19-2374-038

Date Collected: 04/26/19
Time Collected: 9:45
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 90.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 95.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 79.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	85.37		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
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	9.1	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 04/30/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	437	330	ug/kg	
Benzo(a)pyrene	472	90	ug/kg	
Benzo(b)fluoranthene	390	330	ug/kg	
Benzo(k)fluoranthene	617	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	553	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	1,030	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	337	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	352	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	874	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/30/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.0	1.0	mg/kg	
Barium	63.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	25,500	50	mg/kg	
Chromium	13.4	0.5	mg/kg	
Cobalt	7.7	0.5	mg/kg	
Copper	20.2	0.5	mg/kg	
Iron	18,200	5.0	mg/kg	
Lead	22.9	0.5	mg/kg	
Magnesium	14,700	50	mg/kg	
Manganese	618	0.5	mg/kg	
Nickel	16.8	0.5	mg/kg	
Potassium	820	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	140	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 05/01/19		Preparation Method 3050B		
Preparation Date: 04/30/19				
Thallium	< 1.0	1.0	mg/kg	
Vanadium	25.5	1.0	mg/kg	
Zinc	70.7	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.25		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3010A		
Preparation Date: 04/30/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.014	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	0.039	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.045	0.005	mg/L	
Iron	43.9	0.1	mg/L	
Lead	0.050	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-04 (0-2)
Sample No: 19-2374-042

Date Collected: 04/26/19
Time Collected: 10:03
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 75.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	84.96		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
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	20.3	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/30/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.3	1.0	mg/kg	
Barium	84.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	21,300	50	mg/kg	
Chromium	17.3	0.5	mg/kg	
Cobalt	8.5	0.5	mg/kg	
Copper	57.7	0.5	mg/kg	
Iron	21,300	5.0	mg/kg	
Lead	37.0	0.5	mg/kg	
Magnesium	12,200	50	mg/kg	
Manganese	591	0.5	mg/kg	
Nickel	18.4	0.5	mg/kg	
Potassium	973	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.8	0.2	mg/kg	
Sodium	115	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/01/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/30/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	29.6	1.0	mg/kg	
Zinc	84.1	1.0	mg/kg	
Total Mercury Analysis Date: 05/01/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	7.93		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/03/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/30/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/02/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.027	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.028	0.005	mg/L	
Iron	29.9	0.1	mg/L	
Lead	0.024	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-06 (0-2)
Sample No: 19-2374-044

Date Collected: 04/26/19
Time Collected: 10:10
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 98	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 96.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 74.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 48.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.4	50 - 100	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total	Method: 2540B			
Analysis Date: 05/03/19				
Total Solids	82.56		%	

Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

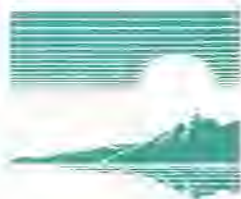
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	102	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,700	50	mg/kg	
Chromium	17.2	0.5	mg/kg	
Cobalt	7.0	0.5	mg/kg	
Copper	257	0.5	mg/kg	
Iron	17,100	5.0	mg/kg	
Lead	69.9	0.5	mg/kg	
Magnesium	15,300	50	mg/kg	
Manganese	273	0.5	mg/kg	
Nickel	18.5	0.5	mg/kg	
Potassium	1,480	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	291	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.2	1.0	mg/kg	
Zinc	86.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	0.07	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.73		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	9.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	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: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.017	0.005	mg/L	
Iron	2.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (0-5)
Sample No: 19-2555-007

Date Collected: 04/30/19
Time Collected: 9:27
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R	93.9	86	117
5035A/8260B	d8-Toluene (Surr)	%R	96.6	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R	85.1	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R	98.4	59	131
8270C	2-Fluorobiphenyl (Surr)	%R	73.8	45	112
8270C	2-Fluorophenol (Surr)	%R	64.6	41	84
8270C	d14-Terphenyl (Surr)	%R	78.2	56	120
8270C	d5-Nitrobenzene (Surr)	%R	56	35	105
8270C	Phenol-d5 (surr)	%R	71.7	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	84.19		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.7	1.0	mg/kg	
Barium	72.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	29,400	50	mg/kg	
Chromium	15.4	0.5	mg/kg	
Cobalt	7.2	0.5	mg/kg	
Copper	44.3	0.5	mg/kg	
Iron	18,400	5.0	mg/kg	
Lead	35.7	0.5	mg/kg	
Magnesium	16,800	50	mg/kg	
Manganese	592	0.5	mg/kg	
Nickel	17.2	0.5	mg/kg	
Potassium	1,090	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	190	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.2	1.0	mg/kg	
Zinc	82.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	7.38		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.030	0.005	mg/L	
Manganese	8.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
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	0.006	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.016	0.005	mg/L	
Iron	5.2	0.1	mg/L	
Lead	0.013	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 04
Sample No: 19-2555-023

Date Collected: 04/30/19
Time Collected: 11:00
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/07/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	108.7	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	99.7	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	88.6	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R:	91	59	131
8270C	2-Fluorobiphenyl (Surr)	%R:	69.3	45	112
8270C	2-Fluorophenol (Surr)	%R:	59.1	41	84
8270C	d14-Terphenyl (Surr)	%R:	74.2	56	120
8270C	d5-Nitrobenzene (Surr)	%R:	61.6	35	105
8270C	Phenol-d5 (surr)	%R:	65.2	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	61.75		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.0	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	21,500	50	mg/kg	
Chromium	18.9	0.5	mg/kg	
Cobalt	7.5	0.5	mg/kg	
Copper	48.2	0.5	mg/kg	
Iron	19,800	5.0	mg/kg	
Lead	67.2	0.5	mg/kg	
Magnesium	11,300	50	mg/kg	
Manganese	362	0.5	mg/kg	
Nickel	22.7	0.5	mg/kg	
Potassium	1,170	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	550	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.5	1.0	mg/kg	
Zinc	151	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.81		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	0.009	0.005	mg/L	
Iron	2.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-02 (5-6)
Sample No: 19-2555-008

Date Collected: 04/30/19
Time Collected: 9:28
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

<i>Sample QC Summary: Surrogate Recovery</i>				<i>%R Limits</i>	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	99.7	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	97.3	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	89.3	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R:	94.9	59	131
8270C	2-Fluorobiphenyl (Surr)	%R:	71.4	45	112
8270C	2-Fluorophenol (Surr)	%R:	60.5	41	84
8270C	d14-Terphenyl (Surr)	%R:	77.9	56	120
8270C	d5-Nitrobenzene (Surr)	%R:	64.7	35	105
8270C	Phenol-d5 (surr)	%R:	69.8	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	82.20		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds	Method: 8270C		Preparation Method 3540C	
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.6	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	46,800	50	mg/kg	
Chromium	17.8	0.5	mg/kg	
Cobalt	8.2	0.5	mg/kg	
Copper	42.1	0.5	mg/kg	
Iron	19,600	5.0	mg/kg	
Lead	31.2	0.5	mg/kg	
Magnesium	27,100	50	mg/kg	
Manganese	664	0.5	mg/kg	
Nickel	21.5	0.5	mg/kg	
Potassium	1,640	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	154	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.6	1.0	mg/kg	
Zinc	72.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.13		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.008	0.005	mg/L	
Iron	2.9	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (0-5)
Sample No: 19-2555-009

Date Collected: 04/30/19
Time Collected: 9:32
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary:		Surrogate Recovery		%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>Low</i>	<i>High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96	86	117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.9	90	110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 84.2	77	120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.6	59	131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.3	45	112	
8270C	2-Fluorophenol (Surr)	%R: 58.9	41	84	
8270C	d14-Terphenyl (Surr)	%R: 80.6	56	120	
8270C	d5-Nitrobenzene (Surr)	%R: 69.6	35	105	
8270C	Phenol-d5 (surr)	%R: 68.3	50	100	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	80.17		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 05/07/19		Preparation Method 3540C		
Preparation Date: 05/02/19				
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3050B		
Preparation Date: 05/03/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	52.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	49,500	50	mg/kg	
Chromium	18.2	0.5	mg/kg	
Cobalt	10.0	0.5	mg/kg	
Copper	36.1	0.5	mg/kg	
Iron	22,200	5.0	mg/kg	
Lead	33.1	0.5	mg/kg	
Magnesium	27,200	50	mg/kg	
Manganese	453	0.5	mg/kg	
Nickel	26.7	0.5	mg/kg	
Potassium	2,000	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	172	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.2	1.0	mg/kg	
Zinc	72.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.90		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.011	0.005	mg/L	
Manganese	3.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction				Complete
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	0.008	0.005	mg/L	
Iron	4.1	0.1	mg/L	
Lead	0.008	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-03 (5-6)
Sample No: 19-2555-010

Date Collected: 04/30/19
Time Collected: 9:33
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
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: 98.7	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 87.2	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R: 84.3	59	131
8270C	2-Fluorobiphenyl (Surr)	%R: 67.1	45	112
8270C	2-Fluorophenol (Surr)	%R: 63.7	41	84
8270C	d14-Terphenyl (Surr)	%R: 75.6	56	120
8270C	d5-Nitrobenzene (Surr)	%R: 67.8	35	105
8270C	Phenol-d5 (surr)	%R: 70.5	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	82.59		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.9	1.0	mg/kg	
Barium	78.9	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	36,500	50	mg/kg	
Chromium	17.7	0.5	mg/kg	
Cobalt	9.5	0.5	mg/kg	
Copper	40.4	0.5	mg/kg	
Iron	24,600	5.0	mg/kg	
Lead	24.0	0.5	mg/kg	
Magnesium	19,400	50	mg/kg	
Manganese	311	0.5	mg/kg	
Nickel	24.4	0.5	mg/kg	
Potassium	1,050	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	158	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	30.5	1.0	mg/kg	
Zinc	76.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.02		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	< 0.005	0.005	mg/L	
Iron	3.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (0-5)
Sample No: 19-2555-013

Date Collected: 04/30/19
Time Collected: 9:45
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery		%R Limits	
Method	Analyte	QC Result	Low High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.8	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 97.3	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 85.8	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 90.3	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 68.9	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 58.5	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 78	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 69.2	35 - 105
8270C	Phenol-d5 (surr)	%R: 66.9	50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	84.85		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	219	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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	573	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	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	420	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	475	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 05/08/19		Preparation Method 3540C		
Preparation Date: 05/06/19				
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3050B		
Preparation Date: 05/03/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.3	1.0	mg/kg	
Barium	51.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	75,500	50	mg/kg	
Chromium	15.5	0.5	mg/kg	
Cobalt	8.4	0.5	mg/kg	
Copper	25.8	0.5	mg/kg	
Iron	23,800	5.0	mg/kg	
Lead	19.3	0.5	mg/kg	
Magnesium	27,600	50	mg/kg	
Manganese	413	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	1,100	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	153	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.8	1.0	mg/kg	
Zinc	69.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.69		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	0.006	0.005	mg/L	
Iron	1.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-05 (5-6)
Sample No: 19-2555-014

Date Collected: 04/30/19
Time Collected: 9:46
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery		%R Limits	
Method	Analyte	QC Result	Low High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.5	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 98.9	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 88.1	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.1	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 66.5	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 61.5	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 79.6	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 65.3	35 - 105
8270C	Phenol-d5 (surr)	%R: 67.8	50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	84.29		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	44.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	56,000	50	mg/kg	
Chromium	10.3	0.5	mg/kg	
Cobalt	5.6	0.5	mg/kg	
Copper	23.8	0.5	mg/kg	
Iron	13,600	5.0	mg/kg	
Lead	48.5	0.5	mg/kg	
Magnesium	32,400	50	mg/kg	
Manganese	485	0.5	mg/kg	
Nickel	14.7	0.5	mg/kg	
Potassium	798	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	704	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.0	1.0	mg/kg	
Zinc	60.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	8.44		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.014	0.005	mg/L	
Iron	6.8	0.1	mg/L	
Lead	0.018	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (0-5)
Sample No: 19-2555-015

Date Collected: 04/30/19
Time Collected: 9:50
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery		%R Limits	
Method	Analyte	QC Result	Low High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.6	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 97.2	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 83.4	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.8	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 63.9	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 52.5	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 74.5	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 63.5	35 - 105
8270C	Phenol-d5 (surr)	%R: 60.9	50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	81.15		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.2	1.0	mg/kg	
Barium	46.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	80,200	50	mg/kg	
Chromium	11.4	0.5	mg/kg	
Cobalt	5.5	0.5	mg/kg	
Copper	39.3	0.5	mg/kg	
Iron	13,800	5.0	mg/kg	
Lead	63.3	0.5	mg/kg	
Magnesium	46,300	50	mg/kg	
Manganese	476	0.5	mg/kg	
Nickel	15.1	0.5	mg/kg	
Potassium	817	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	735	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.6	1.0	mg/kg	
Zinc	61.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	8.57		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.014	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.023	0.005	mg/L	
Iron	11.4	0.1	mg/L	
Lead	0.021	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-06 (5-6)
Sample No: 19-2555-016

Date Collected: 04/30/19
Time Collected: 9:51
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery		%R Limits	
Method	Analyte	QC Result	Low High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.6	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 96.9	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 89.8	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.7	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 60.7	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 53.1	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 73.9	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 62.4	35 - 105
8270C	Phenol-d5 (surr)	%R: 60.5	50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	77.33		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Acetone	< 200	200	ug/kg	
Benzene	23.6	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	42.4	5.0	ug/kg	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

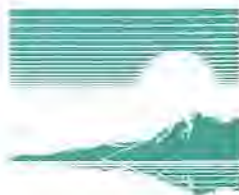
Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	7.7	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	118	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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	11.4	1.0	mg/kg	
Barium	69.0	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,400	50	mg/kg	
Chromium	17.5	0.5	mg/kg	
Cobalt	8.0	0.5	mg/kg	
Copper	28.4	0.5	mg/kg	
Iron	19,300	5.0	mg/kg	
Lead	56.5	0.5	mg/kg	
Magnesium	13,500	50	mg/kg	
Manganese	284	0.5	mg/kg	
Nickel	26.8	0.5	mg/kg	
Potassium	2,140	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	197	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.4	1.0	mg/kg	
Zinc	80.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	7.82		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
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	< 0.005	0.005	mg/L	
Iron	3.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-DUP 05
Sample No: 19-2555-024

Date Collected: 04/30/19
Time Collected: 11:15
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/07/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
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	86	117
5035A/8260B	d8-Toluene (Surr)	%R 132.9	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R 93	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R 92.3	59	131
8270C	2-Fluorobiphenyl (Surr)	%R 67.7	45	112
8270C	2-Fluorophenol (Surr)	%R 59.3	41	84
8270C	d14-Terphenyl (Surr)	%R 79.1	56	120
8270C	d5-Nitrobenzene (Surr)	%R 70.5	35	105
8270C	Phenol-d5 (surr)	%R 67.2	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	88.73		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 05/08/19		Preparation Method 3540C		
Preparation Date: 05/06/19				
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3050B		
Preparation Date: 05/03/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.8	1.0	mg/kg	
Barium	26.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,700	50	mg/kg	
Chromium	9.0	0.5	mg/kg	
Cobalt	5.0	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	17,000	5.0	mg/kg	
Lead	10.3	0.5	mg/kg	
Magnesium	36,700	50	mg/kg	
Manganese	452	0.5	mg/kg	
Nickel	13.8	0.5	mg/kg	
Potassium	588	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	635	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.7	1.0	mg/kg	
Zinc	37.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	8.77		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.018	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.030	0.005	mg/L	
Iron	20.3	0.1	mg/L	
Lead	0.013	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (0-5)
Sample No: 19-2555-017

Date Collected: 04/30/19
Time Collected: 9:58
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
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: 97.4	86	117
5035A/8260B	d8-Toluene (Surr)	%R: 97.3	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 88.6	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R: 90.2	59	131
8270C	2-Fluorobiphenyl (Surr)	%R: 65.1	45	112
8270C	2-Fluorophenol (Surr)	%R: 57.7	41	84
8270C	d14-Terphenyl (Surr)	%R: 74.5	56	120
8270C	d5-Nitrobenzene (Surr)	%R: 63.4	35	105
8270C	Phenol-d5 (surr)	%R: 61.4	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	91.99		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.1	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	34,900	50	mg/kg	
Chromium	17.7	0.5	mg/kg	
Cobalt	7.1	0.5	mg/kg	
Copper	19.5	0.5	mg/kg	
Iron	17,400	5.0	mg/kg	
Lead	10.6	0.5	mg/kg	
Magnesium	22,300	50	mg/kg	
Manganese	196	0.5	mg/kg	
Nickel	21.4	0.5	mg/kg	
Potassium	1,990	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,060	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.7	1.0	mg/kg	
Zinc	63.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	8.93		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	0.009	0.005	mg/L	
Manganese	2.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	0.016	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.202	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.213	0.005	mg/L	
Iron	158	0.1	mg/L	
Lead	0.110	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	0.3	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-07 (5-6)
Sample No: 19-2555-018

Date Collected: 04/30/19
Time Collected: 9:59
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	0.7	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	134.3	*	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R:	96.5		90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	94.3		77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R:	87.8		59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R:	61		45 - 112
8270C	2-Fluorophenol (Surr)	%R:	57.2		41 - 84
8270C	d14-Terphenyl (Surr)	%R:	73		56 - 120
8270C	d5-Nitrobenzene (Surr)	%R:	61.5		35 - 105
8270C	Phenol-d5 (surr)	%R:	61.5		50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	86.36		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds		Method: 8270C	Preparation Method 3540C	
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.8	1.0	mg/kg	
Barium	62.4	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	41,400	50	mg/kg	
Chromium	18.2	0.5	mg/kg	
Cobalt	5.9	0.5	mg/kg	
Copper	68.5	0.5	mg/kg	
Iron	20,400	5.0	mg/kg	
Lead	48.3	0.5	mg/kg	
Magnesium	24,000	50	mg/kg	
Manganese	284	0.5	mg/kg	
Nickel	19.7	0.5	mg/kg	
Potassium	1,350	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	695	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.7	1.0	mg/kg	
Zinc	85.7	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	8.27		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.020	0.005	mg/L	
Manganese	7.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.013	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.119	0.005	mg/L	
Iron	12.0	0.1	mg/L	
Lead	0.026	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (0-5)
Sample No: 19-2555-019

Date Collected: 04/30/19
Time Collected: 10:03
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery		%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>Low High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.2	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 97.8	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 90.3	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 91	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 73	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 57.5	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 77.6	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 69	35 - 105
8270C	Phenol-d5 (surr)	%R: 64.9	50 - 100



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	80.64		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	33.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	74,900	50	mg/kg	
Chromium	12.4	0.5	mg/kg	
Cobalt	4.4	0.5	mg/kg	
Copper	15.6	0.5	mg/kg	
Iron	14,800	5.0	mg/kg	
Lead	9.4	0.5	mg/kg	
Magnesium	44,000	50	mg/kg	
Manganese	354	0.5	mg/kg	
Nickel	13.4	0.5	mg/kg	
Potassium	1,010	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	488	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.7	1.0	mg/kg	
Zinc	38.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	7.98		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19				Preparation Date: 05/06/19
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	0.017	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.012	0.005	mg/L	
Iron	19.2	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-08 (5-6)
Sample No: 19-2555-020

Date Collected: 04/30/19
Time Collected: 10:04
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/07/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	88.3	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	120.7	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	100.3	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R:	88.9	59	131
8270C	2-Fluorobiphenyl (Surr)	%R:	65.2	45	112
8270C	2-Fluorophenol (Surr)	%R:	57	41	84
8270C	d14-Terphenyl (Surr)	%R:	74.6	56	120
8270C	d5-Nitrobenzene (Surr)	%R:	65.4	35	105
8270C	Phenol-d5 (surr)	%R:	63	50	100



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	91.25		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
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: 04/30/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	18.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	107,000	50	mg/kg	
Chromium	9.2	0.5	mg/kg	
Cobalt	4.9	0.5	mg/kg	
Copper	20.6	0.5	mg/kg	
Iron	13,200	5.0	mg/kg	
Lead	16.7	0.5	mg/kg	
Magnesium	61,300	50	mg/kg	
Manganese	461	0.5	mg/kg	
Nickel	13.7	0.5	mg/kg	
Potassium	984	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	309	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3050B		
		Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	14.7	1.0	mg/kg	
Zinc	37.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/29/19 7:00				
pH @ 25°C, 1:2	8.75		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3010A		
		Preparation Date: 04/29/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.020	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.028	0.005	mg/L	
Iron	22.6	0.1	mg/L	
Lead	0.035	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-01 (0-5)
Sample No: 19-2374-001

Date Collected: 04/25/19
Time Collected: 13:33
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 92	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 85.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 109.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 93.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 76.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 100.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 89.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 81.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/25/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 13:51

Sample ID: 1120V2-04-03 (0-5)

Date Received: 04/26/19

Sample No: 19-2374-004

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	84.38		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
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: 04/29/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/29/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	49.9	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	52,400	50	mg/kg	
Chromium	19.1	0.5	mg/kg	
Cobalt	10.7	0.5	mg/kg	
Copper	267	0.5	mg/kg	
Iron	21,800	5.0	mg/kg	
Lead	39.4	0.5	mg/kg	
Magnesium	28,300	50	mg/kg	
Manganese	419	0.5	mg/kg	
Nickel	30.6	0.5	mg/kg	
Potassium	2,720	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	1,510	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C	Preparation Method 3050B	
Analysis Date: 04/30/19			Preparation Date: 04/29/19	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	22.8	1.0	mg/kg	
Zinc	221	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/29/19 7:00				
pH @ 25°C, 1:2	8.76		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C	Preparation Method 3010A	
Analysis Date: 04/30/19			Preparation Date: 04/29/19	
Arsenic	< 0.500	0.010	mg/L	W
Barium	< 50	1.0	mg/L	W
Beryllium	< 50.0	1.0	mg/L	W
Cadmium	< 0.25	0.005	mg/L	W
Chromium	< 0.25	0.005	mg/L	W
Cobalt	< 5.0	0.1	mg/L	W
Copper	205	0.1	mg/L	
Iron	< 5.0	0.1	mg/L	W
Lead	0.985	0.005	mg/L	
Manganese	6.3	0.1	mg/L	
Nickel	< 5.0	0.1	mg/L	W
Selenium	< 0.5	0.010	mg/L	W
Silver	< 0.25	0.005	mg/L	W
Zinc	< 5.0	0.1	mg/L	W
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.038	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.119	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.224	0.005	mg/L	
Iron	131	0.1	mg/L	
Lead	0.172	0.005	mg/L	
Manganese	1.4	0.1	mg/L	
Nickel	0.2	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.005	0.005	mg/L	
Zinc	0.4	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (0-5)
Sample No: 19-2374-004

Date Collected: 04/25/19
Time Collected: 13:51
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 90.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 114.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 90.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 76.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 96.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 88.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 84.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	71.80		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
Acetone	< 200	200	ug/kg	
Benzene	29.7	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	23.2	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 04/30/19				
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	5.2	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/29/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	133	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	0.5	0.5	mg/kg	
Calcium	44,000	50	mg/kg	
Chromium	19.1	0.5	mg/kg	
Cobalt	8.5	0.5	mg/kg	
Copper	27.0	0.5	mg/kg	
Iron	22,300	5.0	mg/kg	
Lead	16.0	0.5	mg/kg	
Magnesium	12,000	50	mg/kg	
Manganese	359	0.5	mg/kg	
Nickel	23.7	0.5	mg/kg	
Potassium	926	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.2	0.2	mg/kg	
Sodium	2,970	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 04/30/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	32.0	1.0	mg/kg	
Zinc	70.7	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.45		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 04/30/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/29/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 04/30/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.085	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.096	0.005	mg/L	
Iron	80.7	0.1	mg/L	
Lead	0.049	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-03 (5-6)
Sample No: 19-2374-005

Date Collected: 04/25/19
Time Collected: 13:54
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 91.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 86.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 110.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 79.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 69.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 89.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 75.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	80.79		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/01/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/01/19				
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: 04/29/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/29/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.7	1.0	mg/kg	
Barium	99.1	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	17,900	50	mg/kg	
Chromium	23.8	0.5	mg/kg	
Cobalt	10.8	0.5	mg/kg	
Copper	28.1	0.5	mg/kg	
Iron	24,300	5.0	mg/kg	
Lead	27.8	0.5	mg/kg	
Magnesium	11,500	50	mg/kg	
Manganese	378	0.5	mg/kg	
Nickel	27.5	0.5	mg/kg	
Potassium	2,640	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.2	0.2	mg/kg	
Sodium	728	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3050B		
Preparation Date: 04/29/19				
Thallium	< 1.0	1.0	mg/kg	
Vanadium	31.8	1.0	mg/kg	
Zinc	62.3	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.23		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3010A		
Preparation Date: 04/29/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.018	0.005	mg/L	
Manganese	4.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.017	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	0.095	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.101	0.005	mg/L	
Iron	111	0.1	mg/L	
Lead	0.214	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (0-5)
Sample No: 19-2374-006

Date Collected: 04/25/19
Time Collected: 13:58
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 93	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 114.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 85.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 72.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 96.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 80	35 - 105	
8270C	Phenol-d5 (surr)	%R: 80.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	80.51		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/01/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/01/19				
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: 04/29/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/29/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	102	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	23,100	50	mg/kg	
Chromium	24.8	0.5	mg/kg	
Cobalt	11.6	0.5	mg/kg	
Copper	24.9	0.5	mg/kg	
Iron	26,600	5.0	mg/kg	
Lead	17.2	0.5	mg/kg	
Magnesium	14,400	50	mg/kg	
Manganese	586	0.5	mg/kg	
Nickel	29.9	0.5	mg/kg	
Potassium	2,600	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.2	0.2	mg/kg	
Sodium	731	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3050B		
		Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	31.9	1.0	mg/kg	
Zinc	55.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.39		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 04/30/19		Preparation Method 3010A		
		Preparation Date: 04/29/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.013	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	0.063	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.046	0.005	mg/L	
Iron	63.5	0.1	mg/L	
Lead	0.024	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-04-04 (5-6)
Sample No: 19-2374-007

Date Collected: 04/25/19
Time Collected: 14:00
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 92.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 98.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 88.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 108.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 81	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 69.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 89.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 77.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 75.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	70.01		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/29/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/29/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/29/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.0	1.0	mg/kg	
Barium	106	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	0.6	0.5	mg/kg	
Calcium	11,100	50	mg/kg	
Chromium	19.3	0.5	mg/kg	
Cobalt	8.2	0.5	mg/kg	
Copper	25.3	0.5	mg/kg	
Iron	25,100	5.0	mg/kg	
Lead	24.0	0.5	mg/kg	
Magnesium	5,300	50	mg/kg	
Manganese	574	0.5	mg/kg	
Nickel	20.4	0.5	mg/kg	
Potassium	1,250	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.2	0.2	mg/kg	
Sodium	4,620	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 04/30/19	Method: 6010C		Preparation Method 3050B Preparation Date: 04/29/19	
Thallium	< 1.0	1.0	mg/kg	
Vanadium	33.1	1.0	mg/kg	
Zinc	111	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	7.49		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 04/30/19	Method: 6010C		Preparation Method 3010A Preparation Date: 04/29/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	19.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 04/30/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.031	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.041	0.005	mg/L	
Iron	31.4	0.1	mg/L	
Lead	0.018	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-01 (0-5)
Sample No: 19-2374-008

Date Collected: 04/25/19
Time Collected: 13:09
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 85.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 113	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 86.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 71.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 93.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 82.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 77.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/25/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 13:12

Sample ID: 1120V2-05-02 (0-5)

