IDOT PTB 178-008 WO#35A
CCDD Document Package
IL 58 (Golf Rd) College Dr to River Rd

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: FAP 557 Golf Road (College Dr to East River Rd) Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
2816V-2 (1600-2200 blocks of Golf Rd), 2816V-4(1700 block of Golf Rd), 2816V-7 (1600-2200 blocks of Golf Rd)

City: Des Plaines State: IL Zip Code: 60016

County: Cook Township: Maine

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

Latitude: 42.05 (Decimal Degrees) Longitude: - 87.88 (-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): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 730

II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 557 Golf Road (College Dr to East River Rd) Latitude: 42.05000 Longitude: - 87.88000

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 in the Final PSI Rpt and borings 2816V-2-01 (IL Route 58 Sta 108+00, 25 Right), 2816V-2-04 (IL Route 58 Sta 118+00, 25 Right), 2816V-2-08 (IL Route 58 Sta 116+00, 25 Left), 2816V-2-09 (IL Route 58 Sta 114+00, 25 Left), and 2816V-4-03 (IL Route 58 Sta 124+00, 25 Left), 2816V-7-01 (IL Route 58 Sta 126 +50, 25 Right), 2816V-7-04 (IL Route 58 Sta 132+00, 25 Right), 2816V-7-05 (IL Route 58 Sta 134+00, 25 Right), 2816V-7-06 (IL Route 58 Sta 136+00, 25 Right), 2816V-7-08 (IL Route 58 Sta 140+00, 25 Right), 2816V-7-10 (IL Route 58 Sta 138+00, 25 Left), 2816V-7-11 (IL Route 58 Sta 136+00, 25 Left), 2816V-7-12 (IL Route 58 Sta 134+00, 25 Left), 2816V-7-13 (IL Route 58 Sta 132+00, 25 Left), 2816V-7-14 (IL Route 58 Sta 130+00, 25 Left), 2816V-7-15 (IL Route 58 Sta 128+00, 25 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. report #19-7697 and #19-7719. 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

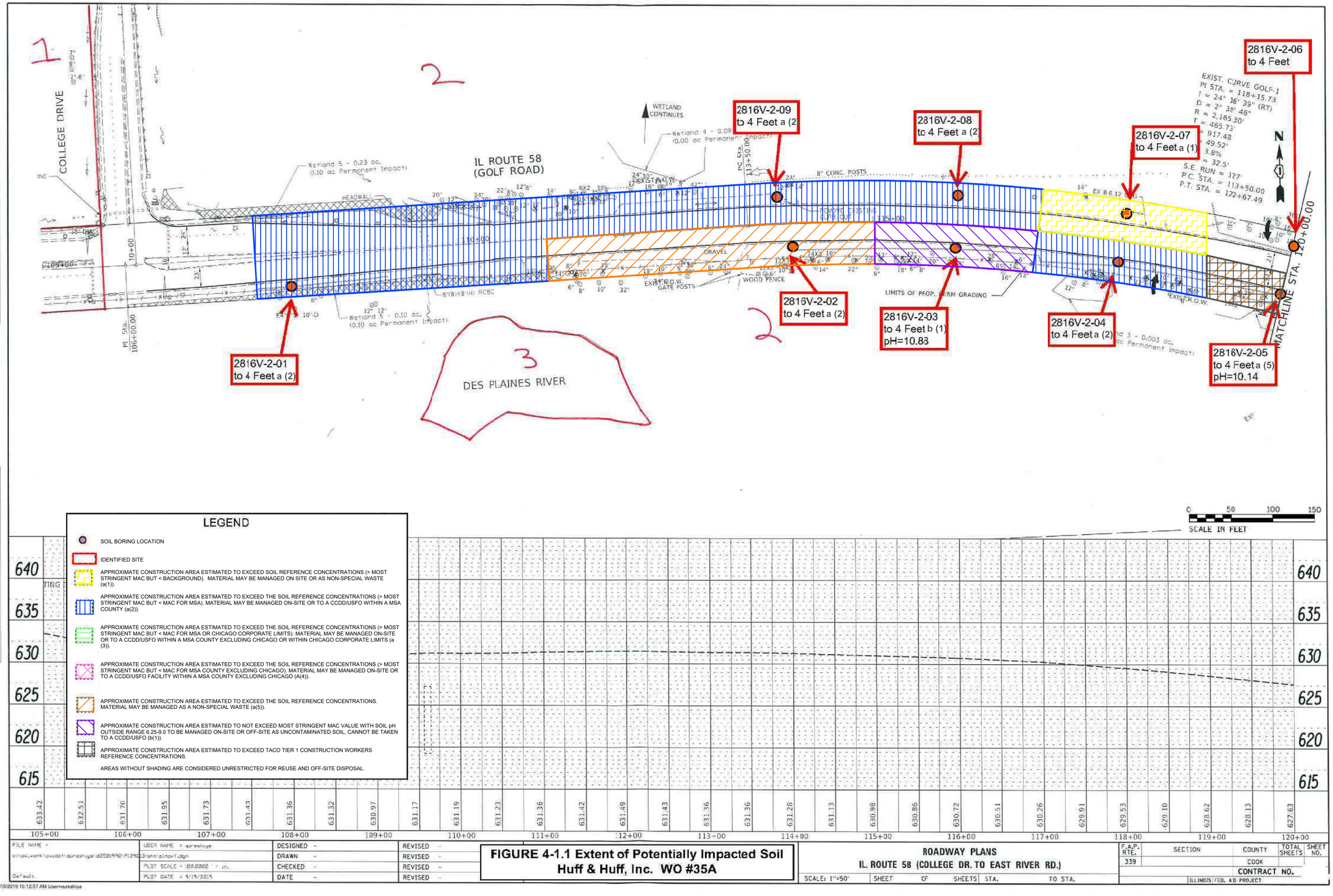
Jeremy J. Reynolds, P.G.
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