Date Received: 04/26/19

Sample No: 19-2374-009

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	72.37		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/30/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	100	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	10,900	50	mg/kg	
Chromium	20.8	0.5	mg/kg	
Cobalt	9.1	0.5	mg/kg	
Copper	28.6	0.5	mg/kg	
Iron	24,900	5.0	mg/kg	
Lead	21.4	0.5	mg/kg	
Magnesium	5,950	50	mg/kg	
Manganese	569	0.5	mg/kg	
Nickel	23.6	0.5	mg/kg	
Potassium	1,340	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.2	0.2	mg/kg	
Sodium	2,250	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 04/30/19		Method: 6010C		Preparation Method 3050B Preparation Date: 04/29/19
Thallium	< 1.0	1.0	mg/kg	
Vanadium	37.2	1.0	mg/kg	
Zinc	105	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30		Method: 9045D 2004		
pH @ 25°C, 1:2	7.66		Units	
TCLP Extraction Analysis Date: 04/29/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 04/30/19		Method: 6010C		Preparation Method 3010A Preparation Date: 04/29/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	7.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 04/30/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction Method: 1312				
Analysis Date: 04/29/19				
SPLP Metals Extraction Complete				
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 05/01/19 Preparation Date: 04/30/19				
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	0.024	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.040	0.005	mg/L	
Iron	25.3	0.1	mg/L	
Lead	0.016	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312 Method: 7470A				
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-02 (0-5)
Sample No: 19-2374-009

Date Collected: 04/25/19
Time Collected: 13:12
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 89.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 106.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 78.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 86.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 69.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 71.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	73.54		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/30/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	1.1	1.0	mg/kg	
Arsenic	8.6	1.0	mg/kg	
Barium	96.3	0.5	mg/kg	
Beryllium	1.3	0.5	mg/kg	
Cadmium	1.8	0.5	mg/kg	
Calcium	27,500	50	mg/kg	
Chromium	28.5	0.5	mg/kg	
Cobalt	8.2	0.5	mg/kg	
Copper	26.0	0.5	mg/kg	
Iron	32,800	5.0	mg/kg	
Lead	20.5	0.5	mg/kg	
Magnesium	11,500	50	mg/kg	
Manganese	554	0.5	mg/kg	
Nickel	24.3	0.5	mg/kg	
Potassium	1,980	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.6	0.2	mg/kg	
Sodium	2,830	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Method: 6010C Preparation Method 3050B				
Analysis Date: 04/30/19 Preparation Date: 04/29/19				
Thallium	< 1.0	1.0	mg/kg	
Vanadium	37.7	1.0	mg/kg	
Zinc	175	1.0	mg/kg	
Total Mercury Method: 7471B				
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	7.87		Units	
TCLP Extraction Method: 1311				
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 04/30/19 Preparation Date: 04/29/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	6.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.047	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.054	0.005	mg/L	
Iron	44.4	0.1	mg/L	
Lead	0.028	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-03 (0-5)
Sample No: 19-2374-010

Date Collected: 04/25/19
Time Collected: 13:16
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 92.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 85.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 118.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 90.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 74.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 96.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 82.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 81.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	91.48		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/30/19				
Preparation Date: 04/28/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.0	1.0	mg/kg	
Barium	30.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	65,500	50	mg/kg	
Chromium	10.3	0.5	mg/kg	
Cobalt	4.8	0.5	mg/kg	
Copper	23.1	0.5	mg/kg	
Iron	13,400	5.0	mg/kg	
Lead	94.2	0.5	mg/kg	
Magnesium	37,900	50	mg/kg	
Manganese	371	0.5	mg/kg	
Nickel	14.1	0.5	mg/kg	
Potassium	702	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	1,220	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 04/30/19				Preparation Date: 04/29/19
Thallium	< 1.0	1.0	mg/kg	
Vanadium	14.4	1.0	mg/kg	
Zinc	52.7	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 04/30/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.94		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 04/30/19				Preparation Date: 04/29/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 04/30/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.019	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.005	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.181	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.133	0.005	mg/L	
Iron	178	0.1	mg/L	
Lead	0.142	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.007	0.005	mg/L	
Zinc	0.6	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-04 (0-5)
Sample No: 19-2374-011

Date Collected: 04/25/19
Time Collected: 13:19
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 90.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 100.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 80.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 77.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/25/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 13:22

Sample ID: 1120V2-05-06 (5-6)

Date Received: 04/26/19

Sample No: 19-2374-013

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	93.45		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/30/19				
Preparation Date: 04/28/19				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzidine	< 330	330	ug/kg	
Benzo(a)anthracene	942	330	ug/kg	
Benzo(a)pyrene	1,020	90	ug/kg	
Benzo(b)fluoranthene	959	330	ug/kg	
Benzo(k)fluoranthene	948	330	ug/kg	
Benzo(ghi)perylene	570	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	1,030	330	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/28/19		
Dibenzo(a,h)anthracene	136	90	ug/kg	
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	1,400	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	658	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/28/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	401	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	1,270	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: 04/30/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.3	1.0	mg/kg	
Barium	60.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	37,100	50	mg/kg	
Chromium	14.3	0.5	mg/kg	
Cobalt	5.1	0.5	mg/kg	
Copper	22.3	0.5	mg/kg	
Iron	17,000	5.0	mg/kg	
Lead	22.7	0.5	mg/kg	
Magnesium	18,700	50	mg/kg	
Manganese	254	0.5	mg/kg	
Nickel	16.0	0.5	mg/kg	
Potassium	663	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	1,440	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 04/30/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	22.3	1.0	mg/kg	
Zinc	51.4	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.70		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 04/30/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/29/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	0.041	0.005	mg/L	
Manganese	6.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 04/30/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Arsenic	0.014	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	0.059	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.103	0.005	mg/L	
Iron	61.8	0.1	mg/L	
Lead	0.194	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.3	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-05-06 (5-6)
Sample No: 19-2374-013

Date Collected: 04/25/19
Time Collected: 13:22
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 90.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 110.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 87.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 71.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 91	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 82.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 78.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	88.59		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/01/19				
Preparation Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



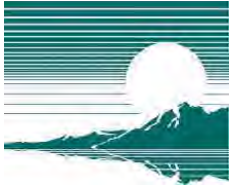
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/01/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.1	1.0	mg/kg	
Barium	39.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	73,200	50	mg/kg	
Chromium	12.7	0.5	mg/kg	
Cobalt	5.8	0.5	mg/kg	
Copper	15.4	0.5	mg/kg	
Iron	15,900	5.0	mg/kg	
Lead	11.1	0.5	mg/kg	
Magnesium	42,000	50	mg/kg	
Manganese	537	0.5	mg/kg	
Nickel	15.1	0.5	mg/kg	
Potassium	581	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	960	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/01/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/29/19		
Thallium	< 1.0	1.0	mg/kg	
Vanadium	20.0	1.0	mg/kg	
Zinc	35.4	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.78		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/03/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/30/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/01/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/02/19		Preparation Date: 04/30/19		
Arsenic	0.027	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	0.154	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.179	0.005	mg/L	
Iron	154	0.1	mg/L	
Lead	0.108	0.005	mg/L	
Manganese	1.3	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: DUP-02 (0-5)
Sample No: 19-2374-036

Date Collected: 04/25/19
Time Collected: 14:05
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 84.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 98.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 76.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	84.12		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/02/19				
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: 04/30/19				
Preparation Date: 04/29/19				
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	261	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 04/30/19		Preparation Date: 04/29/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	493	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 04/30/19				Preparation Date: 04/29/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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	492	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/29/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.8	1.0	mg/kg	
Barium	105	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	81,600	50	mg/kg	
Chromium	10.7	0.5	mg/kg	
Cobalt	8.0	0.5	mg/kg	
Copper	25.1	0.5	mg/kg	
Iron	26,100	5.0	mg/kg	
Lead	26.5	0.5	mg/kg	
Magnesium	45,100	50	mg/kg	
Manganese	1,470	0.5	mg/kg	
Nickel	18.5	0.5	mg/kg	
Potassium	786	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.8	0.2	mg/kg	
Sodium	548	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/01/19	Method: 6010C	Preparation Method 3050B Preparation Date: 04/29/19		
Thallium	1.1	1.0	mg/kg	
Vanadium	21.1	1.0	mg/kg	
Zinc	79.0	1.0	mg/kg	
Total Mercury Analysis Date: 04/30/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 04/30/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.10		Units	
TCLP Extraction Analysis Date: 04/29/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 04/30/19	Method: 6010C	Preparation Method 3010A Preparation Date: 04/29/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 04/30/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 04/25/19

Project ID: IDOT Wheeling #21 #81.0

Time Collected: 12:53

Sample ID: 1120V2-08-03 (0-5)

Date Received: 04/26/19

Sample No: 19-2374-018

Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.010	0.005	mg/L	
Iron	8.3	0.1	mg/L	
Lead	0.010	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/01/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-08-03 (0-5)
Sample No: 19-2374-018

Date Collected: 04/25/19
Time Collected: 12:53
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 85.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 96.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 79.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 65.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 90.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 79.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 71	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 05/06/19

Project ID: 81.0220509.42 IDOT W021A

Time Collected: 10:43

Sample ID: 1120V2-09-02 (0-5)

Date Received: 05/07/19

Sample No: 19-2676-004

Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	76.12		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				
Preparation Date: 05/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/09/19		Preparation Date: 05/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				Preparation Date: 05/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	89.5	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,500	50	mg/kg	
Chromium	16.7	0.5	mg/kg	
Cobalt	6.7	0.5	mg/kg	
Copper	24.4	0.5	mg/kg	
Iron	18,800	5.0	mg/kg	
Lead	17.1	0.5	mg/kg	
Magnesium	14,600	50	mg/kg	
Manganese	324	0.5	mg/kg	
Nickel	17.5	0.5	mg/kg	
Potassium	763	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	3,850	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	31.2	1.0	mg/kg	
Zinc	68.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/13/19				
pH @ 25°C, 1:2	7.40		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19				Preparation Date: 05/08/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	05/06/19
Project ID:	81.0220509.42 IDOT W021A	Time Collected:	10:43
Sample ID:	1120V2-09-02 (0-5)	Date Received:	05/07/19
Sample No:	19-2676-004	Date Reported:	05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.029	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.024	0.005	mg/L	
Iron	21.5	0.1	mg/L	
Lead	0.011	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-02 (0-5)
Sample No: 19-2676-004

Date Collected: 05/06/19
Time Collected: 10:43
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 95.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 91.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 71.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 61.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.1	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-29(50-58 N. Wolf), 1120V2-36 (47 W. Dundee), 1120V2-38(11-35 W. Dundee), 1120V2-41(57-193 S. Wolf), 1120V2-43 (221 S. Wolf)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 430

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.

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 Fig 4-1.8 in the PSI Rpt and borings 1120V2-29-07(Dundee Rd Sta. 49+00, 25 Left), 29-10 (Dundee Rd Sta. 47+50, 25 Left), 36-02 (Dundee Rd Sta. 45+50, 25 Right), 38-08(Dundee Rd Sta. 47+75, 25 Right), 41-13 (Highland Ave St. 4+00, 15 Left), 41-14(Highland Ave St. 5+00, 15 Left), 43-13(Highland Ave St. 3+00, 15 Right), and 43-14(Highland Ave St. 4+00, 15 Right).

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. reports #19-4691 and 19-3477. 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.

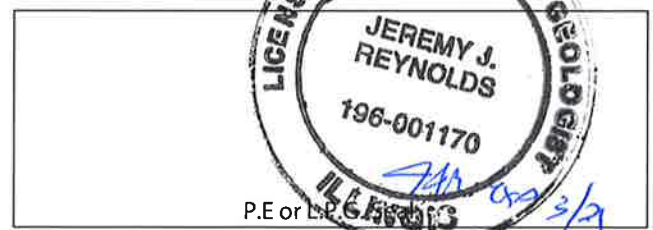
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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: _____

10/4/19
Date: _____



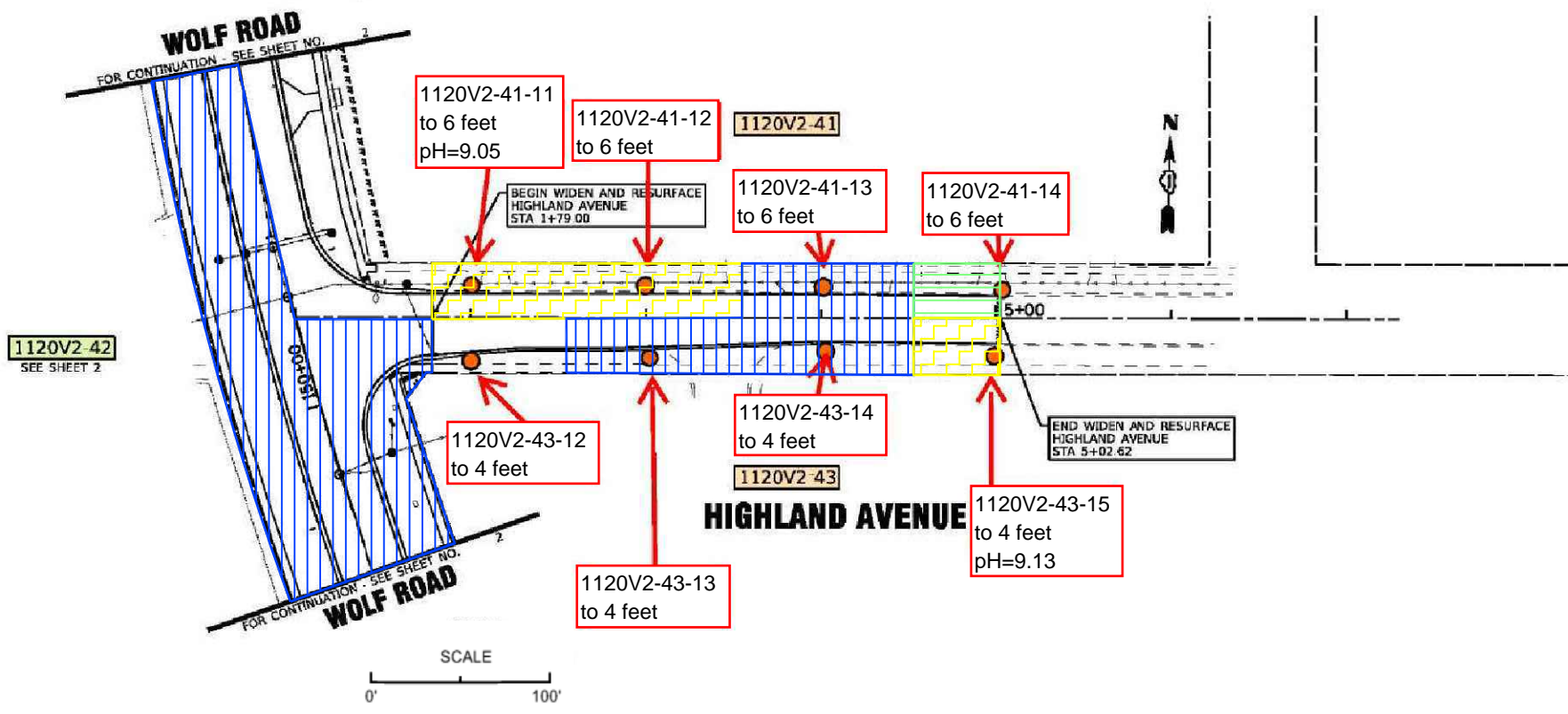
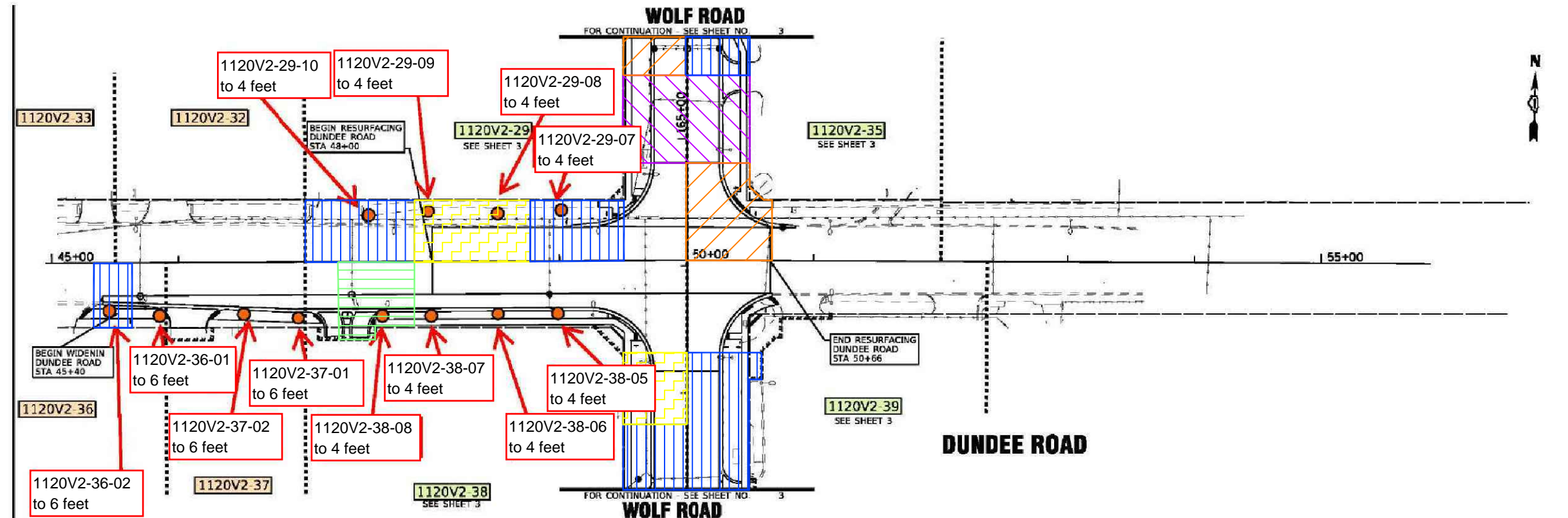


FIGURE 4-1.8 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 8	
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1"= 100"	SHEET NO. 8 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO.	ILLINOIS FED. AID PROJECT
	PLOT DATE =	CHECKED -	REVISED -								

LPC-663 Results - Figure 4-1.8
Soils for Reuse or Disposal at CCDD Facilities in MSA Counties Including Chicago
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-29-07	1120V2-29-10	1120V2-36-02	1120V2-36-02	1120V2-38-08	1120V2-41-13	1120V2-41-13	1120V2-41-14	1120V2-41-14	1120V2-43-13	1120V2-43-14	
				(0-4)	(0-4)	(0-5)	(5-6)	(0-4)	(0-5)	(5-6)	(0-5)	(5-6)	(0-4)	(0-4)	
				8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	6/6/2019	6/6/2019	6/6/2019	6/6/2019	6/6/2019	6/6/2019	6/6/2019
				1120V2-29		1120V2-36		'1120V2-38	1120V2-41				1120V2-43		
Parameter															
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.51	8.51	8.37	8.5	8.32	8.73	8.47	8.41	8.58	8.95	8.95	
VOCs, mg/kg				NO EXCEEDANCES											
SVOCs, mg/kg															
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	<0.09	<0.09	<0.09	<0.09	0.134	<0.09	<0.09	0.149	<0.09	<0.09	<0.09	
Dibenz(a,h)anthracene	0.09 / 0.2 / 0.42	17	0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
Total Metals, mg/kg															
Arsenic	11.3 / 13	61	13	8.5	5.4	5.3	4.6	5.6	<1.0	7.2	4.3	2.3	2.3	<1.0	
Beryllium	22	410	160	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.5	
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Chromium	21	690	230	17.2	20.5	13.1	10	11.4	11.4	14.2	16.5	8.7	13.3	17.2	
Iron	15,000 / 15,900	---	---	25800	26000	17300	15900	17500	8390	33500	19900	9660	12700	13200	
Lead	107	700	400	21.7	37.5	25.8	16	65.8	9.2	8	27.4	6.5	10.7	11.5	
Manganese	630 / 636	4,100	1600	566	433	324	417	401	140	325	249	221	157	198	
Nickel	100	4,100	1600	16.4	25.2	17.8	14.9	14.6	13	21.1	19.5	11.3	13.6	21.7	
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
TCLP Metals, mg/L		Class I Groundwater ^{d/}													
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chromium		0.1		<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Iron		5		<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.7	0.4	2	
Lead		0.0075		<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Manganese		0.15		1.3	5.3	0.7	1.7	1.2	0.7	4.7	0.6	1	0.8	0.8	
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Selenium		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	
SPLP Metals, mg/L		Class I Groundwater ^{d/}													
Arsenic		0.05		0.013	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.109	<0.010	
Beryllium		0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.009	0.006	
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	
Chromium		0.1		0.037	0.042	0.026	0.014	0.011	0.081	0.017	0.024	0.01	0.283	0.188	
Iron		5		41.3	35.7	26.3	13.7	9.8	53.4	15.3	22.4	14.9	609	145	
Lead		0.0075		0.043	0.036	0.012	0.012	0.016	0.043	0.006	0.031	0.008	0.177	0.122	
Manganese		0.15		0.3	0.3	0.2	<0.1	<0.1	0.2	<0.1	0.1	<0.1	1	0.7	
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.2	
Selenium		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-07 (0-4)
Sample No: 19-4691-007

Date Collected: 08/02/19
Time Collected: 10:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
---------	--------	------	-------	-------

Solids, Total **Method: 2540B**

Analysis Date: 08/05/19 15:39

Total Solids	86.27		%	
--------------	-------	--	---	--

Volatile Organic Compounds **Method: 5035A/8260B**

Analysis Date: 08/06/19

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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-07 (0-4)
Sample No: 19-4691-007

Date Collected: 08/02/19
Time Collected: 10:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/06/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-07 (0-4)
Sample No: 19-4691-007

Date Collected: 08/02/19
Time Collected: 10:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-07 (0-4)
Sample No: 19-4691-007

Date Collected: 08/02/19
Time Collected: 10:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/08/19				Preparation Date: 08/06/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.5	1.0	mg/kg	
Barium	42.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	14,100	50	mg/kg	
Chromium	17.2	0.5	mg/kg	
Cobalt	10.0	0.5	mg/kg	
Copper	15.5	0.5	mg/kg	
Iron	25,800	5.0	mg/kg	
Lead	21.7	0.5	mg/kg	
Magnesium	9,240	50	mg/kg	
Manganese	566	0.5	mg/kg	
Nickel	16.4	0.5	mg/kg	
Potassium	958	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	1,340	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:05

Sample ID: 1120V2-29-07 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-007

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/06/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	31.2	1.0	mg/kg	
Zinc	68.9	1.0	mg/kg	
Total Mercury Analysis Date: 08/08/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/06/19 11:30		Method: 9045D 2004		
pH @ 25°C, 1:2	8.51		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:05

Sample ID: 1120V2-29-07 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-007

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
Arsenic	0.013	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	0.037	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.025	0.005	mg/L	
Iron	41.3	0.1	mg/L	
Lead	0.043	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-07 (0-4)
Sample No: 19-4691-007

Date Collected: 08/02/19
Time Collected: 10:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	81.50		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



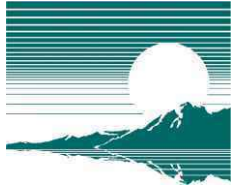
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	92.4	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	27,600	50	mg/kg	
Chromium	20.5	0.5	mg/kg	
Cobalt	10.7	0.5	mg/kg	
Copper	22.5	0.5	mg/kg	
Iron	26,000	5.0	mg/kg	
Lead	37.5	0.5	mg/kg	
Magnesium	16,100	50	mg/kg	
Manganese	433	0.5	mg/kg	
Nickel	25.2	0.5	mg/kg	
Potassium	2,170	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	2,030	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.3	1.0	mg/kg	
Zinc	68.8	1.0	mg/kg	
Total Mercury Analysis Date: 08/08/19		Method: 7471B		
Mercury	0.06	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/06/19 11:30		Method: 9045D 2004		
pH @ 25°C, 1:2	8.51		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	5.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:52

Sample ID: 1120V2-29-10 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-010

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
Arsenic	0.015	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	0.042	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.047	0.005	mg/L	
Iron	35.7	0.1	mg/L	
Lead	0.036	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-10 (0-4)
Sample No: 19-4691-010

Date Collected: 08/02/19
Time Collected: 10:52
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 105.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 107.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 82.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 50.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 70.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 56.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 57.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	84.33		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.3	1.0	mg/kg	
Barium	54.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	18,800	50	mg/kg	
Chromium	13.1	0.5	mg/kg	
Cobalt	7.5	0.5	mg/kg	
Copper	18.5	0.5	mg/kg	
Iron	17,300	5.0	mg/kg	
Lead	25.8	0.5	mg/kg	
Magnesium	9,350	50	mg/kg	
Manganese	324	0.5	mg/kg	
Nickel	17.8	0.5	mg/kg	
Potassium	1,180	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	226	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.3	1.0	mg/kg	
Zinc	51.7	1.0	mg/kg	
Total Mercury Analysis Date: 08/08/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.37		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.011	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:54

Sample ID: 1120V2-36-02 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-013

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.026	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.023	0.005	mg/L	
Iron	26.3	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (0-5)
Sample No: 19-4691-013

Date Collected: 08/02/19
Time Collected: 10:54
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 65.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 45.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 59.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	89.67		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



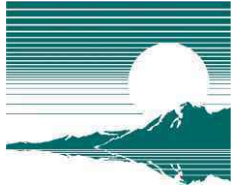
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.6	1.0	mg/kg	
Barium	35.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	40,700	50	mg/kg	
Chromium	10.0	0.5	mg/kg	
Cobalt	5.8	0.5	mg/kg	
Copper	18.3	0.5	mg/kg	
Iron	15,900	5.0	mg/kg	
Lead	16.0	0.5	mg/kg	
Magnesium	24,500	50	mg/kg	
Manganese	417	0.5	mg/kg	
Nickel	14.9	0.5	mg/kg	
Potassium	842	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	189	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/07/19		Preparation Method 3050B		
		Preparation Date: 08/07/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.9	1.0	mg/kg	
Zinc	43.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/08/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.50		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 08/08/19		Preparation Method 3010A		
		Preparation Date: 08/07/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:55

Sample ID: 1120V2-36-02 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-014

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.014	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.015	0.005	mg/L	
Iron	13.7	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-02 (5-6)
Sample No: 19-4691-014

Date Collected: 08/02/19
Time Collected: 10:55
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 101	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 76.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 76.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	87.50		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/09/19				
Preparation Date: 08/07/19				
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	134	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/09/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/09/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	37.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	35,600	50	mg/kg	
Chromium	11.4	0.5	mg/kg	
Cobalt	7.9	0.5	mg/kg	
Copper	17.4	0.5	mg/kg	
Iron	17,500	5.0	mg/kg	
Lead	65.8	0.5	mg/kg	
Magnesium	20,600	50	mg/kg	
Manganese	401	0.5	mg/kg	
Nickel	14.6	0.5	mg/kg	
Potassium	864	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	106	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/07/19				Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.5	1.0	mg/kg	
Zinc	63.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.32		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19				Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:05

Sample ID: 1120V2-38-08 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-027

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.011	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.009	0.005	mg/L	
Iron	9.8	0.1	mg/L	
Lead	0.016	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-08 (0-4)
Sample No: 19-4691-027

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 102.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 75.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 86.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 79	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (0-5)
Sample No: 19-3477-007

Date Collected: 06/06/19
Time Collected: 10:33
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	85.53		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (0-5)
Sample No: 19-3477-007

Date Collected: 06/06/19
Time Collected: 10:33
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



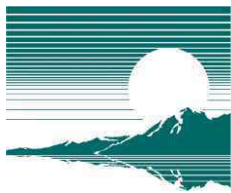
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (0-5)
Sample No: 19-3477-007

Date Collected: 06/06/19
Time Collected: 10:33
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (0-5)
Sample No: 19-3477-007

Date Collected: 06/06/19
Time Collected: 10:33
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
Preparation Date: 06/11/19				
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
Preparation Date: 06/11/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	< 1.0	1.0	mg/kg	
Barium	13.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	28,400	50	mg/kg	
Chromium	11.4	0.5	mg/kg	
Cobalt	4.0	0.5	mg/kg	
Copper	12.8	0.5	mg/kg	
Iron	8,390	5.0	mg/kg	
Lead	9.2	0.5	mg/kg	
Magnesium	18,500	50	mg/kg	
Manganese	140	0.5	mg/kg	
Nickel	13.0	0.5	mg/kg	
Potassium	1,070	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	936	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	13.9	1.0	mg/kg	
Zinc	35.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.73		Units	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/06/19
Project ID:	IDOT Wheeling #21 - 81.0220509.42	Time Collected:	10:33
Sample ID:	1120V2-41-13 (0-5)	Date Received:	06/07/19
Sample No:	19-3477-007	Date Reported:	06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.081	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.059	0.005	mg/L	
Iron	53.4	0.1	mg/L	
Lead	0.043	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (0-5)
Sample No: 19-3477-007

Date Collected: 06/06/19
Time Collected: 10:33
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	81.24		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



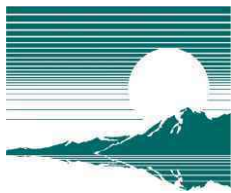
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

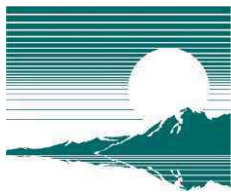
Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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: 06/11/19		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.2	1.0	mg/kg	
Barium	24.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	60,300	50	mg/kg	
Chromium	14.2	0.5	mg/kg	
Cobalt	6.6	0.5	mg/kg	
Copper	17.8	0.5	mg/kg	
Iron	33,500	5.0	mg/kg	
Lead	8.0	0.5	mg/kg	
Magnesium	34,000	50	mg/kg	
Manganese	325	0.5	mg/kg	
Nickel	21.1	0.5	mg/kg	
Potassium	1,800	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	140	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.4	1.0	mg/kg	
Zinc	43.4	1.0	mg/kg	

Total Mercury		Method: 7471B	
Analysis Date: 06/11/19			
Mercury	< 0.05	0.05	mg/kg

pH @ 25°C, 1:2		Method: 9045D 2004	
Analysis Date: 06/10/19 10:30			
pH @ 25°C, 1:2	8.47		Units



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.017	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.015	0.005	mg/L	
Iron	15.3	0.1	mg/L	
Lead	0.006	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-13 (5-6)
Sample No: 19-3477-008

Date Collected: 06/06/19
Time Collected: 10:34
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	78.48		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	149	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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	351	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	
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	



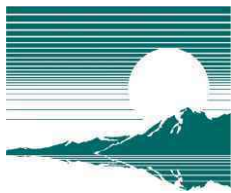
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/11/19		
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	57.0	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	19,500	50	mg/kg	
Chromium	16.5	0.5	mg/kg	
Cobalt	7.8	0.5	mg/kg	
Copper	23.3	0.5	mg/kg	
Iron	19,900	5.0	mg/kg	
Lead	27.4	0.5	mg/kg	
Magnesium	12,200	50	mg/kg	
Manganese	249	0.5	mg/kg	
Nickel	19.5	0.5	mg/kg	
Potassium	1,060	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	222	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.7	1.0	mg/kg	
Zinc	66.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.41		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.6	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.024	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.022	0.005	mg/L	
Iron	22.4	0.1	mg/L	
Lead	0.031	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (0-5)
Sample No: 19-3477-009

Date Collected: 06/06/19
Time Collected: 10:41
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



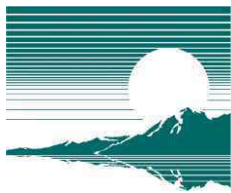
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (5-6)
Sample No: 19-3477-010

Date Collected: 06/06/19
Time Collected: 10:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	87.57		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (5-6)
Sample No: 19-3477-010

Date Collected: 06/06/19
Time Collected: 10:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/13/19				
Preparation Date: 06/11/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (5-6)
Sample No: 19-3477-010

Date Collected: 06/06/19
Time Collected: 10:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/11/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (5-6)
Sample No: 19-3477-010

Date Collected: 06/06/19
Time Collected: 10:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
Preparation Date: 06/11/19				
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
Preparation Date: 06/11/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.3	1.0	mg/kg	
Barium	12.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,200	50	mg/kg	
Chromium	8.7	0.5	mg/kg	
Cobalt	3.6	0.5	mg/kg	
Copper	14.9	0.5	mg/kg	
Iron	9,660	5.0	mg/kg	
Lead	6.5	0.5	mg/kg	
Magnesium	39,000	50	mg/kg	
Manganese	221	0.5	mg/kg	
Nickel	11.3	0.5	mg/kg	
Potassium	952	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	176	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.5	1.0	mg/kg	
Zinc	34.4	1.0	mg/kg	

Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	

pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.58		Units	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/06/19
Project ID:	IDOT Wheeling #21 - 81.0220509.42	Time Collected:	10:42
Sample ID:	1120V2-41-14 (5-6)	Date Received:	06/07/19
Sample No:	19-3477-010	Date Reported:	06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.010	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.024	0.005	mg/L	
Iron	14.9	0.1	mg/L	
Lead	0.008	0.005	mg/L	



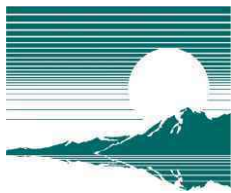
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-14 (5-6)
Sample No: 19-3477-010

Date Collected: 06/06/19
Time Collected: 10:42
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-13 (0-4)
Sample No: 19-3477-020

Date Collected: 06/06/19
Time Collected: 10:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	82.67		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-13 (0-4)
Sample No: 19-3477-020

Date Collected: 06/06/19
Time Collected: 10:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
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	
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	



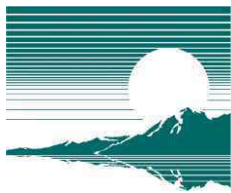
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-13 (0-4)
Sample No: 19-3477-020

Date Collected: 06/06/19
Time Collected: 10:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-13 (0-4)
Sample No: 19-3477-020

Date Collected: 06/06/19
Time Collected: 10:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/12/19		
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.3	1.0	mg/kg	
Barium	47.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	26,100	50	mg/kg	
Chromium	13.3	0.5	mg/kg	
Cobalt	4.4	0.5	mg/kg	
Copper	14.1	0.5	mg/kg	
Iron	12,700	5.0	mg/kg	
Lead	10.7	0.5	mg/kg	
Magnesium	16,800	50	mg/kg	
Manganese	157	0.5	mg/kg	
Nickel	13.6	0.5	mg/kg	
Potassium	635	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,800	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	17.5	1.0	mg/kg	
Zinc	38.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/11/19 10:30				
pH @ 25°C, 1:2	8.95		Units	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/06/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:22

Sample ID: 1120V2-43-13 (0-4)

Date Received: 06/07/19

Sample No: 19-3477-020

Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/13/19		Preparation Date: 06/13/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.109	0.010	mg/L	
Barium	1.1	1.0	mg/L	
Beryllium	0.009	0.004	mg/L	
Cadmium	0.007	0.005	mg/L	
Chromium	0.283	0.005	mg/L	
Cobalt	0.1	0.1	mg/L	
Copper	0.266	0.005	mg/L	
Iron	609	0.1	mg/L	
Lead	0.177	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-13 (0-4)
Sample No: 19-3477-020

Date Collected: 06/06/19
Time Collected: 10:22
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	1.0	0.1	mg/L	
Nickel	0.3	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	0.010	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	84.60		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



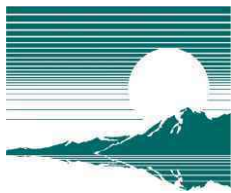
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	
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	



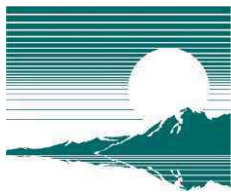
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
		Preparation Date: 06/12/19		
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
		Preparation Date: 06/11/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	< 1.0	1.0	mg/kg	
Barium	23.2	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	30,400	50	mg/kg	
Chromium	17.2	0.5	mg/kg	
Cobalt	6.6	0.5	mg/kg	
Copper	21.7	0.5	mg/kg	
Iron	13,200	5.0	mg/kg	
Lead	11.5	0.5	mg/kg	
Magnesium	21,100	50	mg/kg	
Manganese	198	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	2,240	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,400	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.0	1.0	mg/kg	
Zinc	50.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	8.95		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction Method: 1311				
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/13/19 Preparation Date: 06/13/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.0	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction Method: 1312				
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/12/19 Preparation Date: 06/11/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.188	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.194	0.005	mg/L	
Iron	145	0.1	mg/L	
Lead	0.122	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-14 (0-4)
Sample No: 19-3477-021

Date Collected: 06/06/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.7	0.1	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: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



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: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-44 (360-500 S. Wolf Road), 1120V2-45 (285-411 S. Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

EPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 500

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.

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 in the Final PSI Rpt and borings 1120V2-44-15(Wolf Road Sta. 125+75, 30 Left), 45-01(Wolf Road Sta. 120+00, 40 Right), 45-03(Wolf Road Sta. 122+00, 40 Right), 45-07(Wolf Road Sta. 126+00, 35 Right).

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 #19-3759. Site specific table of results is attached to this form.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

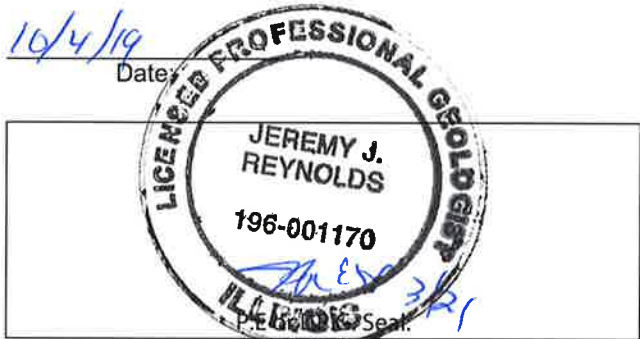
I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with 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.

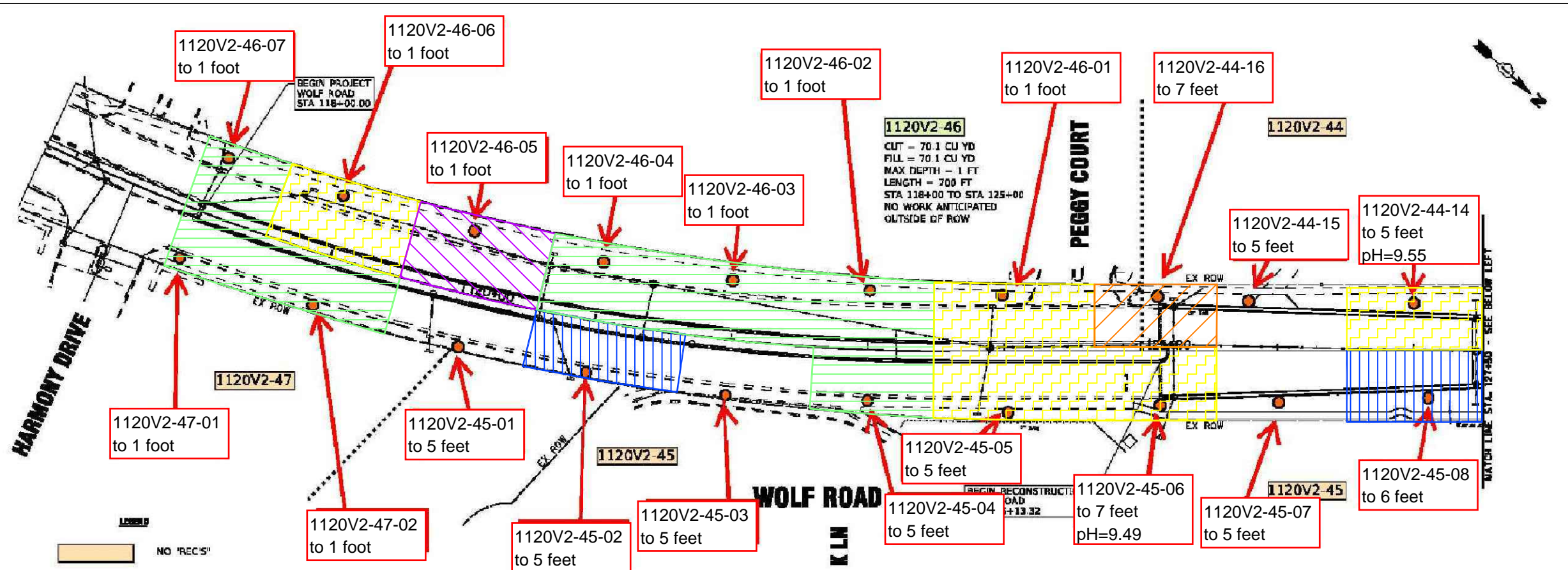
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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:

[Handwritten Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:





LEGEND

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

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



FIGURE 4-1.1 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REMOVED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.U. R.T.E.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 1		
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 1 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Illinois Department of Transportation, District One
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-44-15	1120V2-45-01	1120V2-45-03	1120V2-45-07
				(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019
Parameter							
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.37	7.94	8.4	8.61
VOCs, mg/kg				None Detected			
SVOCs, mg/kg				None Detected			
Total Metals, mg/kg							
Antimony	5	82	31	<1.0	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	5.2	8.2	4.7	4.1
Barium	1,500	14,000	5500	56.5	58.6	69.9	8.3
Beryllium	22	410	160	<0.5	0.5	0.6	<0.5
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5
Calcium	---	---	---	51600	38000	2930	117000
Chromium	21	690	230	9.5	13.1	15.4	5.3
Cobalt	20	12,000	4700	6.8	13	11.7	3.3
Copper	2,900	8,200	2900	16.5	25.6	18	9.5
Iron	15,000 / 15,900	---	---	13200	22700	18300	9260
Lead	107	700	400	10.8	19.1	16.1	6
Magnesium	325,000	730,000	325000	29700	21800	3090	54800
Manganese	630 / 636	4,100	1600	485	1110	587	316
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	15.5	21.7	19.4	8
Potassium	---	---	---	705	883	769	533
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	0.2	0.3	0.3	0.2
Sodium	---	---	---	425	532	531	324
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	16.4	24.5	28	15
Zinc	5,100	61,000	23000	33.9	43	42.8	23.2
TCLP Metals, mg/L		Class I Groundwater ^{d/}					
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010
Barium		2		<1.0	<1.0	<1.0	<1.0
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1	<0.1
Copper		0.65		<0.1	<0.1	<0.1	<0.1
Iron		5		<0.1	0.2	1.6	<0.1
Lead		0.0075		<0.005	0.008	0.014	<0.005
Manganese		0.15		7.1	11.3	13	0.7
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005
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	<0.010
Barium		2		<1.0	<1.0	<1.0	<1.0
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		0.013	0.008	0.012	<0.005
Cobalt		1		<0.1	<0.1	<0.1	<0.1
Copper		0.65		0.012	0.015	0.012	0.005
Iron		5		7.7	9	10.9	3
Lead		0.0075		0.006	0.006	0.005	<0.005
Manganese		0.15		<0.1	<0.1	0.1	<0.1
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005
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

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-15 0-5'
Sample No: 19-3759-016

Date Collected: 06/19/19
Time Collected: 11:15
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	88.16		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-15 0-5'
Sample No: 19-3759-016

Date Collected: 06/19/19
Time Collected: 11:15
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:15

Sample ID: 1120V2-44-15 0-5'

Date Received: 06/20/19

Sample No: 19-3759-016

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-15 0-5'
Sample No: 19-3759-016

Date Collected: 06/19/19
Time Collected: 11:15
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.2	1.0	mg/kg	
Barium	56.5	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	51,600	50	mg/kg	
Chromium	9.5	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	16.5	0.5	mg/kg	
Iron	13,200	5.0	mg/kg	
Lead	10.8	0.5	mg/kg	
Magnesium	29,700	50	mg/kg	
Manganese	485	0.5	mg/kg	
Nickel	15.5	0.5	mg/kg	
Potassium	705	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	425	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-15 0-5'
Sample No: 19-3759-016

Date Collected: 06/19/19
Time Collected: 11:15
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Method: 6010C				
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	16.4	1.0	mg/kg	
Zinc	33.9	1.0	mg/kg	
Total Mercury Method: 7471B				
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.37		Units	
TCLP Extraction Method: 1311				
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C				
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	7.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-15 0-5'
Sample No: 19-3759-016

Date Collected: 06/19/19
Time Collected: 11:15
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.013	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.012	0.005	mg/L	
Iron	7.7	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:15

Sample ID: 1120V2-44-15 0-5'

Date Received: 06/20/19

Sample No: 19-3759-016

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 60	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 58.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-01 0-5'
Sample No: 19-3759-018

Date Collected: 06/19/19
Time Collected: 11:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	83.06		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-01 0-5'
Sample No: 19-3759-018

Date Collected: 06/19/19
Time Collected: 11:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-45-01 0-5'

Date Received: 06/20/19

Sample No: 19-3759-018

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-01 0-5'
Sample No: 19-3759-018

Date Collected: 06/19/19
Time Collected: 11:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.2	1.0	mg/kg	
Barium	58.6	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	38,000	50	mg/kg	
Chromium	13.1	0.5	mg/kg	
Cobalt	13.0	0.5	mg/kg	
Copper	25.6	0.5	mg/kg	
Iron	22,700	5.0	mg/kg	
Lead	19.1	0.5	mg/kg	
Magnesium	21,800	50	mg/kg	
Manganese	1,110	0.5	mg/kg	
Nickel	21.7	0.5	mg/kg	
Potassium	883	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	532	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-01 0-5'
Sample No: 19-3759-018

Date Collected: 06/19/19
Time Collected: 11:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19				Preparation Date: 06/24/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.5	1.0	mg/kg	
Zinc	43.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.94		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19				Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.008	0.005	mg/L	
Manganese	11.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-01 0-5'
Sample No: 19-3759-018

Date Collected: 06/19/19
Time Collected: 11:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.015	0.005	mg/L	
Iron	9.0	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 11:50

Sample ID: 1120V2-45-01 0-5'

Date Received: 06/20/19

Sample No: 19-3759-018

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 90.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 77	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 49.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-45-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-020

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	84.33		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-03 0-5'
Sample No: 19-3759-020

Date Collected: 06/19/19
Time Collected: 12:00
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-45-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-020

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-45-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-020

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.7	1.0	mg/kg	
Barium	69.9	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,930	50	mg/kg	
Chromium	15.4	0.5	mg/kg	
Cobalt	11.7	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	18,300	5.0	mg/kg	
Lead	16.1	0.5	mg/kg	
Magnesium	3,090	50	mg/kg	
Manganese	587	0.5	mg/kg	
Nickel	19.4	0.5	mg/kg	
Potassium	769	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	531	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-45-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-020

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/24/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.0	1.0	mg/kg	
Zinc	42.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/25/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/21/19 6:30	Method: 9045D 2004			
pH @ 25°C, 1:2	8.40		Units	
TCLP Extraction Analysis Date: 06/24/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/26/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.6	0.1	mg/L	
Lead	0.014	0.005	mg/L	
Manganese	13.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/26/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-03 0-5'
Sample No: 19-3759-020

Date Collected: 06/19/19
Time Collected: 12:00
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.012	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.012	0.005	mg/L	
Iron	10.9	0.1	mg/L	
Lead	0.005	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:00

Sample ID: 1120V2-45-03 0-5'

Date Received: 06/20/19

Sample No: 19-3759-020

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 93.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:45

Sample ID: 1120V2-45-07 0-5'

Date Received: 06/20/19

Sample No: 19-3759-025

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	94.40		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-07 0-5'
Sample No: 19-3759-025

Date Collected: 06/19/19
Time Collected: 12:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/25/19				
Preparation Date: 06/24/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-07 0-5'
Sample No: 19-3759-025

Date Collected: 06/19/19
Time Collected: 12:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-07 0-5'
Sample No: 19-3759-025

Date Collected: 06/19/19
Time Collected: 12:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/25/19				Preparation Date: 06/24/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/24/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.1	1.0	mg/kg	
Barium	8.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	117,000	50	mg/kg	
Chromium	5.3	0.5	mg/kg	
Cobalt	3.3	0.5	mg/kg	
Copper	9.5	0.5	mg/kg	
Iron	9,260	5.0	mg/kg	
Lead	6.0	0.5	mg/kg	
Magnesium	54,800	50	mg/kg	
Manganese	316	0.5	mg/kg	
Nickel	8.0	0.5	mg/kg	
Potassium	533	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	324	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-07 0-5'
Sample No: 19-3759-025

Date Collected: 06/19/19
Time Collected: 12:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	15.0	1.0	mg/kg	
Zinc	23.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.61		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-45-07 0-5'
Sample No: 19-3759-025

Date Collected: 06/19/19
Time Collected: 12:45
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/25/19		Preparation Date: 06/24/19		
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	0.005	0.005	mg/L	
Iron	3.0	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 12:45

Sample ID: 1120V2-45-07 0-5'

Date Received: 06/20/19

Sample No: 19-3759-025

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 103.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 73.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.5	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-44 (360-500 S. Wolf Road), 1120V2-45 (285-411 S. Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 1,500

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.

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 Fig 4-1.2 in the Final PSI Rpt and borings 1120V2-44-04 (Wolf Rd Sta. 136+90, 20 Left), 44-05(Wolf Rd Sta. 135+90, 20 Left), 44-06(Wolf Rd Sta. 135+05, 20 Left), 44-07(Wolf Rd Sta. 134+25, 20 Left), 44-09(Wolf Rd Sta. 132+00, 20 Left), 44-10(Wolf Rd Sta. 131+00, 20 Left), 45-12(Wolf Rd Sta. 131+00, 20 Right), 45-14 (Wolf Rd Sta. 133+00, 20 Right), 45-15(Wolf Rd Sta. 134+00, 20 Right), 45-16(Wolf Rd Sta. 135+00, 20 Right), 45-17(Wolf Rd Sta. 136+00, 20 Right), 45-18(Wolf Rd Sta. 137+00, 20 Right)

- 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. reports #19-3759 and # 19-3668. 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

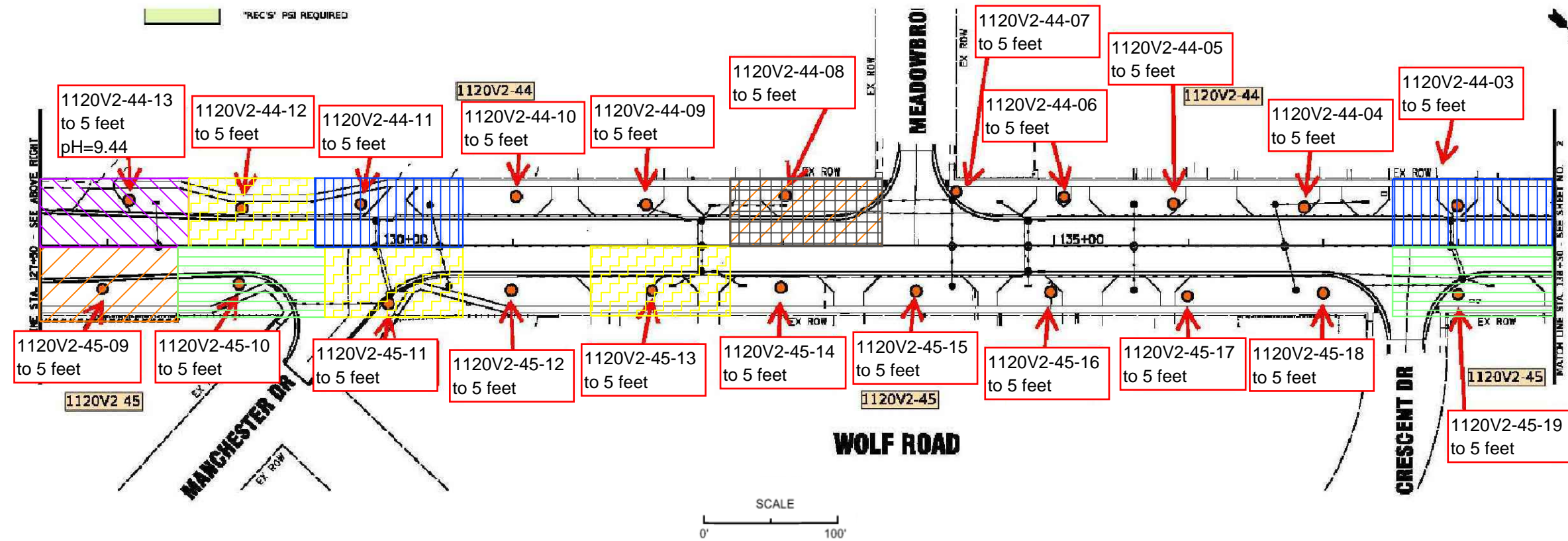
Jeremy J. Reynolds, P.G.

Printed Name:

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:

P.E. OR P.G. Seal:



LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a)(1).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a)(2).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a)(3).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A)(4).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a)(5).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL. CANNOT BE TAKEN TO A CCDD/USFO (b)(1).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

**FIGURE 4-1.2 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.J.L. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 2		
	PLOT SCALE =	DRAWN -	REVISED -			SCALE: 1" = 100'	SHEET NO. 2 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Illinois Department of Transportation, District One
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) (ISGS Site No.(s))	Soil Reference Concentrations ^{3/}	Soil Remediation Objective for Construction Workers ^{4/}	Soil Remediation Objective for Residential Exposure ^{5/}	1120V2-44-04	1120V2-44-05	1120V2-44-06	1120V2-44-07	1120V2-44-09	1120V2-44-10	1120V2-45-12	1120V2-45-14	1120V2-Dup-15	1120V2-45-15	1120V2-45-16	1120V2-45-17	1120V2-45-18
				(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/19/2019	(0-5) 6/14/2019	(0-5) 6/14/2019	(0-5) 6/14/2019	(0-5) 6/14/2019	(0-5) 6/14/2019	(0-5) 6/14/2019	(0-5) 6/14/2019
Parameter																
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.09	7.42	7.67	7.04	7.11	8.25	7.52	7.97	7.46	7.77	8.44	8.75	7.81
VOCS, mg/kg				None Detected												
SVOCs, mg/kg				None Detected												
Total Metals, mg/kg																
Antimony	5	82	31	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	4.7	9.5	6.1	6.7	7	5.8	6	7.5	7.9	5.7	5.5	4.9	7.3
Barium	1,500	14,000	5,500	123	139	27.6	47.5	66.8	25.2	57.9	37.2	53.6	85	78.9	20.2	104
Beryllium	22	410	160	0.6	0.9	0.5	0.6	0.6	<0.5	0.6	<0.5	0.5	<0.5	0.6	<0.5	0.9
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Calcium	---	---	---	4590	9550	22400	1450	1450	29800	1650	819	875	1930	55000	46700	7730
Chromium	21	690	230	16.1	20.1	14.2	16.9	16.8	10.5	16.4	14.6	18.4	15.4	14.9	13.4	23.4
Cobalt	20	12,000	4700	8	9.2	3.9	12.8	11.1	12.3	5.6	30	7.2	11.3	14.2	3.6	7.7
Copper	2,900	8,200	2900	20.6	27.2	18	22.8	31.5	22.9	24.4	15.3	27.2	28.1	32.5	15.9	24.2
Iron	15,000 / 15,900	---	---	17400	28000	17200	23400	24900	14900	17500	17600	21600	20500	27800	12300	25500
Lead	107	700	400	15.5	17.5	9.4	14.7	15	19	15.9	32.5	13	17.9	20	8.9	18.8
Magnesium	325,000	730,000	325,000	3530	6490	14600	2540	2400	18100	2390	2130	2380	2740	32000	27100	5630
Manganese	630 / 636	4,100	1600	205	469	182	346	579	603	157	720	240	584	959	201	234
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	0.06	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	17.8	22.2	14.6	29.9	35.5	26.2	20.3	16.7	25.2	27.2	24.5	12.6	23.7
Potassium	---	---	---	985	1010	749	942	879	849	831	718	955	964	1100	648	1130
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	0.3	0.5	0.4	0.4	0.4	0.3	<0.2	0.2	0.2	0.3	0.4	<0.2	0.3
Sodium	---	---	---	1960	2150	945	2330	1380	1610	1500	1890	1960	1030	1410	1000	4820
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	26.1	33.4	22.8	27	27.9	18.9	25.8	24.2	25.6	21.7	26.2	15.2	35.2
Zinc	5,100	61,000	23000	61.2	59.7	40.8	54.5	56.2	41.8	47.3	36.1	48	42.8	46.8	31	60.4
TCLP Metals, mg/L		Class I Groundwater ^{6/}														
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Barium	2			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	0.004			<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.1			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper	0.65			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Iron	5			0.3	<0.1	<0.1	0.3	0.4	<0.1	0.4	<0.1	<0.1	0.6	<0.1	<0.1	0.7
Lead	0.0075			0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	0.15			5.9	0.2	0.7	<0.1	<0.1	1.3	<0.1	<0.1	<0.1	<0.1	1.3	0.8	<0.1
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	0.05			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	5			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPLP Metals, mg/L		Class I Groundwater ^{6/}														
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010
Barium	2			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	0.004			<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.1			<0.005	0.008	0.01	0.034	0.026	0.014	0.05	0.061	0.036	0.009	0.037	0.039	0.039
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper	0.65			<0.005	0.008	<0.005	0.03	0.031	0.025	0.04	0.055	0.069	0.039	0.008	0.027	0.025
Iron	5			0.7	7.6	3.8	32.3	25.3	14.7	35.6	57.3	61.9	37.4	7.7	33.8	32
Lead	0.0075			<0.005	<0.005	<0.005	0.009	0.007	0.007	0.012	0.017	0.011	0.014	<0.005	0.012	0.012
Manganese	0.15			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	<0.1	<0.1	<0.1	0.2
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	0.05			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	5			<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	0.1	0.2	0.1	<0.1	<0.1	0.1

--- Refers to not applicable or value not available

^{3/} 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.