2/5/20
Date:

LICENSED PROFESSIONAL GEOLOGIST
JEREMY J. REYNOLDS
196-001170
ILLINOIS
exp 3/21

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



LEGEND

- SOIL BORING LOCATION
- IDENTIFIED SITE
- 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 #35A

FILE NAME = c:\pw_work\pwidot\qureshiya\d0501990\P129013-sht-plnprf.dgn	USER NAME = qureshiya	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 9/19/2019	DATE -	REVISED -

ROADWAY PLANS
IL. ROUTE 58 (COLLEGE DR. TO EAST RIVER RD.)
SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339		COOK		
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

P129013-sht-plnprf.dgn 9/19/2019 10:12:57 AM User=qureshiya

2816V-4-04
to 4 Feet

2816V-4-03
to 4 Feet a (2)

2816V-5-02
to 4 Feet

2816V-7-16
to 4 Feet a (1)

2816V-7-15
to 4 Feet a (2)

2816V-7-14
to 4 Feet a (2)

2816V-7-13
to 4 Feet a (3)

2816V-7-12
to 4 Feet a (3)

2816V-4-01
to 4 Feet

2816V-4-02
to 4 Feet a (5)

2816V-7-05
to 4 Feet a (2)

2816V-7-04
to 4 Feet a (2)

2816V-7-03
to 4 Feet a (5)

2816V-7-02
to 4 Feet a (1)

2816V-7-01
to 4 Feet a (5)

2816V-5-01
to 4 Feet

MATCHLINE STA. 120+00.00

MATCHLINE STA. 135+00.00

EXIST. EASEMENT

ST. EASEMENT

ROUTE 58
(GOLF ROAD)

PROP. RETAINING WALL

PROP. PS 17 ACCESS ROAD

EXISTING PS 128+16.21 (TO REMAIN)

EXISTING PS 128+16.21 (TO BE REMOVED)

Wetland 1 - 0.010 ac.
(0.00 ac Permanent Impact)

Wetland 7 - 0.004 ac.
(0.00 ac Permanent Impact)

Wetland 8 - 0.25 ac.
(0.00 ac Permanent Impact)

WETLAND CONTINUES

LIMITS OF PROP. BERM GRADING

EXISTING IL 58 ~ PROFILE

0 50 100 150
SCALE IN FEET

LEGEND

- SOIL BORING LOCATION
- IDENTIFIED SITE
- 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.

640 635 630 625 620 615

627.63 627.14 626.64 626.19 625.70 625.10 624.69 624.37 624.03 623.98 624.00 624.35 624.69 624.99 625.43 625.91 626.38 626.82 627.28 627.65 628.01 628.41 628.80 629.17 629.50 629.90 630.25 630.69 631.10 631.59 632.07

120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00 133+00 134+00 135+00

FIGURE 4-1.2 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #35A

ROADWAY PLANS
IL. ROUTE 58 (COLLEGE DR. TO EAST RIVER RD.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339		COOK		
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

FILE NAME = c:\pw_work\pwidot\qureshiya\d0501930\P129013-sht-plnprf.dgn
Defaults
USER NAME = qureshiya
PLOT SCALE = 100.0000 ' / in.
PLOT DATE = 9/19/2019
DESIGNED -
DRAWN -
CHECKED -
DATE -
REVISED -

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

P129013-sht-plnprf.dgn 9/19/2019 10:13:05 AM User=qureshiya

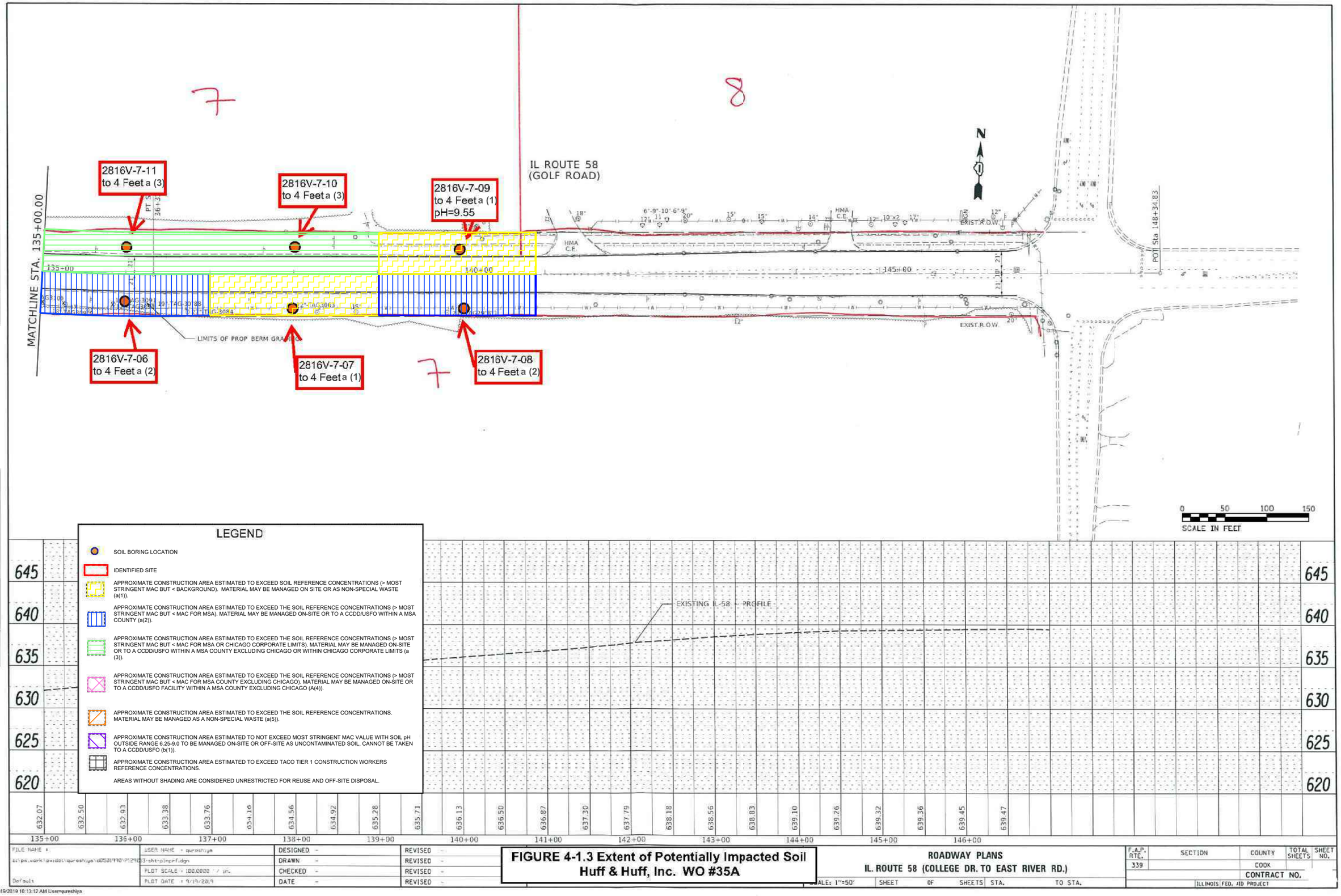


FIGURE 4-1.3 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #35A

P129013-sht-plnprf.dgn 9/19/2019 10:13:12 AM User:qureshiya

LPC-663 Results
Soils for Reuse or Disposal at CCDD Facilities at MSA Counties Including Chicago
IL Route 58 (College Dr. to East River Rd.), Cook County, IL
BDE Sequence No.: 18085
PTB: 178-008 / HH-1, WO# 035A