^{4/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{5/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{6/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected
 Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-04 0-5'
Sample No: 19-3759-005

Date Collected: 06/19/19
Time Collected: 9:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	81.35		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:50

Sample ID: 1120V2-44-04 0-5'

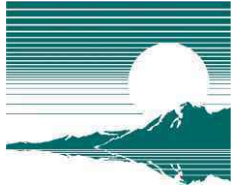
Date Received: 06/20/19

Sample No: 19-3759-005

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:50

Sample ID: 1120V2-44-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-005

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-04 0-5'
Sample No: 19-3759-005

Date Collected: 06/19/19
Time Collected: 9:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.7	1.0	mg/kg	
Barium	123	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	4,590	50	mg/kg	
Chromium	16.1	0.5	mg/kg	
Cobalt	8.0	0.5	mg/kg	
Copper	20.6	0.5	mg/kg	
Iron	17,400	5.0	mg/kg	
Lead	15.5	0.5	mg/kg	
Magnesium	3,530	50	mg/kg	
Manganese	205	0.5	mg/kg	
Nickel	17.8	0.5	mg/kg	
Potassium	985	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,960	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-04 0-5'
Sample No: 19-3759-005

Date Collected: 06/19/19
Time Collected: 9:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.1	1.0	mg/kg	
Zinc	61.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.09		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.3	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	5.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:50

Sample ID: 1120V2-44-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-005

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	< 0.005	0.005	mg/L	
Iron	0.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:50

Sample ID: 1120V2-44-04 0-5'

Date Received: 06/20/19

Sample No: 19-3759-005

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 103.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 67.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 79.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 60.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:55

Sample ID: 1120V2-44-05 0-5'

Date Received: 06/20/19

Sample No: 19-3759-006

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	79.41		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-05 0-5'
Sample No: 19-3759-006

Date Collected: 06/19/19
Time Collected: 9:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:55

Sample ID: 1120V2-44-05 0-5'

Date Received: 06/20/19

Sample No: 19-3759-006

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



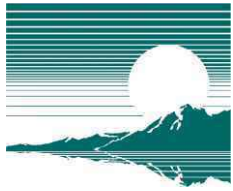
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-05 0-5'
Sample No: 19-3759-006

Date Collected: 06/19/19
Time Collected: 9:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.5	1.0	mg/kg	
Barium	139	0.5	mg/kg	
Beryllium	0.9	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	9,550	50	mg/kg	
Chromium	20.1	0.5	mg/kg	
Cobalt	9.2	0.5	mg/kg	
Copper	27.2	0.5	mg/kg	
Iron	28,000	5.0	mg/kg	
Lead	17.5	0.5	mg/kg	
Magnesium	6,490	50	mg/kg	
Manganese	469	0.5	mg/kg	
Nickel	22.2	0.5	mg/kg	
Potassium	1,010	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,150	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-05 0-5'
Sample No: 19-3759-006

Date Collected: 06/19/19
Time Collected: 9:55
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.4	1.0	mg/kg	
Zinc	59.7	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.42		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19				Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:55

Sample ID: 1120V2-44-05 0-5'

Date Received: 06/20/19

Sample No: 19-3759-006

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.008	0.005	mg/L	
Iron	7.6	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:55

Sample ID: 1120V2-44-05 0-5'

Date Received: 06/20/19

Sample No: 19-3759-006

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 77.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 60.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 48.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 59.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-06 0-5'
Sample No: 19-3759-007

Date Collected: 06/19/19
Time Collected: 10:20
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	85.23		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-06 0-5'
Sample No: 19-3759-007

Date Collected: 06/19/19
Time Collected: 10:20
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:20

Sample ID: 1120V2-44-06 0-5'

Date Received: 06/20/19

Sample No: 19-3759-007

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-06 0-5'
Sample No: 19-3759-007

Date Collected: 06/19/19
Time Collected: 10:20
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.1	1.0	mg/kg	
Barium	27.6	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	22,400	50	mg/kg	
Chromium	14.2	0.5	mg/kg	
Cobalt	3.9	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	17,200	5.0	mg/kg	
Lead	9.4	0.5	mg/kg	
Magnesium	14,600	50	mg/kg	
Manganese	182	0.5	mg/kg	
Nickel	14.6	0.5	mg/kg	
Potassium	749	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	945	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-06 0-5'
Sample No: 19-3759-007

Date Collected: 06/19/19
Time Collected: 10:20
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.8	1.0	mg/kg	
Zinc	40.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.67		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-06 0-5'
Sample No: 19-3759-007

Date Collected: 06/19/19
Time Collected: 10:20
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.010	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.005	0.005	mg/L	
Iron	3.8	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:20

Sample ID: 1120V2-44-06 0-5'

Date Received: 06/20/19

Sample No: 19-3759-007

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 94.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 61.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:25

Sample ID: 1120V2-44-07 0-5'

Date Received: 06/20/19

Sample No: 19-3759-008

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	84.42		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-07 0-5'
Sample No: 19-3759-008

Date Collected: 06/19/19
Time Collected: 10:25
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-07 0-5'
Sample No: 19-3759-008

Date Collected: 06/19/19
Time Collected: 10:25
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-07 0-5'
Sample No: 19-3759-008

Date Collected: 06/19/19
Time Collected: 10:25
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.7	1.0	mg/kg	
Barium	47.5	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,450	50	mg/kg	
Chromium	16.9	0.5	mg/kg	
Cobalt	12.8	0.5	mg/kg	
Copper	22.8	0.5	mg/kg	
Iron	22,400	5.0	mg/kg	
Lead	14.7	0.5	mg/kg	
Magnesium	2,540	50	mg/kg	
Manganese	346	0.5	mg/kg	
Nickel	29.9	0.5	mg/kg	
Potassium	942	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	2,330	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-07 0-5'
Sample No: 19-3759-008

Date Collected: 06/19/19
Time Collected: 10:25
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.0	1.0	mg/kg	
Zinc	54.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.06	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.04		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-07 0-5'
Sample No: 19-3759-008

Date Collected: 06/19/19
Time Collected: 10:25
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.034	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.030	0.005	mg/L	
Iron	32.3	0.1	mg/L	
Lead	0.009	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:25

Sample ID: 1120V2-44-07 0-5'

Date Received: 06/20/19

Sample No: 19-3759-008

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 86	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 65.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 73.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 62.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-09 0-5'
Sample No: 19-3759-010

Date Collected: 06/19/19
Time Collected: 10:35
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	84.48		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-09 0-5'
Sample No: 19-3759-010

Date Collected: 06/19/19
Time Collected: 10:35
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:35

Sample ID: 1120V2-44-09 0-5'

Date Received: 06/20/19

Sample No: 19-3759-010

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:35

Sample ID: 1120V2-44-09 0-5'

Date Received: 06/20/19

Sample No: 19-3759-010

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.0	1.0	mg/kg	
Barium	66.8	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,450	50	mg/kg	
Chromium	16.8	0.5	mg/kg	
Cobalt	11.1	0.5	mg/kg	
Copper	31.5	0.5	mg/kg	
Iron	24,300	5.0	mg/kg	
Lead	15.0	0.5	mg/kg	
Magnesium	2,400	50	mg/kg	
Manganese	579	0.5	mg/kg	
Nickel	35.5	0.5	mg/kg	
Potassium	879	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,380	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-09 0-5'
Sample No: 19-3759-010

Date Collected: 06/19/19
Time Collected: 10:35
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19				Preparation Date: 06/21/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.9	1.0	mg/kg	
Zinc	56.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.07	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.11		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19				Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-09 0-5'
Sample No: 19-3759-010

Date Collected: 06/19/19
Time Collected: 10:35
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.026	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.031	0.005	mg/L	
Iron	25.3	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-09 0-5'
Sample No: 19-3759-010

Date Collected: 06/19/19
Time Collected: 10:35
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 96.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 84.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 57.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 77.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-10 0-5'
Sample No: 19-3759-011

Date Collected: 06/19/19
Time Collected: 10:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	85.42		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-44-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-011

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-44-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-011

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-10 0-5'
Sample No: 19-3759-011

Date Collected: 06/19/19
Time Collected: 10:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.8	1.0	mg/kg	
Barium	25.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	29,800	50	mg/kg	
Chromium	10.5	0.5	mg/kg	
Cobalt	12.3	0.5	mg/kg	
Copper	22.9	0.5	mg/kg	
Iron	14,900	5.0	mg/kg	
Lead	19.0	0.5	mg/kg	
Magnesium	18,100	50	mg/kg	
Manganese	603	0.5	mg/kg	
Nickel	26.2	0.5	mg/kg	
Potassium	849	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,610	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-44-10 0-5'
Sample No: 19-3759-011

Date Collected: 06/19/19
Time Collected: 10:50
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/24/19		Preparation Method 3050B		
		Preparation Date: 06/21/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.9	1.0	mg/kg	
Zinc	41.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	8.25		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/26/19		Preparation Method 3010A		
		Preparation Date: 06/25/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-44-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-011

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.014	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.025	0.005	mg/L	
Iron	14.7	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 10:50

Sample ID: 1120V2-44-10 0-5'

Date Received: 06/20/19

Sample No: 19-3759-011

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.6	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 71.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-12 0-5
Sample No: 19-3668-020

Date Collected: 06/14/19
Time Collected: 9:50
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	86.75		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-12 0-5
Sample No: 19-3668-020

Date Collected: 06/14/19
Time Collected: 9:50
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-12 0-5
Sample No: 19-3668-020

Date Collected: 06/14/19
Time Collected: 9:50
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-12 0-5
Sample No: 19-3668-020

Date Collected: 06/14/19
Time Collected: 9:50
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.0	1.0	mg/kg	
Barium	57.9	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,650	50	mg/kg	
Chromium	16.4	0.5	mg/kg	
Cobalt	5.6	0.5	mg/kg	
Copper	24.4	0.5	mg/kg	
Iron	17,500	5.0	mg/kg	
Lead	15.9	0.5	mg/kg	
Magnesium	2,390	50	mg/kg	
Manganese	157	0.5	mg/kg	
Nickel	20.3	0.5	mg/kg	
Potassium	831	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,500	50	mg/kg	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	06/14/19
Project ID:	81.022.0509.42 Wolf Rd WO21	Time Collected:	9:50
Sample ID:	1120V2-45-12 0-5	Date Received:	06/17/19
Sample No:	19-3668-020	Date Reported:	06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Analysis Date: 06/20/19	Method: 6010C		Preparation Method 3050B	
			Preparation Date: 06/19/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.8	1.0	mg/kg	
Zinc	47.3	1.0	mg/kg	
Total Mercury				
Analysis Date: 06/20/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Analysis Date: 06/18/19 6:00	Method: 9045D 2004			
pH @ 25°C, 1:2	7.52		Units	
TCLP Extraction				
Analysis Date: 06/18/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Analysis Date: 06/21/19	Method: 6010C		Preparation Method 3010A	
			Preparation Date: 06/20/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Analysis Date: 06/20/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:50

Sample ID: 1120V2-45-12 0-5

Date Received: 06/17/19

Sample No: 19-3668-020

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.050	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.040	0.005	mg/L	
Iron	35.6	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-12 0-5
Sample No: 19-3668-020

Date Collected: 06/14/19
Time Collected: 9:50
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 75	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 61.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	83.67		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.5	1.0	mg/kg	
Barium	37.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	819	50	mg/kg	
Chromium	14.6	0.5	mg/kg	
Cobalt	30.0	0.5	mg/kg	
Copper	15.3	0.5	mg/kg	
Iron	17,600	5.0	mg/kg	
Lead	23.5	0.5	mg/kg	
Magnesium	2,130	50	mg/kg	
Manganese	720	0.5	mg/kg	
Nickel	16.7	0.5	mg/kg	
Potassium	718	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	1,890	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/20/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.2	1.0	mg/kg	
Zinc	36.1	1.0	mg/kg	
Total Mercury Analysis Date: 06/20/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/18/19 6:00		Method: 9045D 2004		
pH @ 25°C, 1:2	7.97		Units	
TCLP Extraction Analysis Date: 06/18/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/21/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/20/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:02

Sample ID: 1120V2-45-14 0-5

Date Received: 06/17/19

Sample No: 19-3668-022

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Arsenic	0.014	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	0.050	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.055	0.005	mg/L	
Iron	57.3	0.1	mg/L	
Lead	0.017	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-14 0-5
Sample No: 19-3668-022

Date Collected: 06/14/19
Time Collected: 10:02
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 94.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 65.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 61.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 73.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 60	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	82.88		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/19/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/19/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.9	1.0	mg/kg	
Barium	53.6	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	875	50	mg/kg	
Chromium	18.4	0.5	mg/kg	
Cobalt	7.2	0.5	mg/kg	
Copper	27.2	0.5	mg/kg	
Iron	21,600	5.0	mg/kg	
Lead	13.0	0.5	mg/kg	
Magnesium	2,380	50	mg/kg	
Manganese	240	0.5	mg/kg	
Nickel	25.2	0.5	mg/kg	
Potassium	955	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	1,960	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/20/19				Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.6	1.0	mg/kg	
Zinc	48.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	7.46		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/21/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.	Date Collected: 06/14/19
Project ID: 81.022.0509.42 Wolf Rd WO21	Time Collected: 10:30
Sample ID: 1120V2-DUP-15	Date Received: 06/17/19
Sample No: 19-3668-028	Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.061	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.069	0.005	mg/L	
Iron	61.9	0.1	mg/L	
Lead	0.011	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-15
Sample No: 19-3668-028

Date Collected: 06/14/19
Time Collected: 10:30
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 100.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 57.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 68.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	79.21		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	85.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,930	50	mg/kg	
Chromium	15.4	0.5	mg/kg	
Cobalt	11.3	0.5	mg/kg	
Copper	28.1	0.5	mg/kg	
Iron	20,500	5.0	mg/kg	
Lead	17.9	0.5	mg/kg	
Magnesium	2,740	50	mg/kg	
Manganese	584	0.5	mg/kg	
Nickel	27.2	0.5	mg/kg	
Potassium	964	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,030	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/20/19		Preparation Method 3050B		
		Preparation Date: 06/19/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.7	1.0	mg/kg	
Zinc	42.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	7.77		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/21/19		Preparation Method 3010A		
		Preparation Date: 06/20/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:05

Sample ID: 1120V2-45-15 0-5

Date Received: 06/17/19

Sample No: 19-3668-023

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.036	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.039	0.005	mg/L	
Iron	37.4	0.1	mg/L	
Lead	0.014	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-15 0-5
Sample No: 19-3668-023

Date Collected: 06/14/19
Time Collected: 10:05
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 64.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-16 0-5
Sample No: 19-3668-024

Date Collected: 06/14/19
Time Collected: 10:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	79.74		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-16 0-5
Sample No: 19-3668-024

Date Collected: 06/14/19
Time Collected: 10:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-16 0-5
Sample No: 19-3668-024

Date Collected: 06/14/19
Time Collected: 10:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-16 0-5
Sample No: 19-3668-024

Date Collected: 06/14/19
Time Collected: 10:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.5	1.0	mg/kg	
Barium	78.9	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	55,000	50	mg/kg	
Chromium	14.9	0.5	mg/kg	
Cobalt	14.2	0.5	mg/kg	
Copper	32.5	0.5	mg/kg	
Iron	27,800	5.0	mg/kg	
Lead	20.0	0.5	mg/kg	
Magnesium	32,000	50	mg/kg	
Manganese	959	0.5	mg/kg	
Nickel	24.5	0.5	mg/kg	
Potassium	1,100	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,410	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC. **Date Collected:** 06/14/19
Project ID: 81.022.0509.42 Wolf Rd WO21 **Time Collected:** 10:10
Sample ID: 1120V2-45-16 0-5 **Date Received:** 06/17/19
Sample No: 19-3668-024 **Date Reported:** 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/20/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/19/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.2	1.0	mg/kg	
Zinc	46.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/20/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/18/19 6:00	Method: 9045D 2004			
pH @ 25°C, 1:2	8.44		Units	
TCLP Extraction Analysis Date: 06/18/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/21/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/20/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/20/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:10

Sample ID: 1120V2-45-16 0-5

Date Received: 06/17/19

Sample No: 19-3668-024

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.009	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.008	0.005	mg/L	
Iron	7.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-16 0-5
Sample No: 19-3668-024

Date Collected: 06/14/19
Time Collected: 10:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 60.4	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	85.17		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	20.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	46,700	50	mg/kg	
Chromium	13.4	0.5	mg/kg	
Cobalt	3.6	0.5	mg/kg	
Copper	13.9	0.5	mg/kg	
Iron	12,300	5.0	mg/kg	
Lead	8.8	0.5	mg/kg	
Magnesium	27,100	50	mg/kg	
Manganese	201	0.5	mg/kg	
Nickel	12.6	0.5	mg/kg	
Potassium	648	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,000	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Method: 6010C			Preparation Method 3050B	
Analysis Date: 06/20/19			Preparation Date: 06/19/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	15.2	1.0	mg/kg	
Zinc	31.0	1.0	mg/kg	
Total Mercury				
Method: 7471B				
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Method: 9045D 2004				
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.75		Units	
TCLP Extraction				
Method: 1311				
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Method: 6010C			Preparation Method 3010A	
Analysis Date: 06/21/19			Preparation Date: 06/20/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Method: 7470A				
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:13

Sample ID: 1120V2-45-17 0-5

Date Received: 06/17/19

Sample No: 19-3668-025

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.037	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.027	0.005	mg/L	
Iron	33.8	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-17 0-5
Sample No: 19-3668-025

Date Collected: 06/14/19
Time Collected: 10:13
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 62.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 57.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-18 0-5
Sample No: 19-3668-026

Date Collected: 06/14/19
Time Collected: 10:17
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	76.10		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-18 0-5
Sample No: 19-3668-026

Date Collected: 06/14/19
Time Collected: 10:17
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/20/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-18 0-5
Sample No: 19-3668-026

Date Collected: 06/14/19
Time Collected: 10:17
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-18 0-5
Sample No: 19-3668-026

Date Collected: 06/14/19
Time Collected: 10:17
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/20/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.3	1.0	mg/kg	
Barium	104	0.5	mg/kg	
Beryllium	0.9	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	7,730	50	mg/kg	
Chromium	23.4	0.5	mg/kg	
Cobalt	7.7	0.5	mg/kg	
Copper	24.2	0.5	mg/kg	
Iron	25,500	5.0	mg/kg	
Lead	18.8	0.5	mg/kg	
Magnesium	5,630	50	mg/kg	
Manganese	234	0.5	mg/kg	
Nickel	23.7	0.5	mg/kg	
Potassium	1,130	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	4,820	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:17

Sample ID: 1120V2-45-18 0-5

Date Received: 06/17/19

Sample No: 19-3668-026

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Method: 6010C		Preparation Method 3050B		
Analysis Date: 06/20/19	Preparation Date: 06/19/19			
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	35.2	1.0	mg/kg	
Zinc	60.4	1.0	mg/kg	
Total Mercury				
Method: 7471B				
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Method: 9045D 2004				
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	7.81		Units	
TCLP Extraction				
Method: 1311				
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Method: 6010C		Preparation Method 3010A		
Analysis Date: 06/21/19	Preparation Date: 06/20/19			
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Method: 7470A				
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:17

Sample ID: 1120V2-45-18 0-5

Date Received: 06/17/19

Sample No: 19-3668-026

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	0.039	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.025	0.005	mg/L	
Iron	32.0	0.1	mg/L	
Lead	0.012	0.005	mg/L	
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-45-18 0-5
Sample No: 19-3668-026

Date Collected: 06/14/19
Time Collected: 10:17
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 94.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 68	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 81.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-42 (222 S. Wolf Road), 1120V2-43 (221 S. Wolf Road), 1120V2-45 (285-411 S. Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 530

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.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

Refer to Figure 4-1.3 in the Final PSI Rpt and borings 1120V2-42-09 (Wolf Road Sta. 141+00, 20 Left), 1120V2-43-01 (Wolf Road Sta. 140+10, 20 Right), and 1120V2-45-20 (Wolf Road Sta. 139+00, 20 Right).

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. reports #19-3476 and #19-3759. 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.

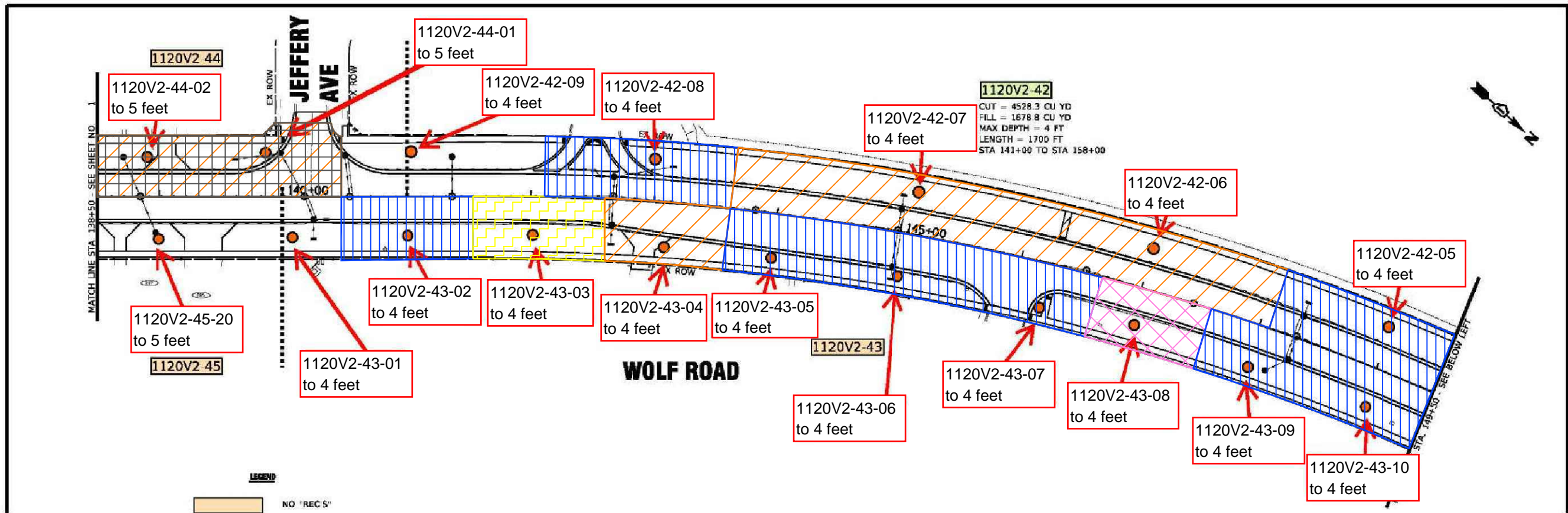
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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:

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:

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



LEGEND

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

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

**FIGURE 4-1.3 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.D. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 4
PLOT SCALE =	PLOT DATE =	DRAWN -	REVISD -							
		CHECKED -	REVISD -		SCALE: 1" = 100'					
		DATE -	REVISD -		SHEET NO. 4 OF 6 SHEETS					
					STA. TO STA.					
								ILLINOIS	FED. AID PROJECT	

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-42-09	1120V2-43-01	1120V2-45-20
				(0-4) 6/19/2019	(0-4) 6/5/2019	(0-5) 6/5/2019
Parameter						
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.43	7.78	7.58
VOCs, mg/kg				None Detected		
SVOCs, mg/kg				None Detected		
Total Metals, mg/kg						
Antimony	5	82	31	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	5.7	7.7	5.3
Barium	1,500	14,000	5500	162	120	65.8
Beryllium	22	410	160	0.7	0.7	0.8
Cadmium	5.2	200	78	<0.5	<0.5	<0.5
Calcium	---	---	---	4300	3190	3350
Chromium	21	690	230	20.6	21.3	22.2
Cobalt	20	12,000	4700	16.3	8.6	5.9
Copper	2,900	8,200	2900	19.4	20.7	27
Iron	15,000 / 15,900	---	---	34300	26700	25600
Lead	107	700	400	13.8	13.4	11.6
Magnesium	325,000	730,000	325000	4310	4130	4950
Manganese	630 / 636	4,100	1600	1380	710	126
Mercury	0.89	0.1	10	0.06	<0.05	<0.05
Nickel	100	4,100	1600	21.2	22.1	21.6
Potassium	---	---	---	943	939	1050
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	0.4	0.5	0.5
Sodium	---	---	---	2160	2670	2660
Thallium	2.6	160	6.3	1.1	<1.0	<1.0
Vanadium	550	1,400	550	30.5	33.2	32.9
Zinc	5,100	61,000	23000	71.1	60.8	67.3
TCLP Metals, mg/L	Class I Groundwater ^{d/}					
Arsenic		0.05		<0.010	<0.010	<0.010
Barium		2		<1.0	<1.0	<1.0
Beryllium		0.004		<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1
Copper		0.65		<0.1	<0.1	<0.1
Iron		5		<0.1	<0.1	<0.1
Lead		0.0075		<0.005	<0.005	<0.005
Manganese		0.15		<0.1	<0.1	<0.1
Mercury		0.002		<0.0005	<0.0005	<0.0005
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	0.016	<0.010
Barium		2		<1.0	<1.0	<1.0
Beryllium		0.004		<0.004	0.006	<0.004
Cadmium		0.005		<0.005	<0.005	<0.005
Chromium		0.1		0.018	0.19	0.087
Cobalt		1		<0.1	<0.1	<0.1
Copper		0.65		0.014	0.131	0.067
Iron		5		18.1	178	80.1
Lead		0.0075		0.006	0.051	0.026
Manganese		0.15		<0.1	0.9	0.3
Mercury		0.002		<0.0005	<0.0005	<0.0005
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	0.5	0.2

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

^{a/} Soil reference concentrations from MAC table. Background values for MSA counties are included as applicable.