Boring ID	Soil Reference Concentrations [a/]	Soil Remediation Objective for Construction Workers [b/]	Soil Remediation Objective for Residential Exposure [c/]	2816V-2-01	2816V-2-04	2816V-2-08	2816V-Dup-03 (2-08)	2816V-2-09	2816V-4-03	2816V-7-01	2816V-7-04	2816V-7-05	2816V-7-06	2816V-7-08	2816V-Dup-02 (7-08)	2816V-7-10	2816V-7-11	2816V-7-12	2816V-7-13	2816V-7-14	2816V-7-15
Sample Depth, ft				(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)	(0-4)
Sample Date				12/13/2019	12/13/2019	12/16/2019	12/16/2019	12/16/2019	12/16/2019	12/13/2019	12/13/2019	12/13/2019	12/13/2019	12/13/2019	12/13/2019	12/16/2019	12/16/2019	12/16/2019	12/16/2019	12/16/2019	12/16/2019
Excavation Area(s)				2816V-2					2816V-4	2816V-7											
[ISGS Site No.(s)]																					
Parameter																					
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.28	8.98	8.59	8.75	8.91	7.90	8.97	8.97	8.82	8.99	8.41	8.97	8.75	8.72	8.66	8.12	8.41	8.15
VOCs, mg/kg																					
Carbon disulfide	9	9	720	<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	<0.005	<0.005
SVOCs, mg/kg																					
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	<0.09	<0.09	<0.09	<0.09	**0.094**	**0.277**	**0.149**	**0.111**	<0.18	<0.09
Fluoranthene	3,100	82,000	3,100	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	**0.537**	**2.76**	<0.33	<0.66	<0.33
Pyrene	2,300	61000	2300	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	**0.485**	<0.33	<0.33	<0.66	<0.33
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	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	**3.5**	**5.4**	**5.7**	**8.4**	**4.7**	**4.6**	**12**	**7**	**4.5**	**3.8**	**4.9**	**3.1**	**2.4**	**3.9**	**2.4**	**5.1**	**5.6**	**5**
Barium	1,500	14,000	5500	**27.3**	**19.8**	**69.8**	**68.9**	**22.3**	**37.3**	**38.7**	**54.7**	**32.1**	**17.1**	**49.4**	**9.5**	**9**	**78**	**11.8**	**66**	**64.6**	**34.1**
Beryllium	22	410	160	<0.5	<0.5	**0.5**	**0.7**	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Calcium	---	---	---	**5580**	**20200**	**24500**	**14500**	**43500**	**38600**	**59200**	**12900**	**32200**	**84800**	**8230**	**79300**	**157000**	**22600**	**109000**	**29100**	**56100**	**62700**
Chromium	21	690	230	**8.6**	**5.1**	**15.3**	**19.9**	**7.5**	**11.4**	**19.3**	**13.9**	**12.8**	**6.1**	**13.9**	**6.8**	**5.2**	**14.9**	**5.1**	**15.1**	**13.1**	**17.8**
Cobalt	20	12,000	4700	**4.6**	**5.2**	**7.1**	**10.6**	**4.4**	**7.7**	**10.2**	**9.1**	**6.9**	**5.2**	**6.2**	**4.1**	**2.1**	**5.5**	**2.7**	**6.8**	**8.4**	**9.1**
Copper	2,900	8,200	2900	**8.1**	**5.5**	**20.2**	**23.2**	**10.1**	**16.6**	**25.8**	**16.9**	**13.2**	**14.8**	**20.4**	**17.8**	**6.1**	**20.7**	**9.7**	**21.9**	**19.6**	**23.7**
Iron	15,000 / 15,900	---	---	**10900**	**10500**	**19200**	**25600**	**11400**	**15600**	**29700**	**19400**	**14800**	**10900**	**17900**	**10700**	**6110**	**14000**	**7990**	**17900**	**14900**	**19000**
Lead	107	700	400	**7.9**	**4.1**	**22.9**	**16.2**	**8.2**	**12.7**	**11**	**12**	**7.6**	**6.9**	**8.6**	**7.9**	**7.2**	**34.7**	**4**	**98.9**	**89.3**	**21.3**
Magnesium	325,000	730,000	325000	**3830**	**12000**	**15600**	**8970**	**22800**	**21200**	**31700**	**8560**	**18100**	**49200**	**6140**	**49500**	**35000**	**13100**	**54900**	**17400**	**34600**	**32100**
Manganese	630 / 636	4,100	1600	**231**	**326**	**347**	**445**	**371**	**546**	**355**	**362**	**618**	**511**	**628**	**452**	**724**	**419**	**220**	**407**	**547**	**338**
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.06**	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	**10.4**	**8.7**	**22.7**	**25.9**	**10.6**	**18**	**32.2**	**18.7**	**17.4**	**11.9**	**23.8**	**11.4**	**6**	**13**	**6.4**	**16.3**	**16.6**	**25.4**
Potassium	---	---	---	**421**	**386**	**1900**	**2050**	**627**	**916**	**3130**	**919**	**1840**	**657**	**831**	**786**	**496**	**886**	**473**	**1090**	**1260**	**2520**
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	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	**0.5**	**0.5**	**0.9**	**1.1**	**0.5**	**0.7**	**1.3**	**0.9**	**0.6**	**0.5**	**0.7**	**0.5**	**0.2**	**0.5**	**0.4**	**0.8**	**0.6**	**0.7**
Sodium	---	---	---	**709**	**563**	**607**	**827**	**432**	**88**	**1020**	**1830**	**1030**	**793**	**1730**	**650**	**182**	**501**	**174**	**1010**	**1460**	**211**
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	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	**13.9**	**10.3**	**19.4**	**27.3**	**14.4**	**18.8**	**24.4**	**23.7**	**18.3**	**13.6**	**22.2**	**13.9**	**8.6**	**19.7**	**11.9**	**21.7**	**18.6**	**20.4**
Zinc	5,100	61,000	23000	**29.2**	**18.6**	**39**	**55.9**	**28.9**	**45**	**50.4**	**49.8**	**32.2**	**36**	**75**	**47.9**	**21**	**67**	**17.7**	**72.6**	**66.8**	**54.2**
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	<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	<1.0	<1.0	<1.0	**1.1**	<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	<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	<0.005	<0.005	<0.005	**0.008**	<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	<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	<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	<0.1	<0.1	<0.1	<0.1	<0.1
Iron	5			**5**	**0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.2**	**4.7**	<0.1
Lead	0.0075			**0.015**	<0.005	**0.008**	<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	**0.251**	<0.005
Manganese	0.15			**7.8**	**1.5**	**0.4**	**0.2**	**0.9**	**10.8**	**1.5**	**9.7**	**2.7**	**1.5**	**1.6**	**0.2**	**0.9**	**0.6**	**1.2**	**3.6**	**11**	**1.6**
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	<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	<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	<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	<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	**0.1**	<0.1	<0.1	**0.6**	<0.1
SPLP Metals, mg/L	Class I Groundwater [d/]																				
Arsenic	0.05			<0.010	<0.010	**0.045**	**0.062**	**0.017**	<0.010	**0.021**	**0.037**	**0.036**	**0.033**	**0.041**	**0.036**	<0.010	**0.017**	<0.010	<0.010	**0.035**	**0.017**
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	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	0.004			<0.004	<0.004	**0.004**	**0.007**	<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	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.1			**0.019**	**0.012**	**0.131**	**0.181**	**0.075**	**0.015**	**0.036**	**0.083**	**0.083**	**0.073**	**0.08**	**0.123**	<0.005	**0.084**	<0.005	**0.014**	**0.074**	**0.076**
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	<0.1	<0.1	<0.1
Copper	0.65			**0.029**	**0.009**	**0.154**	**0.195**	**0.058**	**0.02**	**0.035**	**0.133**	**0.12**	**0.102**	**0.143**	**0.156**	<0.005	**0.099**	<0.005	**0.014**	**0.106**	**0.074**
Iron	5			**20.8**	**17.8**	**143**	**192**	**67.7**	**17.9**	**50.4**	**126**	**92.9**	**107**	**124**	**154**	**0.2**	**86.5**	**0.2**	**9.6**	**93.2**	**78.5**
Lead	0.0075			**0.027**	<0.005	**0.185**	**0.086**	**0.03**	**0.013**	**0.012**	**0.058**	**0.044**	**0.036**	**0.03**	**0.034**	<0.005	**0.056**	<0.005	**0.012**	**0.418**	**0.033**
Manganese	0.15			**0.3**	**0.3**	**0.8**	**1**	**0.6**	**0.4**	**0.4**	**2.5**	**1.2**	**1**	**0.6**	**1**	<0.1	**0.7**	<0.1	**0.1**	**1.6**	**0.7**
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	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	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	<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	<0.010	<0.010	<0.010
Silver	0.05			<0.005	<0.005	**0.006**	**0.008**	<0.005	<0.005	<0.005	**0.006**	<0.005	**0.005**	**0.006**	**0.008**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	5			<0.1	<0.1	**0.4**	**0.4**	**0.2**	<0.1	<0.1	**0.3**	**0.2**	**0.3**	**0.5**	**0.5**	<0.1	**0.4**	<0.1	<0.1	**0.4**	**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 expsoure, most stringent of the Ingestion or Inhalation exposure route.