Organic Soil Reference Concentrations (XX.XX / XX.XX / XX.XX) Include the Most Stringent Values from the MAC Table / The Chicago Corporate Limit / and The MSA County Excluding Chicago Values From the MAC Table.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-42-09 0-4'
Sample No: 19-3759-001

Date Collected: 06/19/19
Time Collected: 9:30
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/20/19				
Total Solids	81.80		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-42-09 0-4'
Sample No: 19-3759-001

Date Collected: 06/19/19
Time Collected: 9:30
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/25/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:30

Sample ID: 1120V2-42-09 0-4'

Date Received: 06/20/19

Sample No: 19-3759-001

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-42-09 0-4'
Sample No: 19-3759-001

Date Collected: 06/19/19
Time Collected: 9:30
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/24/19				Preparation Date: 06/21/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	162	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	4,300	50	mg/kg	
Chromium	20.6	0.5	mg/kg	
Cobalt	16.3	0.5	mg/kg	
Copper	19.4	0.5	mg/kg	
Iron	34,300	5.0	mg/kg	
Lead	13.8	0.5	mg/kg	
Magnesium	4,310	50	mg/kg	
Manganese	1,380	0.5	mg/kg	
Nickel	21.2	0.5	mg/kg	
Potassium	943	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	2,160	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42
Sample ID: 1120V2-42-09 0-4'
Sample No: 19-3759-001

Date Collected: 06/19/19
Time Collected: 9:30
Date Received: 06/20/19
Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/24/19				Preparation Date: 06/21/19
Thallium	1.1	1.0	mg/kg	N
Vanadium	30.5	1.0	mg/kg	
Zinc	71.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/25/19				
Mercury	0.06	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/21/19 6:30				
pH @ 25°C, 1:2	7.43		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/24/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/26/19				Preparation Date: 06/25/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/26/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:30

Sample ID: 1120V2-42-09 0-4'

Date Received: 06/20/19

Sample No: 19-3759-001

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/20/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/24/19		Preparation Date: 06/24/19		
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	0.018	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.014	0.005	mg/L	
Iron	18.1	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/25/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/19/19

Project ID: 81.0220509.42

Time Collected: 9:30

Sample ID: 1120V2-42-09 0-4'

Date Received: 06/20/19

Sample No: 19-3759-001

Date Reported: 06/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 65	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	82.35		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/11/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/11/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/11/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.7	1.0	mg/kg	
Barium	120	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	3,190	50	mg/kg	
Chromium	21.3	0.5	mg/kg	
Cobalt	8.6	0.5	mg/kg	
Copper	20.7	0.5	mg/kg	
Iron	26,700	5.0	mg/kg	
Lead	13.4	0.5	mg/kg	
Magnesium	4,130	50	mg/kg	
Manganese	710	0.5	mg/kg	
Nickel	22.1	0.5	mg/kg	
Potassium	939	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,670	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.2	1.0	mg/kg	
Zinc	60.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	7.78		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/12/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:40

Sample ID: 1120V2-43-01 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-020

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
Arsenic	0.016	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	0.006	0.004	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.190	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.131	0.005	mg/L	
Iron	178	0.1	mg/L	
Lead	0.051	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.5	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-01 (0-4)
Sample No: 19-3476-020

Date Collected: 06/05/19
Time Collected: 10:40
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 68.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 65.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 86	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 76.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:30

Sample ID: 1120V2-45-20 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-032

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	82.06		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-20 (0-5)
Sample No: 19-3476-032

Date Collected: 06/05/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:30

Sample ID: 1120V2-45-20 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-032

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/10/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-20 (0-5)
Sample No: 19-3476-032

Date Collected: 06/05/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/10/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.3	1.0	mg/kg	
Barium	65.8	0.5	mg/kg	
Beryllium	0.8	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	3,350	50	mg/kg	
Chromium	22.2	0.5	mg/kg	
Cobalt	5.9	0.5	mg/kg	
Copper	27.0	0.5	mg/kg	
Iron	25,600	5.0	mg/kg	
Lead	11.6	0.5	mg/kg	
Magnesium	4,950	50	mg/kg	
Manganese	126	0.5	mg/kg	
Nickel	21.6	0.5	mg/kg	
Potassium	1,050	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,660	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:30

Sample ID: 1120V2-45-20 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-032

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	32.9	1.0	mg/kg	
Zinc	67.3	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	7.58		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/12/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/12/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 10:30

Sample ID: 1120V2-45-20 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-032

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.087	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.067	0.005	mg/L	
Iron	80.1	0.1	mg/L	
Lead	0.026	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-45-20 (0-5)
Sample No: 19-3476-032

Date Collected: 06/05/19
Time Collected: 10:30
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.7	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist

for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-41 (57-193 S. Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 324

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.

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 4-1.4 in the Final PSI Rpt and borings 1120V2-41-01 (Wolf Road Sta. 151+00, 20 Right) and 1120V2-41-10 (Wolf Road Sta. 160+00, 20 Right).

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 #19-3476. 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))

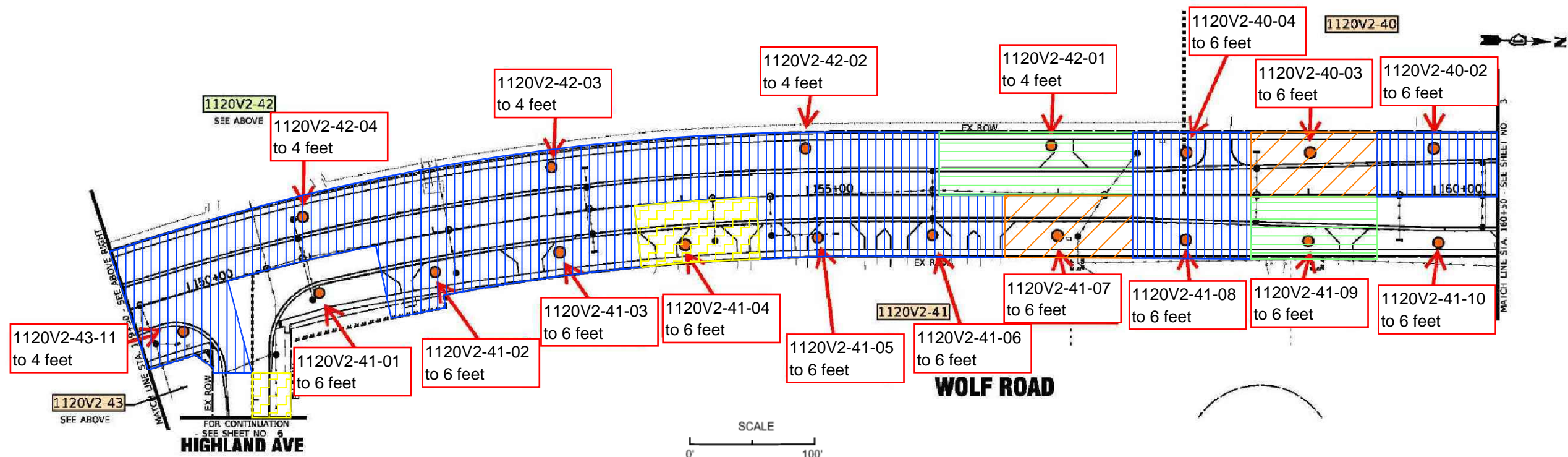
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Handwritten Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON-SITE OR AS NON-SPECIAL WASTE (a(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO WITHIN A MSA COUNTY (a(2)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a(3)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDDIUSFO FACILITY WITHIN A MSA COUNTY EXCLUDING CHICAGO (A(4)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a(5)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL, CANNOT BE TAKEN TO A CCDDIUSFO (b(1)).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	

**FIGURE 4-1.4 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.I. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 5
		DRAWN -	REVISED -							
		CHECKED -	REVISED -							
		DATE -	REVISED -							
					SCALE: 1" = 100'		SHEET NO. 5 OF 8 SHEETS	STA.		TO STA.
								CONTRACT NO. (ILLINOIS) FED. AID PROJECT		

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-41-01	1120V2-41-10	1120V2-41-10
				(0-6)	(0-5)	(5-6)
				6/5/2019	6/5/2019	6/5/2019
Parameter						
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.33	7.67	8.09
VOCs, mg/kg				None Detected		
SVOCS, mg/kg				None Detected		
Total Metals, mg/kg						
Antimony	5	82	31	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	9.5	7.6	6.4
Barium	1,500	14,000	5500	104	20	22.6
Beryllium	22	410	160	0.7	<0.5	<0.5
Cadmium	5.2	200	78	<0.5	<0.5	<0.5
Calcium	---	---	---	15900	55900	54400
Chromium	21	690	230	18.6	11.1	11.9
Cobalt	20	12,000	4700	10.4	6.3	7.3
Copper	2,900	8,200	2900	24.3	18	19.3
Iron	15,000 / 15,900	---	---	28700	18500	17000
Lead	107	700	400	17.1	11.6	11.2
Magnesium	325,000	730,000	325000	11100	32900	31700
Manganese	630 / 636	4,100	1600	651	461	434
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	22.3	17.1	19.3
Potassium	---	---	---	933	839	949
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	0.6	0.3	0.4
Sodium	---	---	---	2200	807	1040
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	29.8	18.7	21.5
Zinc	5,100	61,000	23000	52.4	49	49.1
TCLP Metals, mg/L	Class I Groundwater ^{d/}					
Arsenic		0.05		<0.010	<0.010	<0.010
Barium		2		<1.0	<1.0	<1.0
Beryllium		0.004		<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1
Copper		0.65		<0.1	<0.1	<0.1
Iron		5		0.2	<0.1	<0.1
Lead		0.0075		<0.005	<0.005	<0.005
Manganese		0.15		12	2.7	3.4
Mercury		0.002		<0.0005	<0.0005	<0.0005
Nickel		0.1		<0.1	<0.1	<0.1
Selenium		0.05		0.014	<0.010	0.011
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
Barium		2		<1.0	<1.0	<1.0
Beryllium		0.004		<0.004	<0.004	<0.004
Cadmium		0.005		<0.005	<0.005	<0.005
Chromium		0.1		0.008	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1
Copper		0.65		0.011	<0.005	<0.005
Iron		5		7.7	<0.1	0.5
Lead		0.0075		0.006	<0.005	<0.005
Manganese		0.15		<0.1	<0.1	<0.1
Mercury		0.002		<0.0005	<0.0005	<0.0005
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

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:30

Sample ID: 1120V2-41-01 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-004

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	83.15		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-01 (0-6)
Sample No: 19-3476-004

Date Collected: 06/05/19
Time Collected: 12:30
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:30

Sample ID: 1120V2-41-01 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-004

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:30

Sample ID: 1120V2-41-01 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-004

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.5	1.0	mg/kg	
Barium	104	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	15,900	50	mg/kg	
Chromium	18.6	0.5	mg/kg	
Cobalt	10.4	0.5	mg/kg	
Copper	24.3	0.5	mg/kg	
Iron	28,700	5.0	mg/kg	
Lead	17.1	0.5	mg/kg	
Magnesium	11,100	50	mg/kg	
Manganese	651	0.5	mg/kg	
Nickel	22.3	0.5	mg/kg	
Potassium	933	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	2,200	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:30

Sample ID: 1120V2-41-01 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-004

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.8	1.0	mg/kg	
Zinc	52.4	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.33		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	12.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.014	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 12:30

Sample ID: 1120V2-41-01 (0-6)

Date Received: 06/07/19

Sample No: 19-3476-004

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.011	0.005	mg/L	
Iron	7.7	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-01 (0-6)
Sample No: 19-3476-004

Date Collected: 06/05/19
Time Collected: 12:30
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 100.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 81	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 66	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:56

Sample ID: 1120V2-41-10 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-018

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	93.46		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:56

Sample ID: 1120V2-41-10 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-018

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-10 (0-5)
Sample No: 19-3476-018

Date Collected: 06/05/19
Time Collected: 14:56
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-10 (0-5)
Sample No: 19-3476-018

Date Collected: 06/05/19
Time Collected: 14:56
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.6	1.0	mg/kg	
Barium	20.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	55,900	50	mg/kg	
Chromium	11.1	0.5	mg/kg	
Cobalt	6.3	0.5	mg/kg	
Copper	18.0	0.5	mg/kg	
Iron	18,500	5.0	mg/kg	
Lead	11.6	0.5	mg/kg	
Magnesium	32,900	50	mg/kg	
Manganese	461	0.5	mg/kg	
Nickel	17.1	0.5	mg/kg	
Potassium	839	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	807	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:56

Sample ID: 1120V2-41-10 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-018

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/11/19				Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.7	1.0	mg/kg	
Zinc	49.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 6:45				
pH @ 25°C, 1:2	7.67		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19				Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/11/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 14:56

Sample ID: 1120V2-41-10 (0-5)

Date Received: 06/07/19

Sample No: 19-3476-018

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	< 0.005	0.005	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-10 (0-5)
Sample No: 19-3476-018

Date Collected: 06/05/19
Time Collected: 14:56
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 86.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:00

Sample ID: 1120V2-41-10 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-019

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	89.43		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:00

Sample ID: 1120V2-41-10 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-019

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/11/19				
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: 06/12/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:00

Sample ID: 1120V2-41-10 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-019

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/12/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-10 (5-6)
Sample No: 19-3476-019

Date Collected: 06/05/19
Time Collected: 15:00
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/12/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.4	1.0	mg/kg	
Barium	22.6	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	11.9	0.5	mg/kg	
Cobalt	7.3	0.5	mg/kg	
Copper	19.3	0.5	mg/kg	
Iron	17,000	5.0	mg/kg	
Lead	11.2	0.5	mg/kg	
Magnesium	31,700	50	mg/kg	
Manganese	434	0.5	mg/kg	
Nickel	19.3	0.5	mg/kg	
Potassium	949	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,040	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:00

Sample ID: 1120V2-41-10 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-019

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/11/19				Preparation Date: 06/10/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.5	1.0	mg/kg	
Zinc	49.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/11/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 6:45				
pH @ 25°C, 1:2	8.09		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19				Preparation Date: 06/12/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.011	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/11/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:00

Sample ID: 1120V2-41-10 (5-6)

Date Received: 06/07/19

Sample No: 19-3476-019

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	< 0.005	0.005	mg/L	
Iron	0.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-41-10 (5-6)
Sample No: 19-3476-019

Date Collected: 06/05/19
Time Collected: 15:00
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.7	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-21(60-180 N. Wolf Rd), 1120V2-26(99-101 N. Wolf Rd), 1120V2-29(50-58 N. Wolf Rd), 1120V2-38(11-35 W. Dundee), 1120V2-39(11 E. Dundee), 1120V2-40(62 S. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 950

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.

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 4-1.5 in the Final PSI Report and borings 1120V2-21-05 (Wolf Road Sta. 171+00, 20 Left), 21-06 (Wolf Road Sta. 170+00, 20 Left), 26-01 (Wolf Road Sta. 170+40, 20 Right), 29-01 (Wolf Road Sta. 167+50, 20 Left), 29-02 (Wolf Road Sta. 167+00, 20 Left), 38-01 (Wolf Road Sta. 163+50, 20 Left), 39-02 (Wolf Road Sta. 161+40, 20 Right), 39-06 (Wolf Road Sta. 163+50, 20 Right), 40-01 (Wolf Road Sta. 166+00, 20 Left)

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. reports #19-4573, 19-4691, and 19-4718. 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.

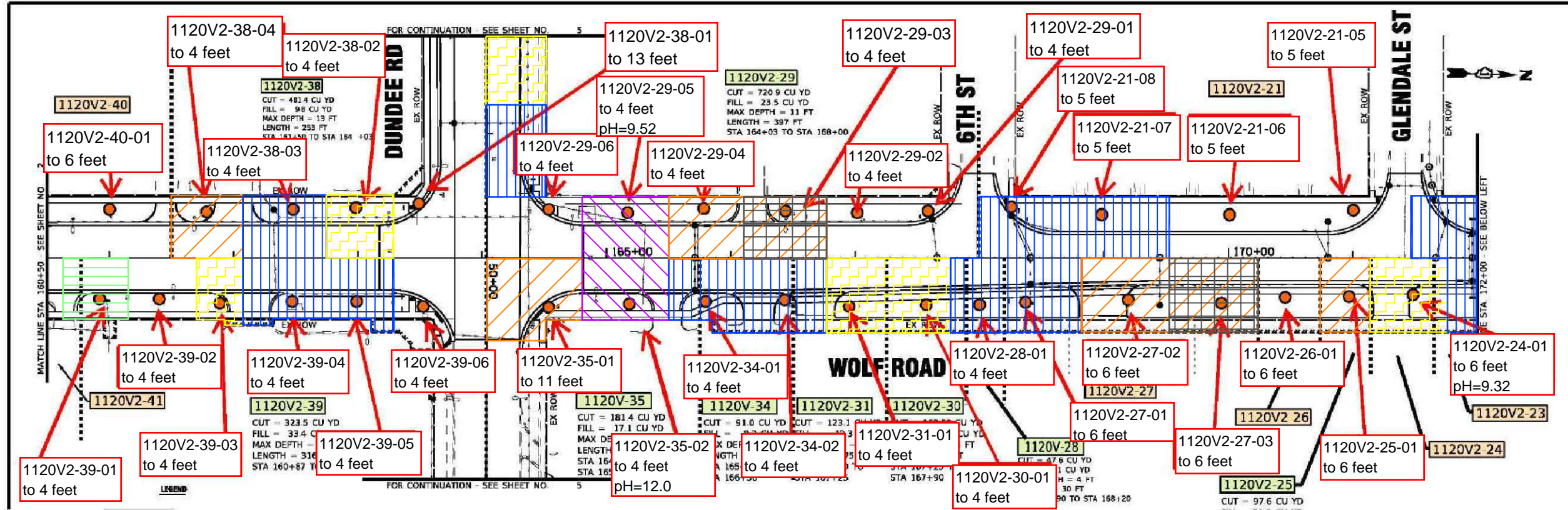
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

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

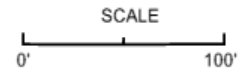
Jeremy J. Reynolds, P.G.
Printed Name:

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/14/19
Date:

P.E or L.P.C.



LEGEND	
	SOIL BORING LOCATION
	IDENTIFIED SITE WITH EXCAVATION
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < BACKGROUND). MATERIAL MAY BE MANAGED ON SITE OR AS NON-SPECIAL WASTE (a)(1).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY (a)(2).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA OR CHICAGO CORPORATE LIMITS). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO OR WITHIN CHICAGO CORPORATE LIMITS (a)(3).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS (> MOST STRINGENT MAC BUT < MAC FOR MSA COUNTY EXCLUDING CHICAGO). MATERIAL MAY BE MANAGED ON-SITE OR TO A CCDD/USFO WITHIN A MSA COUNTY EXCLUDING CHICAGO (A)(4).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED THE SOIL REFERENCE CONCENTRATIONS. MATERIAL MAY BE MANAGED AS A NON-SPECIAL WASTE (a)(5).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO NOT EXCEED MOST STRINGENT MAC VALUE WITH SOIL pH OUTSIDE RANGE 6.25-9.0 TO BE MANAGED ON-SITE OR OFF-SITE AS UNCONTAMINATED SOIL. CANNOT BE TAKEN TO A CCDD/USFO (b)(1).
	APPROXIMATE CONSTRUCTION AREA ESTIMATED TO EXCEED TACO TIER 1 CONSTRUCTION WORKERS REFERENCE CONCENTRATIONS.
AREAS WITHOUT SHADING ARE CONSIDERED UNRESTRICTED FOR REUSE AND OFF-SITE DISPOSAL.	



**FIGURE 4-1.5 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REWISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	F.A.M. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 6		
	PLOT SCALE =	DRAWN -	REWISED -			SCALE: 1" = 100'	SHEET NO. 6 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO.		
	PLOT DATE =	CHECKED -	REWISED -			ILLINOIS FED. AID PROJECT						
		DATE -	REWISED -									

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-21-05	1120V2-Dup-21 (1120V2-21-05)	1120V2-21-06	1120V2-26-01	1120V2-26-01	1120V2-29-01	1120V2-29-02	1120V2-38-01	1120V2-38-01	1120V2-38-01	1120V2-Dup-25 (1120V2-38-01)	1120V2-39-02	1120V2-39-06	1120V2-40-01	1120V2-40-01	
Sample Depth, ft				(0-5)	(0-5)	(0-5)	(0-5)	(5-6)	(0-4)	(0-4)	(0-5)	(5-10)	(10-13)	(10-13)	(0-4)	(0-4)	(0-5)	(5-6)	
Sample Date				7/30/2019	7/30/2019	7/30/2019	8/5/2019	8/5/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	6/5/2019	8/2/2019	6/14/2019	6/14/2019
Excavation Area(s)				1120V2-21			1120V2-26		1120V2-29		1120V2-38						1120V2-40		
[ISGS Site No.(s)]				1120V2-21			1120V2-26		1120V2-29		1120V2-38						1120V2-40		
Parameter																			
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.89	7.71	7.59	8.35	7.73	8.69	8.96	8.07	8.38	8.97	8.81	8.71	8.11	8.23	8.27	
VOCs, mg/kg				None detected															
SVOCS, mg/kg				None detected															
Total Metals, mg/kg																			
Arsenic	11.3 / 13	61	13	6.4	5.8	6.6	7.7	10.1	1	4.3	6.9	5.4	8.4	8.8	4.8	4.2	3.4	7.6	
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Chromium	21	690	230	11.8	9.7	13.3	10.2	8	16.5	11.5	22.7	16.4	17.9	16.3	12.4	9.5	12.9	14.7	
Cobalt	20	12,000	4700	6.8	6.8	12.3	7.8	6.3	5.1	6	9.8	14.4	8	10	5.5	5.6	3.6	14.1	
Iron	15,000 / 15,900	---	---	16100	19200	19500	15100	13600	12900	18300	23300	19600	26100	22500	14300	13900	13500	18100	
Lead	107	700	400	21.1	16.2	33.1	11.9	8.3	13.7	9.2	23.6	20.5	15.8	12.6	55.3	10.7	10.1	15.7	
Manganese	630 / 636	4,100	1600	335	367	826	811	335	74.8	409	612	1040	476	596	463	389	329	355	
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Zinc	5,100	61,000	23000	50.9	40.3	60.5	56.1	39.8	59.2	55.9	53.5	47	50.1	41.9	370	47.9	42.5	35.9	
TCLP Metals, mg/L		Class I Groundwater ^{d/}																	
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chromium		0.1		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	
Cobalt		1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Iron		5		0.4	0.2	0.3	0.2	0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.5	<0.1	0.3	
Lead		0.0075		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.036	<0.005	<0.005	<0.005	
Manganese		0.15		3.9	5.4	7.3	5.2	11.4	0.7	0.7	<0.1	6.9	1.1	2.7	2.4	6.4	1.1	<0.1	
Selenium		0.05		<0.010	<0.010	0.012	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	0.011	<0.010	<0.010	
Zinc		5		<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	0.1	<0.1	<0.1	
SPLP Metals, mg/L		Class I Groundwater ^{d/}																	
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chromium		0.1		0.015	0.011	<0.005	<0.005	<0.005	0.062	0.014	0.016	0.009	0.019	0.015	<0.005	<0.005	0.009	0.014	
Cobalt		1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Iron		5		14.5	10.7	3.7	3.6	2.5	52.9	22.2	13	7.2	12.4	10	2.9	0.6	6.1	14.2	
Lead		0.0075		0.017	0.009	<0.005	<0.005	<0.005	0.027	0.008	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	
Manganese		0.15		<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	
Selenium		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Zinc		5		<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	

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

^{a/} Soil reference concentrations from MAC table. Background values for MSA counties are included as applicable.