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

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	88.03		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.5	1.0	mg/kg	
Barium	27.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	5,580	50	mg/kg	
Chromium	8.6	0.5	mg/kg	
Cobalt	4.6	0.5	mg/kg	
Copper	8.1	0.5	mg/kg	
Iron	10,900	5.0	mg/kg	
Lead	7.9	0.5	mg/kg	
Magnesium	3,830	50	mg/kg	
Manganese	231	0.5	mg/kg	
Nickel	10.4	0.5	mg/kg	
Potassium	421	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	709	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	13.9	1.0	mg/kg	
Zinc	29.2	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.28		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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	5.0	0.1	mg/L	
Lead	0.015	0.005	mg/L	
Manganese	7.8	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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/16/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	0.029	0.005	mg/L	
Iron	20.8	0.1	mg/L	
Lead	0.027	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-01 (0-4)
Sample No: 19-7697-001

Date Collected: 12/13/19
Time Collected: 10:10
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 103.4*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 105.2*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 107.2*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 104.7*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 81.1*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 64.6*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 101.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 90.6*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 77.4*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	84.49		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.4	1.0	mg/kg	
Barium	19.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	20,200	50	mg/kg	
Chromium	5.1	0.5	mg/kg	
Cobalt	5.2	0.5	mg/kg	
Copper	5.5	0.5	mg/kg	
Iron	10,500	5.0	mg/kg	
Lead	4.1	0.5	mg/kg	
Magnesium	12,000	50	mg/kg	
Manganese	326	0.5	mg/kg	
Nickel	8.7	0.5	mg/kg	
Potassium	386	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	563	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	10.3	1.0	mg/kg	
Zinc	18.6	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.98		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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	1.5	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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/16/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	0.009	0.005	mg/L	
Iron	17.8	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	
SPLP Mercury Method 1312 **Method: 7470A**				
Analysis Date: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-2-04 (0-4)
Sample No: 19-7697-004

Date Collected: 12/13/19
Time Collected: 10:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 100.9*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.1*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 99.3*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 98*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 71.4*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 59.6*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 86.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 91.7*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 71.4*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	81.82		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	12.0	1.0	mg/kg	
Barium	38.7	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	59,200	50	mg/kg	
Chromium	19.3	0.5	mg/kg	
Cobalt	10.2	0.5	mg/kg	
Copper	25.8	0.5	mg/kg	
Iron	29,700	5.0	mg/kg	
Lead	11.0	0.5	mg/kg	
Magnesium	31,700	50	mg/kg	
Manganese	355	0.5	mg/kg	
Nickel	32.2	0.5	mg/kg	
Potassium	3,130	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.3	0.2	mg/kg	
Sodium	1,020	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.4	1.0	mg/kg	
Zinc	50.4	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.97		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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	1.5	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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.021	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		0.035	0.005	mg/L	
Iron		50.4	0.1	mg/L	
Lead		0.012	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: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-01 (0-4)
Sample No: 19-7697-009

Date Collected: 12/13/19
Time Collected: 11:05
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 102.7*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 104.6*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 107.9*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 107.2*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 79.6*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 64.7*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 101*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 93.9*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 77.2*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	85.56		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	7.0	1.0	mg/kg	
Barium	54.7	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	12,900	50	mg/kg	
Chromium	13.9	0.5	mg/kg	
Cobalt	9.1	0.5	mg/kg	
Copper	16.9	0.5	mg/kg	
Iron	19,400	5.0	mg/kg	
Lead	12.0	0.5	mg/kg	
Magnesium	8,560	50	mg/kg	
Manganese	362	0.5	mg/kg	
Nickel	18.7	0.5	mg/kg	
Potassium	919	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	1,830	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	23.7	1.0	mg/kg	
Zinc	49.8	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.97		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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	9.7	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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.037	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		0.133	0.005	mg/L	
Iron		126	0.1	mg/L	
Lead		0.058	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		0.006	0.005	mg/L	
Zinc		0.3	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-04 (0-4)
Sample No: 19-7697-012

Date Collected: 12/13/19
Time Collected: 11:25
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 100*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.8*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 99.8*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 104.3*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 74*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 64*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 101.8*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 87.1*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 74.6*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	87.84		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.5	1.0	mg/kg	
Barium	32.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	32,200	50	mg/kg	
Chromium	12.8	0.5	mg/kg	
Cobalt	6.9	0.5	mg/kg	
Copper	13.2	0.5	mg/kg	
Iron	14,800	5.0	mg/kg	
Lead	7.6	0.5	mg/kg	
Magnesium	18,100	50	mg/kg	
Manganese	618	0.5	mg/kg	
Nickel	17.4	0.5	mg/kg	
Potassium	1,840	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	1,030	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.3	1.0	mg/kg	
Zinc	32.2	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.82		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.036	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		0.120	0.005	mg/L	
Iron		92.9	0.1	mg/L	
Lead		0.044	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		0.2	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-05 (0-4)
Sample No: 19-7697-013

Date Collected: 12/13/19
Time Collected: 11:35
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 102.5*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 104.5*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 105.6*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 105.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 75.2*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 58*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 103.5*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 82.5*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 68.6*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	91.88		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.8	1.0	mg/kg	
Barium	17.1	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	84,800	50	mg/kg	
Chromium	6.1	0.5	mg/kg	
Cobalt	5.2	0.5	mg/kg	
Copper	14.8	0.5	mg/kg	
Iron	10,900	5.0	mg/kg	
Lead	6.9	0.5	mg/kg	
Magnesium	49,200	50	mg/kg	
Manganese	511	0.5	mg/kg	
Nickel	11.9	0.5	mg/kg	
Potassium	657	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	793	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	13.6	1.0	mg/kg	
Zinc	36.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.99		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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	1.5	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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.033	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		0.073	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.102	0.005	mg/L	
Iron		107	0.1	mg/L	
Lead		0.036	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		0.3	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-06 (0-4)
Sample No: 19-7697-014