Organic Soil Reference Concentrations (XX.XX / XX.XX / XX.XX) Include the Most Stringent Values from the MAC Table / The Chicago Corporate Limit / and The MSA County Excluding Chicago Values From the MAC Table.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	80.00		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.4	1.0	mg/kg	
Barium	54.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	47,500	50	mg/kg	
Chromium	11.8	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	18.1	0.5	mg/kg	
Iron	16,100	5.0	mg/kg	
Lead	21.1	0.5	mg/kg	
Magnesium	27,100	50	mg/kg	
Manganese	335	0.5	mg/kg	
Nickel	18.0	0.5	mg/kg	
Potassium	726	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	3,020	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/01/19		Preparation Method 3050B		
		Preparation Date: 08/01/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.4	1.0	mg/kg	
Zinc	50.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/02/19 13:00				
pH @ 25°C, 1:2	7.89		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/01/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/05/19				Preparation Date: 08/05/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	3.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.015	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.026	0.005	mg/L	
Iron	14.5	0.1	mg/L	
Lead	0.017	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-05 (0-5)
Sample No: 19-4573-004

Date Collected: 07/30/19
Time Collected: 10:15
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 105.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 73.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 72.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-DUP 21
Sample No: 19-4573-009

Date Collected: 07/30/19
Time Collected: 9:45
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	76.32		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-DUP 21
Sample No: 19-4573-009

Date Collected: 07/30/19
Time Collected: 9:45
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-DUP 21
Sample No: 19-4573-009

Date Collected: 07/30/19
Time Collected: 9:45
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 9:45

Sample ID: 1120V2-DUP 21

Date Received: 07/30/19

Sample No: 19-4573-009

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/02/19				Preparation Date: 08/02/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.8	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	53,300	50	mg/kg	
Chromium	9.7	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	18.8	0.5	mg/kg	
Iron	19,200	5.0	mg/kg	
Lead	16.2	0.5	mg/kg	
Magnesium	30,100	50	mg/kg	
Manganese	367	0.5	mg/kg	
Nickel	16.3	0.5	mg/kg	
Potassium	737	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,950	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 9:45

Sample ID: 1120V2-DUP 21

Date Received: 07/30/19

Sample No: 19-4573-009

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Analysis Date: 08/02/19		Method: 6010C	Preparation Method 3050B	
			Preparation Date: 08/02/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.2	1.0	mg/kg	
Zinc	40.3	1.0	mg/kg	
Total Mercury				
Analysis Date: 08/01/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Analysis Date: 08/02/19 13:00		Method: 9045D 2004		
pH @ 25°C, 1:2	7.71		Units	
TCLP Extraction				
Analysis Date: 08/01/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Analysis Date: 08/05/19		Method: 6010C	Preparation Method 3010A	
			Preparation Date: 08/05/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Analysis Date: 08/02/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 9:45

Sample ID: 1120V2-DUP 21

Date Received: 07/30/19

Sample No: 19-4573-009

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.011	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.016	0.005	mg/L	
Iron	10.7	0.1	mg/L	
Lead	0.009	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 07/30/19

Project ID: WO-21 Wolf Road

Time Collected: 9:45

Sample ID: 1120V2-DUP 21

Date Received: 07/30/19

Sample No: 19-4573-009

Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 96.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 74.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 55.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 89.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 69.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 07/31/19				
Total Solids	76.95		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/02/19				
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: 08/01/19				
Preparation Date: 07/31/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/01/19		Preparation Date: 07/31/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/01/19				Preparation Date: 07/31/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/01/19				Preparation Date: 08/01/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.6	1.0	mg/kg	
Barium	64.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	74,100	50	mg/kg	
Chromium	13.3	0.5	mg/kg	
Cobalt	12.3	0.5	mg/kg	
Copper	24.4	0.5	mg/kg	
Iron	19,500	5.0	mg/kg	
Lead	33.1	0.5	mg/kg	
Magnesium	42,100	50	mg/kg	
Manganese	826	0.5	mg/kg	
Nickel	25.6	0.5	mg/kg	
Potassium	1,070	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	341	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/01/19		Preparation Method 3050B		
		Preparation Date: 08/01/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	34.4	1.0	mg/kg	
Zinc	60.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/05/19 11:00				
pH @ 25°C, 1:2	7.59		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/01/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 08/05/19		Preparation Method 3010A		
		Preparation Date: 08/05/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	7.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.012	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: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 07/31/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/02/19		Preparation Date: 08/02/19		
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	0.006	0.005	mg/L	
Iron	3.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: WO-21 Wolf Road
Sample ID: 1120V2-21-06 (0-5)
Sample No: 19-4573-005

Date Collected: 07/30/19
Time Collected: 10:18
Date Received: 07/30/19
Date Reported: 08/06/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94	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: 94.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 50.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	89.27		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.7	1.0	mg/kg	
Barium	30.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	83,500	50	mg/kg	
Chromium	10.2	0.5	mg/kg	
Cobalt	7.8	0.5	mg/kg	
Copper	18.8	0.5	mg/kg	
Iron	15,100	5.0	mg/kg	
Lead	11.9	0.5	mg/kg	
Magnesium	45,100	50	mg/kg	
Manganese	811	0.5	mg/kg	
Nickel	17.8	0.5	mg/kg	
Potassium	715	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	900	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 08/09/19		Preparation Method 3050B		
		Preparation Date: 08/08/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.6	1.0	mg/kg	
Zinc	56.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/08/19 13:00				
pH @ 25°C, 1:2	8.35		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/09/19				Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	5.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/12/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	0.008	0.005	mg/L	
Iron	3.6	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (0-5)
Sample No: 19-4718-009

Date Collected: 08/05/19
Time Collected: 11:50
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 104	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 74.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 48.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 61.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (5-6)
Sample No: 19-4718-010

Date Collected: 08/05/19
Time Collected: 11:51
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/06/19				
Total Solids	80.99		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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	6.5	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	



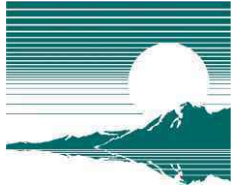
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (5-6)
Sample No: 19-4718-010

Date Collected: 08/05/19
Time Collected: 11:51
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/09/19				
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: 08/10/19				
Preparation Date: 08/08/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (5-6)
Sample No: 19-4718-010

Date Collected: 08/05/19
Time Collected: 11:51
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/10/19		Preparation Date: 08/08/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (5-6)
Sample No: 19-4718-010

Date Collected: 08/05/19
Time Collected: 11:51
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/10/19				Preparation Date: 08/08/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/09/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	10.1	1.0	mg/kg	
Barium	39.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	35,900	50	mg/kg	
Chromium	8.0	0.5	mg/kg	
Cobalt	6.3	0.5	mg/kg	
Copper	15.7	0.5	mg/kg	
Iron	13,600	5.0	mg/kg	
Lead	8.3	0.5	mg/kg	
Magnesium	18,800	50	mg/kg	
Manganese	335	0.5	mg/kg	
Nickel	15.3	0.5	mg/kg	
Potassium	513	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	1,370	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.	Date Collected: 08/05/19
Project ID: 81.0220509.42 WO21 Wolf Road	Time Collected: 11:51
Sample ID: 1120V2-26-01 (5-6)	Date Received: 08/06/19
Sample No: 19-4718-010	Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/09/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.1	1.0	mg/kg	
Zinc	39.8	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/08/19 13:00		Method: 9045D 2004		
pH @ 25°C, 1:2	7.73		Units	
TCLP Extraction Analysis Date: 08/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/09/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/09/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	11.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.015	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/12/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	08/05/19
Project ID:	81.0220509.42 WO21 Wolf Road	Time Collected:	11:51
Sample ID:	1120V2-26-01 (5-6)	Date Received:	08/06/19
Sample No:	19-4718-010	Date Reported:	08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/06/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/08/19		
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	< 0.005	0.005	mg/L	
Iron	2.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 WO21 Wolf Road
Sample ID: 1120V2-26-01 (5-6)
Sample No: 19-4718-010

Date Collected: 08/05/19
Time Collected: 11:51
Date Received: 08/06/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 107.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 102.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 47	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 86.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-01 (0-4)
Sample No: 19-4691-001

Date Collected: 08/02/19
Time Collected: 9:38
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	79.55		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-01 (0-4)
Sample No: 19-4691-001

Date Collected: 08/02/19
Time Collected: 9:38
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/06/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-01 (0-4)
Sample No: 19-4691-001

Date Collected: 08/02/19
Time Collected: 9:38
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-01 (0-4)
Sample No: 19-4691-001

Date Collected: 08/02/19
Time Collected: 9:38
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/06/19				Preparation Date: 08/06/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	1.0	1.0	mg/kg	
Barium	49.7	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,630	50	mg/kg	
Chromium	16.5	0.5	mg/kg	
Cobalt	5.1	0.5	mg/kg	
Copper	19.0	0.5	mg/kg	
Iron	12,900	5.0	mg/kg	
Lead	13.7	0.5	mg/kg	
Magnesium	4,110	50	mg/kg	
Manganese	74.8	0.5	mg/kg	
Nickel	15.3	0.5	mg/kg	
Potassium	617	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	3,510	50	mg/kg	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	08/02/19
Project ID:	81.0220509.42 IDOT Wolf Road	Time Collected:	9:38
Sample ID:	1120V2-29-01 (0-4)	Date Received:	08/05/19
Sample No:	19-4691-001	Date Reported:	08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Method: 6010C		Preparation Method 3050B		
Analysis Date: 08/06/19		Preparation Date: 08/06/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.6	1.0	mg/kg	
Zinc	59.2	1.0	mg/kg	
Total Mercury				
Method: 7471B				
Analysis Date: 08/08/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Method: 9045D 2004				
Analysis Date: 08/06/19 11:30				
pH @ 25°C, 1:2	8.69		Units	
TCLP Extraction				
Method: 1311				
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Method: 6010C		Preparation Method 3010A		
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Method: 7470A				
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 9:38

Sample ID: 1120V2-29-01 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-001

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.062	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.037	0.005	mg/L	
Iron	52.9	0.1	mg/L	
Lead	0.027	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.2	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-01 (0-4)
Sample No: 19-4691-001

Date Collected: 08/02/19
Time Collected: 9:38
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 56.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	85.46		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/06/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/06/19				Preparation Date: 08/06/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.3	1.0	mg/kg	
Barium	11.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	66,400	50	mg/kg	
Chromium	11.5	0.5	mg/kg	
Cobalt	6.0	0.5	mg/kg	
Copper	21.8	0.5	mg/kg	
Iron	18,300	5.0	mg/kg	
Lead	9.2	0.5	mg/kg	
Magnesium	41,700	50	mg/kg	
Manganese	409	0.5	mg/kg	
Nickel	17.1	0.5	mg/kg	
Potassium	855	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	932	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/06/19				Preparation Date: 08/06/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.1	1.0	mg/kg	
Zinc	55.9	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/08/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/06/19 11:30				
pH @ 25°C, 1:2	8.96		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19				Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 9:43

Sample ID: 1120V2-29-02 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-002

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.014	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.023	0.005	mg/L	
Iron	22.2	0.1	mg/L	
Lead	0.008	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-29-02 (0-4)
Sample No: 19-4691-002

Date Collected: 08/02/19
Time Collected: 9:43
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 108.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 94.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 53	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 77.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	85.85		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.9	1.0	mg/kg	
Barium	67.7	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	10,100	50	mg/kg	
Chromium	22.7	0.5	mg/kg	
Cobalt	9.8	0.5	mg/kg	
Copper	15.1	0.5	mg/kg	
Iron	23,300	5.0	mg/kg	
Lead	23.6	0.5	mg/kg	
Magnesium	6,210	50	mg/kg	
Manganese	612	0.5	mg/kg	
Nickel	17.5	0.5	mg/kg	
Potassium	983	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,250	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/07/19		Preparation Date: 08/07/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.1	1.0	mg/kg	
Zinc	53.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.07		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:21

Sample ID: 1120V2-38-01 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-019

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.016	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.008	0.005	mg/L	
Iron	13.0	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (0-5)
Sample No: 19-4691-019

Date Collected: 08/02/19
Time Collected: 11:21
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 93.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 52.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 81.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
---------	--------	------	-------	-------

Solids, Total Method: 2540B

Analysis Date: 08/05/19 15:39

Total Solids	85.64		%	
--------------	-------	--	---	--

Volatile Organic Compounds Method: 5035A/8260B

Analysis Date: 08/07/19

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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	68.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	9,420	50	mg/kg	
Chromium	16.4	0.5	mg/kg	
Cobalt	14.4	0.5	mg/kg	
Copper	14.2	0.5	mg/kg	
Iron	19,600	5.0	mg/kg	
Lead	20.5	0.5	mg/kg	
Magnesium	5,340	50	mg/kg	
Manganese	1,040	0.5	mg/kg	
Nickel	17.7	0.5	mg/kg	
Potassium	838	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	1,050	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19	Method: 6010C	Preparation Method 3050B Preparation Date: 08/07/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.8	1.0	mg/kg	
Zinc	47.0	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15	Method: 9045D 2004			
pH @ 25°C, 1:2	8.38		Units	
TCLP Extraction Analysis Date: 08/06/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19	Method: 6010C	Preparation Method 3010A Preparation Date: 08/07/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	6.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.009	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.008	0.005	mg/L	
Iron	7.2	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (5-10)
Sample No: 19-4691-020

Date Collected: 08/02/19
Time Collected: 11:24
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 50.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66	35 - 105	
8270C	Phenol-d5 (surr)	%R: 59.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (10-13)
Sample No: 19-4691-021

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	85.30		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (10-13)
Sample No: 19-4691-021

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/15/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (10-13)
Sample No: 19-4691-021

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/15/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (10-13)
Sample No: 19-4691-021

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/15/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.4	1.0	mg/kg	
Barium	26.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,200	50	mg/kg	
Chromium	17.9	0.5	mg/kg	
Cobalt	8.0	0.5	mg/kg	
Copper	21.6	0.5	mg/kg	
Iron	26,100	5.0	mg/kg	
Lead	15.8	0.5	mg/kg	
Magnesium	32,600	50	mg/kg	
Manganese	476	0.5	mg/kg	
Nickel	21.1	0.5	mg/kg	
Potassium	2,030	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	902	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC. **Date Collected:** 08/02/19
Project ID: 81.0220509.42 IDOT Wolf Road **Time Collected:** 11:30
Sample ID: 1120V2-38-01 (10-13) **Date Received:** 08/05/19
Sample No: 19-4691-021 **Date Reported:** 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Method: 6010C Preparation Method 3050B				
Analysis Date: 08/07/19 Preparation Date: 08/07/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.8	1.0	mg/kg	
Zinc	50.1	1.0	mg/kg	
Total Mercury Method: 7471B				
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.97		Units	
TCLP Extraction Method: 1311				
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 08/08/19 Preparation Date: 08/07/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.	Date Collected: 08/02/19
Project ID: 81.0220509.42 IDOT Wolf Road	Time Collected: 11:30
Sample ID: 1120V2-38-01 (10-13)	Date Received: 08/05/19
Sample No: 19-4691-021	Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.019	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.011	0.005	mg/L	
Iron	12.4	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-01 (10-13)
Sample No: 19-4691-021

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 91	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 90.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 72.2	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 68.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	85.07		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/09/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/09/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/09/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/08/19				Preparation Date: 08/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.8	1.0	mg/kg	
Barium	30.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	79,700	50	mg/kg	
Chromium	16.3	0.5	mg/kg	
Cobalt	10.0	0.5	mg/kg	
Copper	27.9	0.5	mg/kg	
Iron	22,500	5.0	mg/kg	
Lead	12.6	0.5	mg/kg	
Magnesium	38,900	50	mg/kg	
Manganese	596	0.5	mg/kg	
Nickel	26.2	0.5	mg/kg	
Potassium	2,320	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,100	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.5	1.0	mg/kg	
Zinc	41.9	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/08/19 13:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.81		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	2.7	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.	Date Collected: 08/02/19
Project ID: 81.0220509.42 IDOT Wolf Road	Time Collected: 11:30
Sample ID: 1120V2-DUP-25	Date Received: 08/05/19
Sample No: 19-4691-034	Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.015	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.012	0.005	mg/L	
Iron	10.0	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-DUP-25
Sample No: 19-4691-034

Date Collected: 08/02/19
Time Collected: 11:30
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 107	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 70.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 55.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 48.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 65.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 59.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 57.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:26

Sample ID: 1120V2-39-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-002

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	87.41		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:26

Sample ID: 1120V2-39-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-002

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/10/19				
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: 06/10/19				
Preparation Date: 06/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:26

Sample ID: 1120V2-39-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-002

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/10/19		Preparation Date: 06/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-39-02 (0-4)
Sample No: 19-3476-002

Date Collected: 06/05/19
Time Collected: 15:26
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/10/19				Preparation Date: 06/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/11/19				Preparation Date: 06/10/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.8	1.0	mg/kg	
Barium	34.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	79,300	50	mg/kg	
Chromium	12.4	0.5	mg/kg	
Cobalt	5.5	0.5	mg/kg	
Copper	19.7	0.5	mg/kg	
Iron	14,300	5.0	mg/kg	
Lead	55.3	0.5	mg/kg	
Magnesium	46,900	50	mg/kg	
Manganese	463	0.5	mg/kg	
Nickel	14.7	0.5	mg/kg	
Potassium	1,100	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	409	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:26

Sample ID: 1120V2-39-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-002

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/11/19	Method: 6010C	Preparation Method 3050B Preparation Date: 06/10/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	16.4	1.0	mg/kg	
Zinc	370	1.0	mg/kg	
Total Mercury Analysis Date: 06/11/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/10/19 6:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.71		Units	
TCLP Extraction Analysis Date: 06/10/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/13/19	Method: 6010C	Preparation Method 3010A Preparation Date: 06/11/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.036	0.005	mg/L	
Manganese	2.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	1.7	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/11/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/05/19

Project ID: IDOT Wheeling #21 - 81.0220509.42

Time Collected: 15:26

Sample ID: 1120V2-39-02 (0-4)

Date Received: 06/07/19

Sample No: 19-3476-002

Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/12/19		Preparation Date: 06/11/19		
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	0.010	0.005	mg/L	
Iron	2.9	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-39-02 (0-4)
Sample No: 19-3476-002

Date Collected: 06/05/19
Time Collected: 15:26
Date Received: 06/07/19
Date Reported: 06/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 98.5	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 100.1	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.8	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:22

Sample ID: 1120V2-40-01 0-5

Date Received: 06/17/19

Sample No: 19-3668-014

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	85.11		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 0-5
Sample No: 19-3668-014

Date Collected: 06/14/19
Time Collected: 9:22
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 0-5
Sample No: 19-3668-014

Date Collected: 06/14/19
Time Collected: 9:22
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 0-5
Sample No: 19-3668-014

Date Collected: 06/14/19
Time Collected: 9:22
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.4	1.0	mg/kg	
Barium	28.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	50,100	50	mg/kg	
Chromium	12.9	0.5	mg/kg	
Cobalt	3.6	0.5	mg/kg	
Copper	14.3	0.5	mg/kg	
Iron	13,500	5.0	mg/kg	
Lead	10.1	0.5	mg/kg	
Magnesium	27,400	50	mg/kg	
Manganese	329	0.5	mg/kg	
Nickel	13.3	0.5	mg/kg	
Potassium	798	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	301	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 0-5
Sample No: 19-3668-014

Date Collected: 06/14/19
Time Collected: 9:22
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/20/19				Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.2	1.0	mg/kg	
Zinc	42.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.23		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:22

Sample ID: 1120V2-40-01 0-5

Date Received: 06/17/19

Sample No: 19-3668-014

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	0.009	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.007	0.005	mg/L	
Iron	6.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 0-5
Sample No: 19-3668-014

Date Collected: 06/14/19
Time Collected: 9:22
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 71.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 5-6
Sample No: 19-3668-015

Date Collected: 06/14/19
Time Collected: 9:25
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	87.21		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 5-6
Sample No: 19-3668-015

Date Collected: 06/14/19
Time Collected: 9:25
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 5-6
Sample No: 19-3668-015

Date Collected: 06/14/19
Time Collected: 9:25
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 5-6
Sample No: 19-3668-015

Date Collected: 06/14/19
Time Collected: 9:25
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.6	1.0	mg/kg	
Barium	39.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,820	50	mg/kg	
Chromium	14.7	0.5	mg/kg	
Cobalt	14.1	0.5	mg/kg	
Copper	14.6	0.5	mg/kg	
Iron	18,100	5.0	mg/kg	
Lead	15.7	0.5	mg/kg	
Magnesium	2,080	50	mg/kg	
Manganese	355	0.5	mg/kg	
Nickel	23.3	0.5	mg/kg	
Potassium	640	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	165	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 9:25

Sample ID: 1120V2-40-01 5-6

Date Received: 06/17/19

Sample No: 19-3668-015

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	0.014	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.015	0.005	mg/L	
Iron	14.2	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-40-01 5-6
Sample No: 19-3668-015

Date Collected: 06/14/19
Time Collected: 9:25
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 103.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 100.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 87.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-9 (312 N. Wolf Rd), 1120V2-12 (300 N. Wolf Rd), 1120V2-15 (200 block of N. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 550

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.

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 4-1.6 in the Final PSI Rpt and borings 1120V2-9-03 (Wolf Road Sta. 183+40, 20 Left), 12-01(Wolf Road Sta. 181 +50, 20 Left), 15-01 (Wolf Road Sta. 180+25, 25 Left), and 15-04 (Wolf Road Sta. 180+25, 25 Right).

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 #19-2676 and 19-3668. 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.

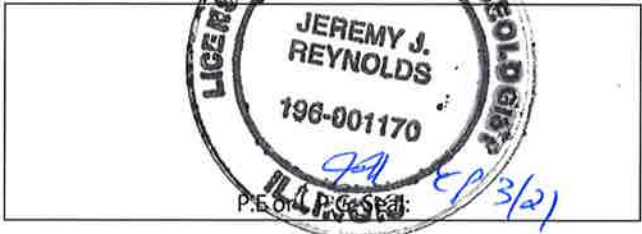
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

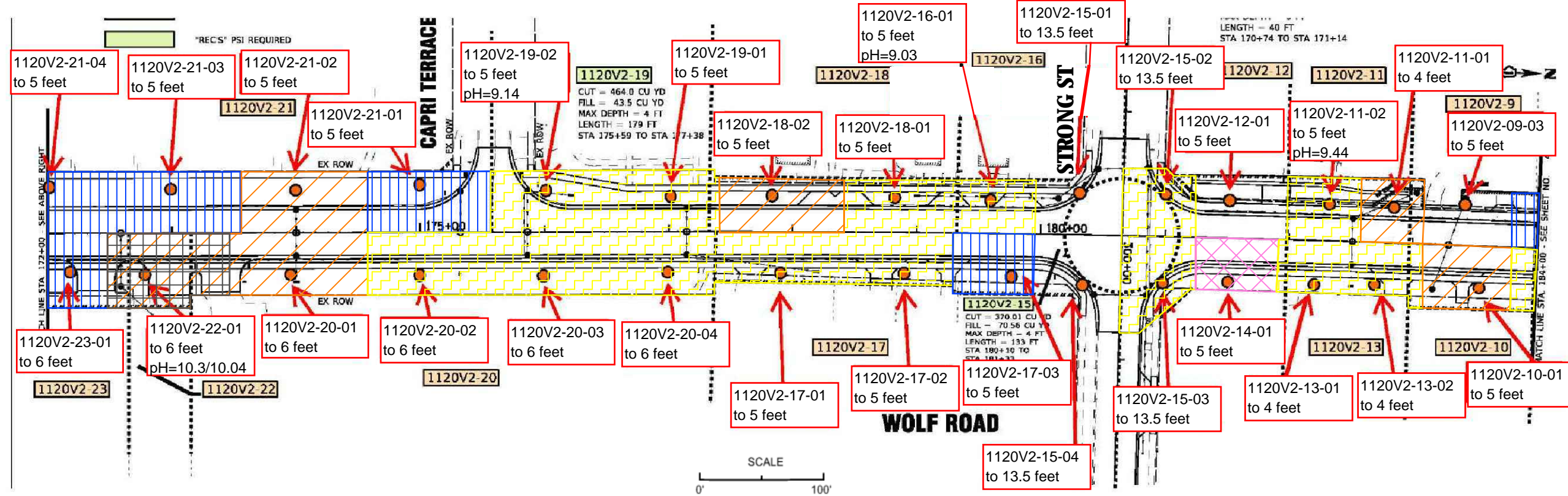
Company Name: Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address: 915 Harger Road, Suite 330
City: Oak Brook State: IL Zip Code: 60523
Phone: 630-684-9100

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

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date:





LEGEND

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

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

**FIGURE 4-1.6 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A**

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL		F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 7
	PLOT SCALE =	DRAWN -	REVISED -		SCALE: 1" = 100'	SHEET NO. 7 OF 8 SHEETS	STA.			CONTRACT NO.	
	PLOT DATE =	CHECKED -	REVISED -				TO STA.			(ILLINOIS) FED. AID PROJECT	
		DATE -	REVISED -								

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-09-03	1120V2-12-01	1120V2-15-01	1120V2-15-01	1120V2-Dup-16 (1120V2-15-01)	1120V2-15-01	1120V2-15-04	1120V2-15-04	1120V2-15-04
				(0-5) 5/6/2019	(0-5) 5/6/2019	(0-5) 6/14/2019	(5-10) 6/14/2019	(5-10) 6/14/2019	(10-13.5) 6/14/2019	(0-5) 6/14/2019	(5-10) 6/14/2019	(10-13.5) 6/14/2019
Parameter												
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.82	7.4	8.26	8.69	8.58	8.65	8.26	8.92	8.53
VOCs, mg/kg				NO EXCEEDANCES								
SVOCs, mg/kg				NO EXCEEDANCES								
Total Metals, mg/kg												
Arsenic	11.3 / 13	61	13	4.7	5.7	9.1	9.1	4.5	7.7	11.2	5.4	5.4
Beryllium	22	410	160	<0.5	0.6	0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5
Chromium	21	690	230	15.6	18.1	16.6	9.5	6.2	6.2	19.8	7.2	20.1
Iron	15,000 / 15,900	---	---	19200	22600	22200	22200	10200	18500	30100	15500	20800
Lead	107	700	400	13.9	17.5	22.3	32.2	6.6	12	22	9.3	10.6
Manganese	630 / 636	4,100	1600	476	834	780	398	395	629	1120	500	433
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	14.4	15.9	20.5	16.7	11	20.3	27.6	13.2	29.5
TCPL Metals, mg/L		Class I Groundwater ^{d/}										
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	0.004			<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	0.1			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Iron	5			<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lead	0.0075			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	0.15			<0.1	<0.1	0.2	1.9	1.4	1.6	0.9	2	2.3
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPLP Metals, mg/L		Class I Groundwater ^{d/}										
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	0.004			<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Chromium	0.1			0.019	0.023	0.007	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Iron	5			19.2	21.7	5.1	1.6	<0.1	<0.1	5.5	0.3	0.9
Lead	0.0075			0.01	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	0.15			0.2	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	79.53		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/10/19				
Preparation Date: 05/09/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/10/19		Preparation Date: 05/09/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/10/19				Preparation Date: 05/09/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	126	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,840	50	mg/kg	
Chromium	18.1	0.5	mg/kg	
Cobalt	9.4	0.5	mg/kg	
Copper	16.8	0.5	mg/kg	
Iron	22,600	5.0	mg/kg	
Lead	17.5	0.5	mg/kg	
Magnesium	2,460	50	mg/kg	
Manganese	834	0.5	mg/kg	
Nickel	15.9	0.5	mg/kg	
Potassium	811	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	4,170	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 05/06/19

Project ID: 81.0220509.42 IDOT W021A

Time Collected: 11:06

Sample ID: 1120V2-12-01 (0-5)

Date Received: 05/07/19

Sample No: 19-2676-008

Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals				
Analysis Date: 05/08/19	Method: 6010C		Preparation Method 3050B	
			Preparation Date: 05/08/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	37.9	1.0	mg/kg	
Zinc	80.0	1.0	mg/kg	
Total Mercury				
Analysis Date: 05/09/19	Method: 7471B			
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2				
Analysis Date: 05/13/19	Method: 9045D 2004			
pH @ 25°C, 1:2	7.40		Units	
TCLP Extraction				
Analysis Date: 05/07/19	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311				
Analysis Date: 05/09/19	Method: 6010C		Preparation Method 3010A	
			Preparation Date: 05/08/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311				
Analysis Date: 05/09/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.023	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.018	0.005	mg/L	
Iron	21.7	0.1	mg/L	
Lead	0.010	0.005	mg/L	
Manganese	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-12-01 (0-5)
Sample No: 19-2676-008

Date Collected: 05/06/19
Time Collected: 11:06
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 92.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 95.7	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 89.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 89.6	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 65.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.2	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 0-5
Sample No: 19-3668-001

Date Collected: 06/14/19
Time Collected: 10:51
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	82.01		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 0-5
Sample No: 19-3668-001

Date Collected: 06/14/19
Time Collected: 10:51
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/17/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 0-5
Sample No: 19-3668-001

Date Collected: 06/14/19
Time Collected: 10:51
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/17/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 0-5
Sample No: 19-3668-001

Date Collected: 06/14/19
Time Collected: 10:51
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/17/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/18/19				Preparation Date: 06/18/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.1	1.0	mg/kg	
Barium	66.7	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	4,640	50	mg/kg	
Chromium	16.6	0.5	mg/kg	
Cobalt	9.4	0.5	mg/kg	
Copper	27.0	0.5	mg/kg	
Iron	22,200	5.0	mg/kg	
Lead	22.3	0.5	mg/kg	
Magnesium	4,080	50	mg/kg	
Manganese	780	0.5	mg/kg	
Nickel	20.5	0.5	mg/kg	
Potassium	775	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	62	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:51

Sample ID: 1120V2-15-01 0-5

Date Received: 06/17/19

Sample No: 19-3668-001

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/18/19		Method: 6010C	Preparation Method 3050B Preparation Date: 06/18/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	34.1	1.0	mg/kg	
Zinc	75.5	1.0	mg/kg	
Total Mercury Analysis Date: 06/19/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/18/19 6:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.26		Units	
TCLP Extraction Analysis Date: 06/18/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/20/19		Method: 6010C	Preparation Method 3010A Preparation Date: 06/20/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/20/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:51

Sample ID: 1120V2-15-01 0-5

Date Received: 06/17/19

Sample No: 19-3668-001

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.005	0.005	mg/L	
Iron	5.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 0-5
Sample No: 19-3668-001

Date Collected: 06/14/19
Time Collected: 10:51
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 101.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.3	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 83.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 58.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 49.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 57.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:53

Sample ID: 1120V2-15-01 5-10

Date Received: 06/17/19

Sample No: 19-3668-002

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	89.18		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 5-10
Sample No: 19-3668-002

Date Collected: 06/14/19
Time Collected: 10:53
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/17/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 5-10
Sample No: 19-3668-002

Date Collected: 06/14/19
Time Collected: 10:53
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/17/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 5-10
Sample No: 19-3668-002

Date Collected: 06/14/19
Time Collected: 10:53
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/17/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/18/19				Preparation Date: 06/18/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.1	1.0	mg/kg	
Barium	16.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	68,100	50	mg/kg	
Chromium	9.5	0.5	mg/kg	
Cobalt	6.6	0.5	mg/kg	
Copper	25.9	0.5	mg/kg	
Iron	22,200	5.0	mg/kg	
Lead	32.2	0.5	mg/kg	
Magnesium	35,200	50	mg/kg	
Manganese	398	0.5	mg/kg	
Nickel	16.7	0.5	mg/kg	
Potassium	934	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	119	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:53

Sample ID: 1120V2-15-01 5-10

Date Received: 06/17/19

Sample No: 19-3668-002

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/18/19		Preparation Method 3050B		
		Preparation Date: 06/18/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.5	1.0	mg/kg	
Zinc	83.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/19/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.69		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/20/19		Preparation Method 3010A		
		Preparation Date: 06/20/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 10:53

Sample ID: 1120V2-15-01 5-10

Date Received: 06/17/19

Sample No: 19-3668-002

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	< 0.005	0.005	mg/L	
Iron	1.6	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 5-10
Sample No: 19-3668-002

Date Collected: 06/14/19
Time Collected: 10:53
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.6	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	86.72		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/19/19				
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	



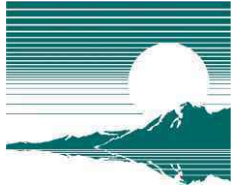
Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/19/19				
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: 06/21/19				
Preparation Date: 06/20/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/21/19		Preparation Date: 06/20/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/21/19				Preparation Date: 06/20/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.5	1.0	mg/kg	
Barium	8.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	61,800	50	mg/kg	
Chromium	6.2	0.5	mg/kg	
Cobalt	4.0	0.5	mg/kg	
Copper	18.4	0.5	mg/kg	
Iron	10,200	5.0	mg/kg	
Lead	6.6	0.5	mg/kg	
Magnesium	29,100	50	mg/kg	
Manganese	395	0.5	mg/kg	
Nickel	11.0	0.5	mg/kg	
Potassium	806	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	123	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 06/20/19				Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	12.3	1.0	mg/kg	
Zinc	47.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/20/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.58		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/21/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 11:00

Sample ID: 1120V2-DUP-16

Date Received: 06/17/19

Sample No: 19-3668-029

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19		Preparation Date: 06/18/19		
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	< 0.005	0.005	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-DUP-16
Sample No: 19-3668-029

Date Collected: 06/14/19
Time Collected: 11:00
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 102.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 73.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.6	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 66.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.7	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	84.68		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/17/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/17/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/17/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/18/19				Preparation Date: 06/18/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.7	1.0	mg/kg	
Barium	4.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	89,000	50	mg/kg	
Chromium	6.2	0.5	mg/kg	
Cobalt	8.3	0.5	mg/kg	
Copper	18.2	0.5	mg/kg	
Iron	18,500	5.0	mg/kg	
Lead	12.0	0.5	mg/kg	
Magnesium	45,800	50	mg/kg	
Manganese	629	0.5	mg/kg	
Nickel	20.3	0.5	mg/kg	
Potassium	656	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	139	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	< 0.005	0.005	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-01 10-13.5
Sample No: 19-3668-003

Date Collected: 06/14/19
Time Collected: 10:55
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 102.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 101.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59.1	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.1	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.1	35 - 105	
8270C	Phenol-d5 (surr)	%R: 63	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	78.67		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	11.2	1.0	mg/kg	
Barium	79.6	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	13,000	50	mg/kg	
Chromium	19.8	0.5	mg/kg	
Cobalt	10.6	0.5	mg/kg	
Copper	28.5	0.5	mg/kg	
Iron	30,100	5.0	mg/kg	
Lead	22.0	0.5	mg/kg	
Magnesium	8,590	50	mg/kg	
Manganese	1,120	0.5	mg/kg	
Nickel	27.6	0.5	mg/kg	
Potassium	731	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	137	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/20/19		Preparation Method 3050B		
		Preparation Date: 06/19/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	43.6	1.0	mg/kg	
Zinc	131	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/19/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.26		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/20/19				Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 11:10

Sample ID: 1120V2-15-04 0-5

Date Received: 06/17/19

Sample No: 19-3668-010

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	0.011	0.005	mg/L	
Iron	5.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 0-5
Sample No: 19-3668-010

Date Collected: 06/14/19
Time Collected: 11:10
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.3	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 86.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 57	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 84.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	90.70		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	11.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	73,500	50	mg/kg	
Chromium	7.2	0.5	mg/kg	
Cobalt	5.7	0.5	mg/kg	
Copper	20.6	0.5	mg/kg	
Iron	15,500	5.0	mg/kg	
Lead	9.3	0.5	mg/kg	
Magnesium	37,300	50	mg/kg	
Manganese	500	0.5	mg/kg	
Nickel	13.2	0.5	mg/kg	
Potassium	664	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	234	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 06/20/19		Method: 6010C		Preparation Method 3050B Preparation Date: 06/19/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.5	1.0	mg/kg	
Zinc	75.8	1.0	mg/kg	
Total Mercury Analysis Date: 06/19/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 06/18/19 6:00		Method: 9045D 2004		
pH @ 25°C, 1:2	8.92		Units	
TCLP Extraction Analysis Date: 06/18/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 06/20/19		Method: 6010C		Preparation Method 3010A Preparation Date: 06/20/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.0	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 06/20/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 06/14/19

Project ID: 81.022.0509.42 Wolf Rd WO21

Time Collected: 11:12

Sample ID: 1120V2-15-04 5-10

Date Received: 06/17/19

Sample No: 19-3668-011

Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 06/17/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
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	< 0.005	0.005	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 5-10
Sample No: 19-3668-011

Date Collected: 06/14/19
Time Collected: 11:12
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 103.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 100.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 90	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.1	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 58	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 83.3	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/18/19				
Total Solids	82.25		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/18/19				
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: 06/19/19				
Preparation Date: 06/18/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/19/19		Preparation Date: 06/18/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 06/19/19				Preparation Date: 06/18/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 06/20/19				Preparation Date: 06/19/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	36.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	68,100	50	mg/kg	
Chromium	20.1	0.5	mg/kg	
Cobalt	10.5	0.5	mg/kg	
Copper	23.1	0.5	mg/kg	
Iron	20,800	5.0	mg/kg	
Lead	10.6	0.5	mg/kg	
Magnesium	31,200	50	mg/kg	
Manganese	433	0.5	mg/kg	
Nickel	29.5	0.5	mg/kg	
Potassium	2,980	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	302	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 06/20/19		Preparation Method 3050B		
		Preparation Date: 06/19/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.1	1.0	mg/kg	
Zinc	52.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/19/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/18/19 6:00				
pH @ 25°C, 1:2	8.53		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 06/18/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 06/20/19		Preparation Method 3010A		
		Preparation Date: 06/20/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	2.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 06/20/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction Method: 1312				
Analysis Date: 06/17/19				
SPLP Metals Extraction Complete				
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/19/19 Preparation Date: 06/18/19				
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	< 0.005	0.005	mg/L	
Iron	0.9	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Method: 7470A				
Analysis Date: 06/21/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.022.0509.42 Wolf Rd WO21
Sample ID: 1120V2-15-04 10-13.5
Sample No: 19-3668-012

Date Collected: 06/14/19
Time Collected: 11:14
Date Received: 06/17/19
Date Reported: 06/26/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.4	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 101.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 74.5	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 62	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.5	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 69.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

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

1120V2-01(700 N. Wolf Rd), 1120V2-02(501-565 N. Wolf Rd), 1120V2-03(300 block of N. Wolf Rd), 1120V2-06(25 Mayer Avenue), 1120V2-09(312 N. Wolf Rd)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 310

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.

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 4-1.7 in the Final PSI Rpt and borings 1120V2-01-01 (Wolf Rd Sta. 200+00, 30 Left), 02-07(Wolf Rd Sta. 198+00, 40 Right), 02-08 (Wolf Rd Sta. 198+50, 40 Right), 03-01 (Wolf Rd Sta. 196+20, 35 Left), 03-09 (Wolf Rd Sta. 188+00, 30 Left), 06-01 (Wolf Rd Sta. 186+50, 25 Left), 06-02 (Wolf Rd Sta. 185+50, 20 Left), 09-01 (Wolf Rd Sta. 184+90, 20 Left).

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. reports #19-2374, 19-2676, and #19-2555. 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: _____

[Signature]
Licensed Professional Engineer or
Licensed Professional Geologist Signature:

10/4/19
Date: _____

P.E or L.P.G. Seal

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID Sample Depth, ft Sample Date Excavation Area(s) [ISGS Site No.(s)]	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-01-01	1120V2-02-07	1120V2-02-08	1120V2-03-01	1120V2-03-01	1120V2-03-09	1120V2-03-09	1120V2-06-01	1120V2-06-02	1120V2-09-01
				(0-1)	(0-2)	(0-2)	(0-5)	(5-6)	(0-5)	(5-6)	(0-5)	(0-5)	(0-5)
				4/30/2019	4/26/2019	4/26/2019	4/30/2019	4/30/2019	4/30/2019	4/30/2019	5/6/2019	5/6/2019	5/6/2019
				1120V2-01		1120V2-02		1120V2-03				1120V2-06	
Parameter													
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	7.99	8.16	8.16	7.87	7.9	7.93	8.46	8.29	7.77	8.82
VOCs, mg/kg				None Detected									
SVOCs, mg/kg				None Detected									
Total Metals, mg/kg				None Detected									
Arsenic	11.3 / 13	61	13	6.4	6.6	7.8	4.1	2.4	4.9	10.3	9.1	6.6	4.4
Beryllium	22	410	160	0.7	<0.5	<0.5	<0.5	<0.5	0.8	0.5	<0.5	<0.5	0.5
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	21	690	230	20.3	13.8	11	11.2	8.5	25.6	22.1	15.8	17.5	16.6
Cobalt	20	12,000	4700	13.1	8.1	6.7	6.5	4.2	5.4	17.8	11.2	7.6	4.1
Copper	2,900	8,200	2900	24.9	22.7	19.3	17.8	14.7	19.8	29.5	29.8	22.4	20.5
Iron	15,000 / 15,900	---	---	22600	19500	16000	12200	10400	24200	29400	25800	25200	21400
Lead	107	700	400	24.2	41.3	37.1	8.9	14.8	13.1	17	23	20.5	19.5
Manganese	630 / 636	4,100	1600	948	607	506	319	590	141	1190	1070	741	228
Nickel	100	4,100	1600	25	17.4	16.2	15.7	12	20.2	31	27.4	16.6	13.9
TCPL Metals, mg/L		Class I Groundwater ^{d/}											
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cobalt		1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper		0.65		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Iron		5		0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Lead		0.0075		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese		0.15		3.8	0.2	<0.1	4.2	<0.1	0.4	0.9	1.1	0.5	0.9
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPLP Metals, mg/L		Class I Groundwater ^{d/}											
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium		0.1		0.012	0.021	0.02	<0.005	<0.005	0.022	0.008	<0.005	0.016	0.019
Cobalt		1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper		0.65		0.011	0.025	0.024	<0.005	<0.005	0.011	0.01	0.009	0.017	0.02
Iron		5		9.8	22.2	22.6	0.3	2.2	16.5	6.5	3.7	14.2	18.5
Lead		0.0075		0.008	0.026	0.036	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.014
Manganese		0.15		<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mercury		0.002		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	77.26		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.4	1.0	mg/kg	
Barium	123	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	19,400	50	mg/kg	
Chromium	20.3	0.5	mg/kg	
Cobalt	13.1	0.5	mg/kg	
Copper	24.9	0.5	mg/kg	
Iron	22,600	5.0	mg/kg	
Lead	24.2	0.5	mg/kg	
Magnesium	6,910	50	mg/kg	
Manganese	948	0.5	mg/kg	
Nickel	25.0	0.5	mg/kg	
Potassium	1,830	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	370	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	30.8	1.0	mg/kg	
Zinc	59.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.99		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	3.8	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	0.012	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-01-01 (0-1)
Sample No: 19-2555-001

Date Collected: 04/30/19
Time Collected: 9:05
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

<i>Sample QC Summary: Surrogate Recovery</i>		<i>%R Limits</i>	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>Low High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.8	86 - 117
5035A/8260B	d8-Toluene (Surr)	%R: 95.8	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 84.8	77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R: 96.1	59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R: 75.3	45 - 112
8270C	2-Fluorophenol (Surr)	%R: 67.8	41 - 84
8270C	d14-Terphenyl (Surr)	%R: 106.9	56 - 120
8270C	d5-Nitrobenzene (Surr)	%R: 61.6	35 - 105
8270C	Phenol-d5 (surr)	%R: 72	50 - 100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	82.19		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 05/07/19		Preparation Method 3540C		
Preparation Date: 05/02/19				
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3050B		
Preparation Date: 05/03/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.1	1.0	mg/kg	
Barium	61.9	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	11.2	0.5	mg/kg	
Cobalt	6.5	0.5	mg/kg	
Copper	17.8	0.5	mg/kg	
Iron	12,200	5.0	mg/kg	
Lead	8.9	0.5	mg/kg	
Magnesium	23,100	50	mg/kg	
Manganese	319	0.5	mg/kg	
Nickel	15.7	0.5	mg/kg	
Potassium	668	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	181	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.0	1.0	mg/kg	
Zinc	48.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.87		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	4.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19		Preparation Date: 05/06/19		
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	< 0.005	0.005	mg/L	
Iron	0.3	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (0-5)
Sample No: 19-2555-005

Date Collected: 04/30/19
Time Collected: 9:22
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>		<i>Low</i>	<i>High</i>
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	95.4	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	96.6	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	86.4	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R:	92.9	59	131
8270C	2-Fluorobiphenyl (Surr)	%R:	66.1	45	112
8270C	2-Fluorophenol (Surr)	%R:	61.7	41	84
8270C	d14-Terphenyl (Surr)	%R:	74.9	56	120
8270C	d5-Nitrobenzene (Surr)	%R:	54.8	35	105
8270C	Phenol-d5 (surr)	%R:	67.6	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	91.47		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/07/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	11.1	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				
Preparation Date: 05/02/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/07/19		Preparation Date: 05/02/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/07/19				Preparation Date: 05/02/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/03/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.4	1.0	mg/kg	
Barium	24.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	92,600	50	mg/kg	
Chromium	8.5	0.5	mg/kg	
Cobalt	4.2	0.5	mg/kg	
Copper	14.7	0.5	mg/kg	
Iron	10,400	5.0	mg/kg	
Lead	14.8	0.5	mg/kg	
Magnesium	53,100	50	mg/kg	
Manganese	590	0.5	mg/kg	
Nickel	12.0	0.5	mg/kg	
Potassium	856	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	200	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	15.0	1.0	mg/kg	
Zinc	38.8	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 6:15				
pH @ 25°C, 1:2	7.90		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/06/19				Preparation Date: 05/06/19
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	< 0.005	0.005	mg/L	
Iron	2.2	0.1	mg/L	
Lead	0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-01 (5-6)
Sample No: 19-2555-006

Date Collected: 04/30/19
Time Collected: 9:23
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/06/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

<i>Sample QC Summary:</i>		<i>Surrogate Recovery</i>		<i>%R Limits</i>	
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>Low</i>	<i>High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.7	86	117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.7	90	110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 88.8	77	120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.5	59	131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.9	45	112	
8270C	2-Fluorophenol (Surr)	%R: 60.3	41	84	
8270C	d14-Terphenyl (Surr)	%R: 74.1	56	120	
8270C	d5-Nitrobenzene (Surr)	%R: 66.9	35	105	
8270C	Phenol-d5 (surr)	%R: 66.5	50	100	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/03/19				
Total Solids	77.91		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	77.4	0.5	mg/kg	
Beryllium	0.8	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	13,600	50	mg/kg	
Chromium	25.6	0.5	mg/kg	
Cobalt	5.4	0.5	mg/kg	
Copper	19.8	0.5	mg/kg	
Iron	24,200	5.0	mg/kg	
Lead	13.1	0.5	mg/kg	
Magnesium	9,970	50	mg/kg	
Manganese	141	0.5	mg/kg	
Nickel	20.2	0.5	mg/kg	
Potassium	1,830	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	649	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	40.0	1.0	mg/kg	
Zinc	90.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	7.93		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.4	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19		Preparation Date: 05/06/19		
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	0.022	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.011	0.005	mg/L	
Iron	16.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (0-5)
Sample No: 19-2555-021

Date Collected: 04/30/19
Time Collected: 10:10
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/07/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
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: 112.7	86	117
5035A/8260B	d8-Toluene (Surr)	%R: 98.4	90	110
5035A/8260B	Dibromofluoromethane (Surr)	%R: 88.2	77	120
8270C	2,4,6-Tribromophenol (Surr)	%R: 91.6	59	131
8270C	2-Fluorobiphenyl (Surr)	%R: 60	45	112
8270C	2-Fluorophenol (Surr)	%R: 57.2	41	84
8270C	d14-Terphenyl (Surr)	%R: 78	56	120
8270C	d5-Nitrobenzene (Surr)	%R: 64	35	105
8270C	Phenol-d5 (surr)	%R: 62.3	50	100



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total	Method: 2540B			
Analysis Date: 05/03/19				
Total Solids	81.55		%	

Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/08/19				
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds	Method: 5035A/8260B			
Analysis Date: 05/08/19				
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	

Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19				
Preparation Date: 05/06/19				
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	694	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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/08/19		Preparation Date: 05/06/19		
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	
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	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/08/19				Preparation Date: 05/06/19
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/06/19				Preparation Date: 05/03/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	10.3	1.0	mg/kg	
Barium	108	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	40,800	50	mg/kg	
Chromium	22.1	0.5	mg/kg	
Cobalt	17.8	0.5	mg/kg	
Copper	29.5	0.5	mg/kg	
Iron	29,400	5.0	mg/kg	
Lead	17.0	0.5	mg/kg	
Magnesium	24,800	50	mg/kg	
Manganese	1,190	0.5	mg/kg	
Nickel	31.0	0.5	mg/kg	
Potassium	1,670	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	611	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	47.3	1.0	mg/kg	
Zinc	108	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/03/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/02/19 7:30				
pH @ 25°C, 1:2	8.46		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/03/19				
TCLP Extraction	Complete			



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19				Preparation Date: 05/06/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/07/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction		Method: 1312		
Analysis Date: 05/03/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/07/19				Preparation Date: 05/06/19
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.010	0.005	mg/L	
Iron	6.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	



**First
Environmental
Laboratories, Inc.**

IL ELAP / NELAC Accreditation # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • Fax (630) 778-1233

Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 Wolf Rd Hinz
Sample ID: 1120V2-03-09 (5-6)
Sample No: 19-2555-022

Date Collected: 04/30/19
Time Collected: 10:11
Date Received: 05/01/19
Date Reported: 05/10/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312 Analysis Date: 05/07/19	Method: 6010C	Preparation Method 3010A Preparation Date: 05/06/19		
Zinc	< 0.1	0.1	mg/L	

SPLP Mercury Method 1312 Analysis Date: 05/07/19	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	

Sample QC Summary: Surrogate Recovery				%R Limits	
Method	Analyte	QC Result		Low	High
5035A/8260B	4-Bromofluorobenzene (Surr)	%R:	107	86	117
5035A/8260B	d8-Toluene (Surr)	%R:	122.5	*	90 - 110
5035A/8260B	Dibromofluoromethane (Surr)	%R:	95.4		77 - 120
8270C	2,4,6-Tribromophenol (Surr)	%R:	90.1		59 - 131
8270C	2-Fluorobiphenyl (Surr)	%R:	57.8		45 - 112
8270C	2-Fluorophenol (Surr)	%R:	56.7		41 - 84
8270C	d14-Terphenyl (Surr)	%R:	75.1		56 - 120
8270C	d5-Nitrobenzene (Surr)	%R:	63.7		35 - 105
8270C	Phenol-d5 (surr)	%R:	60.8		50 - 100



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	86.17		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				
Preparation Date: 05/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/09/19		Preparation Date: 05/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				Preparation Date: 05/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	9.1	1.0	mg/kg	
Barium	86.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	47,000	50	mg/kg	
Chromium	15.8	0.5	mg/kg	
Cobalt	11.2	0.5	mg/kg	
Copper	29.8	0.5	mg/kg	
Iron	25,800	5.0	mg/kg	
Lead	23.0	0.5	mg/kg	
Magnesium	28,300	50	mg/kg	
Manganese	1,070	0.5	mg/kg	
Nickel	27.4	0.5	mg/kg	
Potassium	1,040	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	265	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	30.0	1.0	mg/kg	
Zinc	96.2	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/13/19				
pH @ 25°C, 1:2	8.29		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19				Preparation Date: 05/08/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 05/06/19

Project ID: 81.0220509.42 IDOT W021A

Time Collected: 10:15

Sample ID: 1120V2-06-01 (0-5)

Date Received: 05/07/19

Sample No: 19-2676-001

Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.009	0.005	mg/L	
Iron	3.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-01 (0-5)
Sample No: 19-2676-001

Date Collected: 05/06/19
Time Collected: 10:15
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.3	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 50.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 72.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 59.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 56.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	83.22		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				
Preparation Date: 05/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/09/19		Preparation Date: 05/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				Preparation Date: 05/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.6	1.0	mg/kg	
Barium	111	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	27,000	50	mg/kg	
Chromium	17.5	0.5	mg/kg	
Cobalt	7.6	0.5	mg/kg	
Copper	22.4	0.5	mg/kg	
Iron	25,200	5.0	mg/kg	
Lead	20.5	0.5	mg/kg	
Magnesium	16,600	50	mg/kg	
Manganese	741	0.5	mg/kg	
Nickel	16.6	0.5	mg/kg	
Potassium	879	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	2,350	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 05/08/19		Method: 6010C		Preparation Method 3050B Preparation Date: 05/08/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	33.5	1.0	mg/kg	
Zinc	88.3	1.0	mg/kg	
Total Mercury Analysis Date: 05/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 05/13/19		Method: 9045D 2004		
pH @ 25°C, 1:2	7.77		Units	
TCLP Extraction Analysis Date: 05/07/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 05/09/19		Method: 6010C		Preparation Method 3010A Preparation Date: 05/08/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 05/09/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 05/06/19

Project ID: 81.0220509.42 IDOT W021A

Time Collected: 10:30

Sample ID: 1120V2-06-02 (0-5)

Date Received: 05/07/19

Sample No: 19-2676-002

Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.016	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.017	0.005	mg/L	
Iron	14.2	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-06-02 (0-5)
Sample No: 19-2676-002

Date Collected: 05/06/19
Time Collected: 10:30
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 93.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 96.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 91.9	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 90.2	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 61.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 74.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 63.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 05/07/19				
Total Solids	75.94		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
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	8.9	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/10/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				
Preparation Date: 05/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/09/19		Preparation Date: 05/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/09/19				Preparation Date: 05/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/08/19				Preparation Date: 05/08/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.4	1.0	mg/kg	
Barium	54.3	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	23,800	50	mg/kg	
Chromium	16.6	0.5	mg/kg	
Cobalt	4.1	0.5	mg/kg	
Copper	20.5	0.5	mg/kg	
Iron	21,400	5.0	mg/kg	
Lead	19.5	0.5	mg/kg	
Magnesium	14,300	50	mg/kg	
Manganese	228	0.5	mg/kg	
Nickel	13.9	0.5	mg/kg	
Potassium	1,060	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	1,900	50	mg/kg	



Analytical Report

Client:	HUFF & HUFF INC.	Date Collected:	05/06/19
Project ID:	81.0220509.42 IDOT W021A	Time Collected:	10:38
Sample ID:	1120V2-09-01 (0-5)	Date Received:	05/07/19
Sample No:	19-2676-003	Date Reported:	05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 05/08/19		Preparation Method 3050B		
		Preparation Date: 05/08/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	28.8	1.0	mg/kg	
Zinc	78.1	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 05/13/19				
pH @ 25°C, 1:2	8.82		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 05/07/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19				Preparation Date: 05/08/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	0.9	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 05/07/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/09/19		Preparation Date: 05/09/19		
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	0.019	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.020	0.005	mg/L	
Iron	18.5	0.1	mg/L	
Lead	0.014	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/10/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT W021A
Sample ID: 1120V2-09-01 (0-5)
Sample No: 19-2676-003

Date Collected: 05/06/19
Time Collected: 10:38
Date Received: 05/07/19
Date Reported: 05/14/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 98	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 63.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.3	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 70.9	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 60.3	35 - 105	
8270C	Phenol-d5 (surr)	%R: 59.3	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	83.09		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
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	14.3	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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/30/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.6	1.0	mg/kg	
Barium	58.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	72,400	50	mg/kg	
Chromium	13.8	0.5	mg/kg	
Cobalt	8.1	0.5	mg/kg	
Copper	22.7	0.5	mg/kg	
Iron	19,500	5.0	mg/kg	
Lead	41.3	0.5	mg/kg	
Magnesium	41,300	50	mg/kg	
Manganese	607	0.5	mg/kg	
Nickel	17.4	0.5	mg/kg	
Potassium	965	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	226	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		
Analysis Date: 05/01/19		Preparation Method 3050B		
Preparation Date: 04/30/19				
Thallium	< 1.0	1.0	mg/kg	
Vanadium	27.9	1.0	mg/kg	
Zinc	74.0	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 05/01/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 04/30/19 6:30				
pH @ 25°C, 1:2	8.16		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 04/29/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		
Analysis Date: 05/03/19		Preparation Method 3010A		
Preparation Date: 04/30/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.021	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.025	0.005	mg/L	
Iron	22.2	0.1	mg/L	
Lead	0.026	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-07 (0-2)
Sample No: 19-2374-045

Date Collected: 04/26/19
Time Collected: 10:13
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> <i>Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 94.7	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 97.5	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 95.4	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 97.4	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 77.4	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 60.8	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 87	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 75.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 70.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 04/26/19				
Total Solids	88.55		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 05/03/19				
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				
Preparation Date: 04/30/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 05/06/19		Preparation Date: 04/30/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 05/06/19				Preparation Date: 04/30/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
n-Nitrosodimethylamine	< 330	330	ug/kg	
n-Nitrosodiphenylamine	< 330	330	ug/kg	
Pentachlorophenol	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Phenol	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Pyridine	< 330	330	ug/kg	
1,2,4-Trichlorobenzene	< 330	330	ug/kg	
2,4,5-Trichlorophenol	< 330	330	ug/kg	
2,4,6-Trichlorophenol	< 330	330	ug/kg	
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 05/01/19				Preparation Date: 04/30/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.8	1.0	mg/kg	
Barium	36.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	66,300	50	mg/kg	
Chromium	11.0	0.5	mg/kg	
Cobalt	6.7	0.5	mg/kg	
Copper	19.3	0.5	mg/kg	
Iron	16,000	5.0	mg/kg	
Lead	37.1	0.5	mg/kg	
Magnesium	36,500	50	mg/kg	
Manganese	506	0.5	mg/kg	
Nickel	16.2	0.5	mg/kg	
Potassium	802	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	201	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 04/29/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 05/01/19		Preparation Date: 04/30/19		
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	0.020	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.024	0.005	mg/L	
Iron	22.6	0.1	mg/L	
Lead	0.036	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 05/02/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 #81.0
Sample ID: 1120V2-02-08 (0-2)
Sample No: 19-2374-046

Date Collected: 04/26/19
Time Collected: 10:17
Date Received: 04/26/19
Date Reported: 05/07/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary:		Surrogate Recovery		
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits</i> Low High	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 99.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 97.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 99.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 78.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 85.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 70.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 67.7	50 - 100	



Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 2692 Wolf Road Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
1120V2-36 (47 W. Dundee), 1120V2-37 (43 W. Dundee), 1120V2-38 (11-35 W. Dundee), 1120V2-43(221 S. Wolf Road)

City: Wheeling State: IL Zip Code: 60090

County: Cook Township: Wheeling

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

Latitude: 42.14 Longitude: - 87.92

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

ISGS Public Land Survey System - Approximate center of multiple addresses

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

Approximate Start Date (mm/dd/yyyy): 1/17/2020 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 183

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.

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 4-1.8 in the Final PSI Rpt and borings 1120V2-36-01(Dundee Road Sta. 45+80, 25 Right), 37-01 (Dundee Road Sta. 46+50, 25 Right), 37-02 (Dundee Road Sta. 47+00, 25 Right), 38-05 (Dundee Road Sta. 49+00, 25 Right), 38-06 (Dundee Road Sta. 48+50, 25 Right), and 43-12 (Highland Avenue St. 2+00, 15 Right)

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. reports #19-3477 and 19-4691. Site specific table of results is attached to this form.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

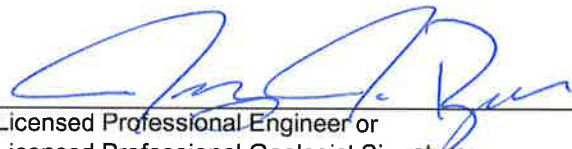
I, Jeremy J. Reynolds, P.G. (name of licensed professional engineer or geologist)


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:

10/4/19
Date:

P.E. or P.G.

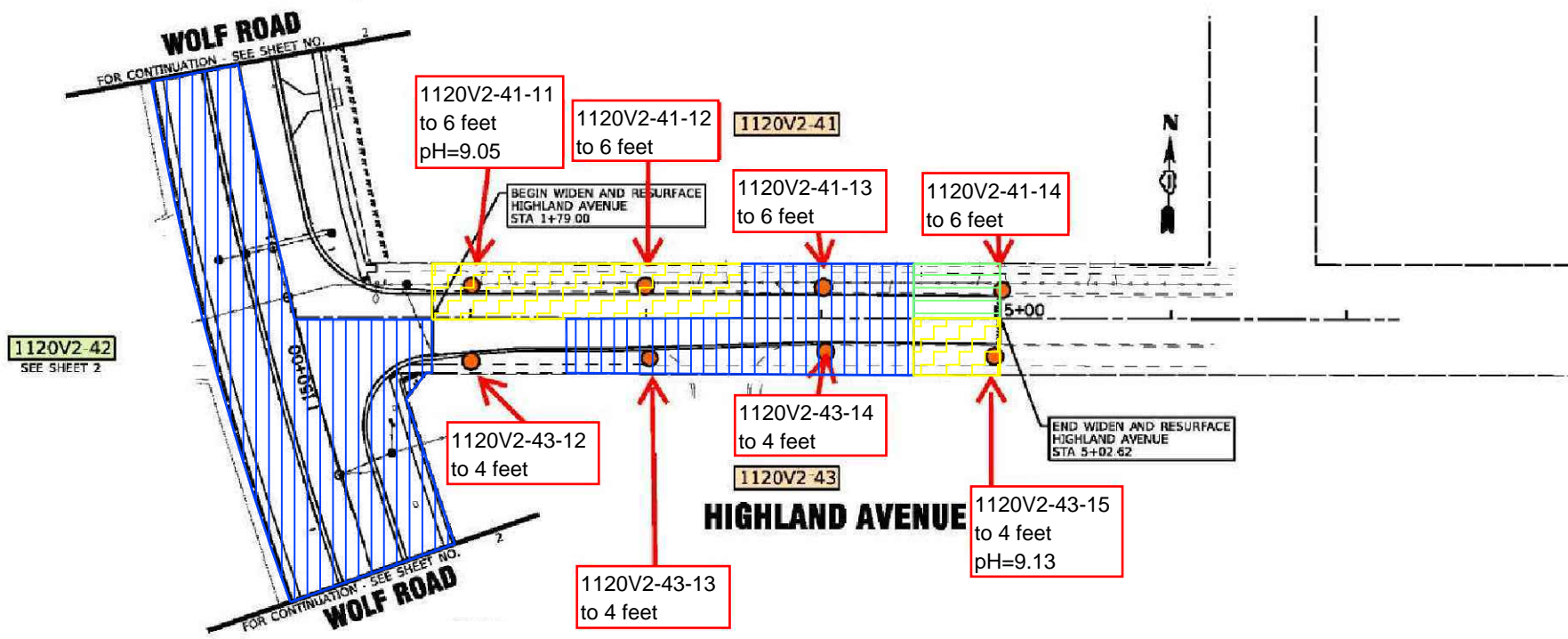
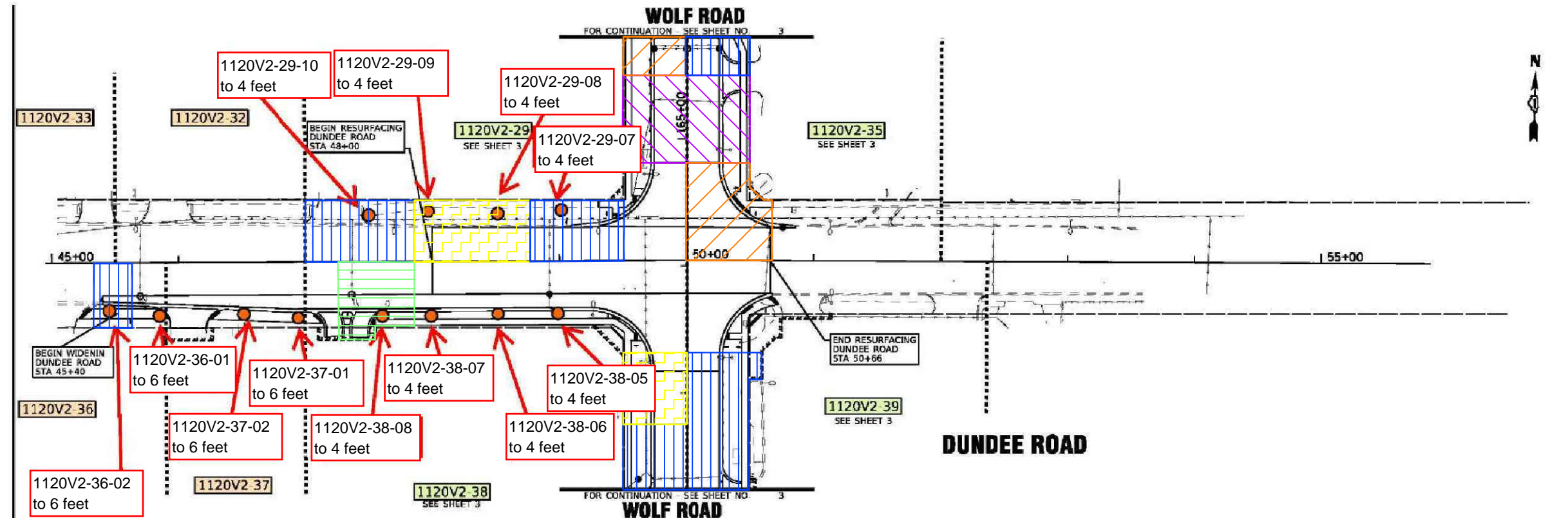


FIGURE 4-1.8 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #21A

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WOLF RD PSI REPORT COOK COUNTY, IL	SCALE: 1" = 100'	SHEET NO. 8 OF 8 SHEETS	STA. TO STA.	F.A.U. RTE.	SECTION	COUNTY COOK	TOTAL SHEETS 8	SHE NO 8
	PLOT SCALE =	DRAWN -	REVISED -						CONTRACT NO.				
	PLOT DATE =	CHECKED -	REVISED -						ILLINOIS FED. AID PROJECT				

Soils for Unrestricted Reuse or Disposal at CCDD Facilities
Wolf Road, Hintz Road to IL 21
Wheeling, Cook County, Illinois
BDE Sequence No.: 1371B
PTB: 178-008/HH-1, Work Order No.: 21A

Boring ID	Soil Reference Concentrations ^{a/}	Soil Remediation Objective for Construction Workers ^{b/}	Soil Remediation Objective for Residential Exposure ^{c/}	1120V2-36-01	1120V2-36-01	1120V2-37-01	1120V2-37-01	1120V2-37-02	1120V2-37-02	1120V2-38-05	1120V2-38-06	1120V2-Dup-24 (1120V2-28-06)	1120V2-43-12
				(0-5)	(5-6)	(0-5)	(5-6)	(0-5)	(5-6)	(0-4)	(0-4)	(0-4)	(0-4)
Sample Depth, ft													
Sample Date				8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	8/2/2019	6/6/2019
Excavation Area(s)				1120V2-36		1120V2-37				1120V2-38			1120V2-43
[ISGS Site No.(s)]													
Parameter													
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.27	8.27	8.1	8.53	8.35	8.37	8.14	8.27	7.99	7.62
VOCs, mg/kg				NO EXCEEDANCES									
SVOCS, mg/kg				NO EXCEEDANCES									
Total Metals, mg/kg													
Arsenic	11.3 / 13	61	13	6.2	8.5	6.2	7	5.7	10.4	4.2	5.1	6.1	4.9
Beryllium	22	410	160	<0.5	<0.5	<0.5	0.7	<0.5	0.7	<0.5	<0.5	<0.5	1
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Chromium	21	690	230	11	12.2	11.7	22.5	13.6	20	17.1	15.6	14.1	21.6
Iron	15,000 / 15,900	---	---	17000	23900	16300	27300	17500	26000	19900	20700	18800	20300
Lead	107	700	400	15.3	18.1	26.6	21.3	32.6	19.3	13.3	12.6	19.6	21.7
Manganese	630 / 636	4,100	1600	451	617	277	487	530	478	172	609	589	157
Nickel	100	4,100	1600	19.2	23.3	16.6	32.5	19.4	26.3	19.2	21.1	16.3	29.9
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
TCLP Metals, mg/L	Class I Groundwater ^{d/}												
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium		0.1		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005
Iron		5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	1.2
Lead		0.0075		<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese		0.15		0.5	1.2	1.3	5	1.1	0.2	<0.1	<0.1	<0.1	<0.1
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Selenium		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
SPLP Metals, mg/L	Class I Groundwater ^{d/}												
Arsenic		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium		0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium		0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium		0.1		0.006	0.012	0.008	0.012	0.007	<0.005	0.012	0.02	0.022	0.021
Iron		5		5.2	13.2	7.4	11.3	5.9	1.5	10.7	25.9	24.1	21.1
Lead		0.0075		<0.005	0.007	0.013	0.006	<0.005	<0.005	<0.005	0.008	0.014	0.024
Manganese		0.15		<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.4	0.2
Nickel		0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Selenium		0.05		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

--- - 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.

^{b/} Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure route.

^{c/} Soil Remediation Objective for Residential exposure, most stringent of the Ingestion or Inhalation exposure route.

^{d/} Soil Remediation Objective for the Groundwater Component of the Groundwater Ingestion Route, Class I Groundwater

Bold indicates concentration detected

 Shaded values indicate concentration exceeds reference concentration



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (0-5)
Sample No: 19-4691-011

Date Collected: 08/02/19
Time Collected: 10:57
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	81.63		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (0-5)
Sample No: 19-4691-011

Date Collected: 08/02/19
Time Collected: 10:57
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (0-5)
Sample No: 19-4691-011

Date Collected: 08/02/19
Time Collected: 10:57
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (0-5)
Sample No: 19-4691-011

Date Collected: 08/02/19
Time Collected: 10:57
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.2	1.0	mg/kg	
Barium	38.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	40,600	50	mg/kg	
Chromium	11.0	0.5	mg/kg	
Cobalt	7.2	0.5	mg/kg	
Copper	21.4	0.5	mg/kg	
Iron	17,000	5.0	mg/kg	
Lead	15.3	0.5	mg/kg	
Magnesium	23,000	50	mg/kg	
Manganese	451	0.5	mg/kg	
Nickel	19.2	0.5	mg/kg	
Potassium	1,120	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	160	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:57

Sample ID: 1120V2-36-01 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-011

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C	Preparation Method 3050B Preparation Date: 08/07/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	16.4	1.0	mg/kg	
Zinc	51.4	1.0	mg/kg	
Total Mercury Analysis Date: 08/08/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.27		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C	Preparation Method 3010A Preparation Date: 08/07/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.5	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:57

Sample ID: 1120V2-36-01 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-011

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.006	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.006	0.005	mg/L	
Iron	5.2	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (0-5)
Sample No: 19-4691-011

Date Collected: 08/02/19
Time Collected: 10:57
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.3	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99.5	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.3	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 46.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 71.2	35 - 105	
8270C	Phenol-d5 (surr)	%R: 59.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (5-6)
Sample No: 19-4691-012

Date Collected: 08/02/19
Time Collected: 10:58
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	86.21		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (5-6)
Sample No: 19-4691-012

Date Collected: 08/02/19
Time Collected: 10:58
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (5-6)
Sample No: 19-4691-012

Date Collected: 08/02/19
Time Collected: 10:58
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (5-6)
Sample No: 19-4691-012

Date Collected: 08/02/19
Time Collected: 10:58
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.5	1.0	mg/kg	
Barium	58.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	69,400	50	mg/kg	
Chromium	12.2	0.5	mg/kg	
Cobalt	9.7	0.5	mg/kg	
Copper	29.5	0.5	mg/kg	
Iron	23,900	5.0	mg/kg	
Lead	18.1	0.5	mg/kg	
Magnesium	40,600	50	mg/kg	
Manganese	617	0.5	mg/kg	
Nickel	23.3	0.5	mg/kg	
Potassium	1,670	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	176	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 10:58

Sample ID: 1120V2-36-01 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-012

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.012	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.014	0.005	mg/L	
Iron	13.2	0.1	mg/L	
Lead	0.007	0.005	mg/L	
Manganese	0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-36-01 (5-6)
Sample No: 19-4691-012

Date Collected: 08/02/19
Time Collected: 10:58
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 106.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 88.8	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 66.7	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 47.9	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 76.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.1	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	84.54		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.2	1.0	mg/kg	
Barium	40.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	27,500	50	mg/kg	
Chromium	11.7	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	18.2	0.5	mg/kg	
Iron	16,300	5.0	mg/kg	
Lead	26.6	0.5	mg/kg	
Magnesium	15,000	50	mg/kg	
Manganese	277	0.5	mg/kg	
Nickel	16.6	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	175	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C	Preparation Method 3050B Preparation Date: 08/07/19	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.1	1.0	mg/kg	
Zinc	47.9	1.0	mg/kg	
Total Mercury Analysis Date: 08/08/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.10		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C	Preparation Method 3010A Preparation Date: 08/07/19	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.	Date Collected: 08/02/19
Project ID: 81.0220509.42 IDOT Wolf Road	Time Collected: 11:04
Sample ID: 1120V2-37-01 (0-5)	Date Received: 08/05/19
Sample No: 19-4691-015	Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.008	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.006	0.005	mg/L	
Iron	7.4	0.1	mg/L	
Lead	0.013	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (0-5)
Sample No: 19-4691-015

Date Collected: 08/02/19
Time Collected: 11:04
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 96.2	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.8	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 100.1	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 92	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 56.2	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 78.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 74.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 65.6	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:05

Sample ID: 1120V2-37-01 (5-6)

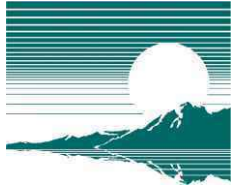
Date Received: 08/05/19

Sample No: 19-4691-016

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	84.17		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (5-6)
Sample No: 19-4691-016

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (5-6)
Sample No: 19-4691-016

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:05

Sample ID: 1120V2-37-01 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-016

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.0	1.0	mg/kg	
Barium	69.9	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	46,800	50	mg/kg	
Chromium	22.5	0.5	mg/kg	
Cobalt	12.4	0.5	mg/kg	
Copper	26.5	0.5	mg/kg	
Iron	27,300	5.0	mg/kg	
Lead	21.3	0.5	mg/kg	
Magnesium	19,400	50	mg/kg	
Manganese	487	0.5	mg/kg	
Nickel	32.5	0.5	mg/kg	
Potassium	2,480	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	305	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:05

Sample ID: 1120V2-37-01 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-016

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.012	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.010	0.005	mg/L	
Iron	11.3	0.1	mg/L	
Lead	0.006	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-01 (5-6)
Sample No: 19-4691-016

Date Collected: 08/02/19
Time Collected: 11:05
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 105.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 92.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 69.8	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 54.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 80.2	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 72.9	35 - 105	
8270C	Phenol-d5 (surr)	%R: 64.4	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:00

Sample ID: 1120V2-37-02 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-017

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	87.72		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (0-5)
Sample No: 19-4691-017

Date Collected: 08/02/19
Time Collected: 11:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (0-5)
Sample No: 19-4691-017

Date Collected: 08/02/19
Time Collected: 11:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (0-5)
Sample No: 19-4691-017

Date Collected: 08/02/19
Time Collected: 11:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	49.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	55,500	50	mg/kg	
Chromium	13.6	0.5	mg/kg	
Cobalt	8.3	0.5	mg/kg	
Copper	22.0	0.5	mg/kg	
Iron	17,500	5.0	mg/kg	
Lead	32.6	0.5	mg/kg	
Magnesium	32,800	50	mg/kg	
Manganese	530	0.5	mg/kg	
Nickel	19.4	0.5	mg/kg	
Potassium	1,560	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	139	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (0-5)
Sample No: 19-4691-017

Date Collected: 08/02/19
Time Collected: 11:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/07/19		Preparation Date: 08/07/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.4	1.0	mg/kg	
Zinc	57.6	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.35		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	1.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:00

Sample ID: 1120V2-37-02 (0-5)

Date Received: 08/05/19

Sample No: 19-4691-017

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.006	0.005	mg/L	
Iron	5.9	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (0-5)
Sample No: 19-4691-017

Date Collected: 08/02/19
Time Collected: 11:00
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.9	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 102.9	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 99	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 83.7	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 67.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 49.4	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 82.4	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 72.7	35 - 105	
8270C	Phenol-d5 (surr)	%R: 62.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:01

Sample ID: 1120V2-37-02 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-018

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	82.63		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (5-6)
Sample No: 19-4691-018

Date Collected: 08/02/19
Time Collected: 11:01
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/06/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (5-6)
Sample No: 19-4691-018

Date Collected: 08/02/19
Time Collected: 11:01
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/06/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (5-6)
Sample No: 19-4691-018

Date Collected: 08/02/19
Time Collected: 11:01
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/06/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	10.4	1.0	mg/kg	
Barium	73.4	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	22,200	50	mg/kg	
Chromium	20.0	0.5	mg/kg	
Cobalt	11.1	0.5	mg/kg	
Copper	24.7	0.5	mg/kg	
Iron	26,000	5.0	mg/kg	
Lead	19.3	0.5	mg/kg	
Magnesium	12,500	50	mg/kg	
Manganese	478	0.5	mg/kg	
Nickel	26.3	0.5	mg/kg	
Potassium	2,090	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	119	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (5-6)
Sample No: 19-4691-018

Date Collected: 08/02/19
Time Collected: 11:01
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals		Method: 6010C		Preparation Method 3050B
Analysis Date: 08/07/19				Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	29.1	1.0	mg/kg	
Zinc	57.5	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 08/09/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 08/07/19 14:15				
pH @ 25°C, 1:2	8.37		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 08/06/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/08/19				Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 08/08/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:01

Sample ID: 1120V2-37-02 (5-6)

Date Received: 08/05/19

Sample No: 19-4691-018

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	< 0.005	0.005	mg/L	
Iron	1.5	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-37-02 (5-6)
Sample No: 19-4691-018

Date Collected: 08/02/19
Time Collected: 11:01
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 99.6	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 104	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 107.2	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 85.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 64.9	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 46.7	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 75.5	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 67.8	35 - 105	
8270C	Phenol-d5 (surr)	%R: 60.5	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 08/05/19 15:39				
Total Solids	87.01		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.2	1.0	mg/kg	
Barium	27.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	2,130	50	mg/kg	
Chromium	17.1	0.5	mg/kg	
Cobalt	6.9	0.5	mg/kg	
Copper	19.5	0.5	mg/kg	
Iron	19,900	5.0	mg/kg	
Lead	13.3	0.5	mg/kg	
Magnesium	2,990	50	mg/kg	
Manganese	172	0.5	mg/kg	
Nickel	19.2	0.5	mg/kg	
Potassium	861	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	< 50	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	26.2	1.0	mg/kg	
Zinc	52.9	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.14		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	0.007	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	< 0.1	0.1	mg/L	
Iron	< 0.1	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:18

Sample ID: 1120V2-38-05 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-024

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.012	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.007	0.005	mg/L	
Iron	10.7	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-05 (0-4)
Sample No: 19-4691-024

Date Collected: 08/02/19
Time Collected: 11:18
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 97.8	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.2	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 103.7	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 99.1	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 70.5	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 59	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 90.8	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 77.5	35 - 105	
8270C	Phenol-d5 (surr)	%R: 69.8	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
---------	--------	------	-------	-------

Solids, Total Method: 2540B

Analysis Date: 08/05/19 15:39

Total Solids	85.93		%	
--------------	-------	--	---	--

Volatile Organic Compounds Method: 5035A/8260B

Analysis Date: 08/07/19

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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 08/07/19				
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: 08/08/19				
Preparation Date: 08/07/19				
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 08/08/19		Preparation Date: 08/07/19		
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		Preparation Method 3540C
Analysis Date: 08/08/19				Preparation Date: 08/07/19
4-Nitrophenol	< 1,600	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 90	90	ug/kg	
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: 08/07/19				Preparation Date: 08/07/19
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.1	1.0	mg/kg	
Barium	38.5	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	1,570	50	mg/kg	
Chromium	15.6	0.5	mg/kg	
Cobalt	6.5	0.5	mg/kg	
Copper	20.9	0.5	mg/kg	
Iron	20,700	5.0	mg/kg	
Lead	12.6	0.5	mg/kg	
Magnesium	2,680	50	mg/kg	
Manganese	609	0.5	mg/kg	
Nickel	21.1	0.5	mg/kg	
Potassium	669	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	< 0.2	0.2	mg/kg	
Sodium	52	50	mg/kg	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals Analysis Date: 08/07/19		Method: 6010C		Preparation Method 3050B Preparation Date: 08/07/19
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	25.1	1.0	mg/kg	
Zinc	69.5	1.0	mg/kg	
Total Mercury Analysis Date: 08/09/19		Method: 7471B		
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 Analysis Date: 08/07/19 14:15		Method: 9045D 2004		
pH @ 25°C, 1:2	8.27		Units	
TCLP Extraction Analysis Date: 08/06/19		Method: 1311		
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 08/08/19		Method: 6010C		Preparation Method 3010A Preparation Date: 08/07/19
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Analysis Date: 08/08/19		Method: 7470A		
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.

Date Collected: 08/02/19

Project ID: 81.0220509.42 IDOT Wolf Road

Time Collected: 11:15

Sample ID: 1120V2-38-06 (0-4)

Date Received: 08/05/19

Sample No: 19-4691-025

Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction		Method: 1312		
Analysis Date: 08/05/19				
SPLP Metals Extraction		Complete		
SPLP Metals Method 1312		Method: 6010C		Preparation Method 3010A
Analysis Date: 08/07/19		Preparation Date: 08/06/19		
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	0.020	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.029	0.005	mg/L	
Iron	25.9	0.1	mg/L	
Lead	0.008	0.005	mg/L	
Manganese	0.3	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 08/09/19				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: 81.0220509.42 IDOT Wolf Road
Sample ID: 1120V2-38-06 (0-4)
Sample No: 19-4691-025

Date Collected: 08/02/19
Time Collected: 11:15
Date Received: 08/05/19
Date Reported: 08/16/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Sample QC Summary: Surrogate Recovery				
<i>Method</i>	<i>Analyte</i>	<i>QC Result</i>	<i>%R Limits Low High</i>	
5035A/8260B	4-Bromofluorobenzene (Surr)	%R: 95.1	86 - 117	
5035A/8260B	d8-Toluene (Surr)	%R: 103.4	90 - 110	
5035A/8260B	Dibromofluoromethane (Surr)	%R: 98.6	77 - 120	
8270C	2,4,6-Tribromophenol (Surr)	%R: 82.9	59 - 131	
8270C	2-Fluorobiphenyl (Surr)	%R: 58.6	45 - 112	
8270C	2-Fluorophenol (Surr)	%R: 49	41 - 84	
8270C	d14-Terphenyl (Surr)	%R: 77.7	56 - 120	
8270C	d5-Nitrobenzene (Surr)	%R: 65.6	35 - 105	
8270C	Phenol-d5 (surr)	%R: 58.9	50 - 100	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540B		
Analysis Date: 06/07/19				
Total Solids	56.55		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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	18.7	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	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



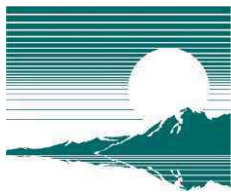
Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 06/12/19				
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: 06/13/19				
Preparation Date: 06/12/19				
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds	Method: 8270C	Preparation Method 3540C		
Analysis Date: 06/13/19		Preparation Date: 06/12/19		
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	
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	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds		Method: 8270C		
Analysis Date: 06/13/19		Preparation Method 3540C		
Preparation Date: 06/12/19				
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		
Analysis Date: 06/11/19		Preparation Method 3050B		
Preparation Date: 06/11/19				
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	110	0.5	mg/kg	
Beryllium	1.0	0.5	mg/kg	
Cadmium	0.5	0.5	mg/kg	
Calcium	16,600	50	mg/kg	
Chromium	21.6	0.5	mg/kg	
Cobalt	8.5	0.5	mg/kg	
Copper	45.4	0.5	mg/kg	
Iron	20,300	5.0	mg/kg	
Lead	21.7	0.5	mg/kg	
Magnesium	5,800	50	mg/kg	
Manganese	157	0.5	mg/kg	
Nickel	29.9	0.5	mg/kg	
Potassium	1,240	50	mg/kg	
Selenium	1.4	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	1,980	50	mg/kg	
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	30.6	1.0	mg/kg	
Zinc	87.4	1.0	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 06/12/19				
Mercury	0.07	0.05	mg/kg	
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 06/10/19 10:30				
pH @ 25°C, 1:2	7.62		Units	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
TCLP Extraction Method: 1311				
Analysis Date: 06/10/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/13/19 Preparation Date: 06/13/19				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Beryllium	< 1.00	1.0	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	1.2	0.1	mg/L	
Lead	< 0.005	0.005	mg/L	
Manganese	< 0.1	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	< 0.1	0.1	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 06/12/19				
Mercury	< 0.0005	0.0005	mg/L	
SPLP Extraction Method: 1312				
Analysis Date: 06/07/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 Method: 6010C Preparation Method 3010A				
Analysis Date: 06/12/19 Preparation Date: 06/11/19				
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	0.021	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.036	0.005	mg/L	
Iron	21.1	0.1	mg/L	
Lead	0.024	0.005	mg/L	



Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT Wheeling #21 - 81.0220509.42
Sample ID: 1120V2-43-12 (0-4)
Sample No: 19-3477-019

Date Collected: 06/06/19
Time Collected: 10:15
Date Received: 06/07/19
Date Reported: 06/18/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Metals Method 1312		Method: 6010C		
Analysis Date: 06/12/19		Preparation Method 3010A		
		Preparation Date: 06/11/19		
Manganese	0.2	0.1	mg/L	
Nickel	< 0.1	0.1	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
Zinc	0.1	0.1	mg/L	
SPLP Mercury Method 1312		Method: 7470A		
Analysis Date: 06/13/19				
Mercury	< 0.0005	0.0005	mg/L	



Huff & Huff, a Subsidiary of GZA