Date Collected: 12/13/19
Time Collected: 11:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 99.3*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.8*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.1*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 100.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 72.7*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 57.2*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 98.5*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 85.1*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 68.5*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	86.13		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.9	1.0	mg/kg	
Barium	49.4	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	8,230	50	mg/kg	
Chromium	13.9	0.5	mg/kg	
Cobalt	6.2	0.5	mg/kg	
Copper	20.4	0.5	mg/kg	
Iron	17,900	5.0	mg/kg	
Lead	8.6	0.5	mg/kg	
Magnesium	6,140	50	mg/kg	
Manganese	628	0.5	mg/kg	
Nickel	23.8	0.5	mg/kg	
Potassium	831	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	1,730	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	22.2	1.0	mg/kg	
Zinc	75.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.41		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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 **Method: 7470A**				
Analysis Date: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.041	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		0.080	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.143	0.005	mg/L	
Iron		124	0.1	mg/L	
Lead		0.030	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		0.006	0.005	mg/L	
Zinc		0.5	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-7-08 (0-4)
Sample No: 19-7697-016

Date Collected: 12/13/19
Time Collected: 12:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 101*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.5*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.8*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 99*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 86.7*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 60.8*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 109.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 94.8*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 75.2*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.1	1.0	mg/kg	
Barium	9.5	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	6.8	0.5	mg/kg	
Cobalt	4.1	0.5	mg/kg	
Copper	17.8	0.5	mg/kg	
Iron	10,700	5.0	mg/kg	
Lead	7.9	0.5	mg/kg	
Magnesium	49,500	50	mg/kg	
Manganese	452	0.5	mg/kg	
Nickel	11.4	0.5	mg/kg	
Potassium	786	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	650	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	13.9	1.0	mg/kg	
Zinc	47.9	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.97		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/16/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19			Preparation Date: 12/17/19		
Arsenic		0.036	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		0.156	0.005	mg/L	
Iron		154	0.1	mg/L	
Lead		0.034	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		0.008	0.005	mg/L	
Zinc		0.5	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: DUP-02
Sample No: 19-7697-018

Date Collected: 12/13/19
Time Collected: 11:55
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 99.6*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 101.8*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.7*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 102.5*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 75.5*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 57.3*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 101.3*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 88.4*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 69.7*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	82.19		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.7	1.0	mg/kg	
Barium	69.8	0.5	mg/kg	
Beryllium	0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	24,500	50	mg/kg	
Chromium	15.3	0.5	mg/kg	
Cobalt	7.1	0.5	mg/kg	
Copper	20.2	0.5	mg/kg	
Iron	19,200	5.0	mg/kg	
Lead	22.9	0.5	mg/kg	
Magnesium	15,600	50	mg/kg	
Manganese	347	0.5	mg/kg	
Nickel	22.7	0.5	mg/kg	
Potassium	1,900	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	607	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C**		**Preparation Method 3050B**		
Analysis Date: 12/18/19		Preparation Date: 12/18/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.4	1.0	mg/kg	
Zinc	39.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.59		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	0.008	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
Arsenic		0.045	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		0.131	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.154	0.005	mg/L	
Iron		143	0.1	mg/L	
Lead		0.185	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		0.006	0.005	mg/L	
Zinc		0.4	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-08 (0-4)
Sample No: 19-7719-004

Date Collected: 12/16/19
Time Collected: 10:30
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 96.6*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 101.9*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 96.2*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 99*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 72.1*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 56.7*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 97.1*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 85*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 69*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	84.99		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.7	1.0	mg/kg	
Barium	22.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	43,500	50	mg/kg	
Chromium	7.5	0.5	mg/kg	
Cobalt	4.4	0.5	mg/kg	
Copper	10.1	0.5	mg/kg	
Iron	11,400	5.0	mg/kg	
Lead	8.2	0.5	mg/kg	
Magnesium	22,800	50	mg/kg	
Manganese	371	0.5	mg/kg	
Nickel	10.6	0.5	mg/kg	
Potassium	627	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	432	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	14.4	1.0	mg/kg	
Zinc	28.9	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.91		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
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		0.075	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.058	0.005	mg/L	
Iron		67.7	0.1	mg/L	
Lead		0.030	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: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-09 (0-4)
Sample No: 19-7719-001

Date Collected: 12/16/19
Time Collected: 10:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 97.1*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 101.7*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 104.9*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 103.5*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 72*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 58.8*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 103.9*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 85.3*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 69.7*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	87.08		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	4.6	1.0	mg/kg	
Barium	37.3	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	38,600	50	mg/kg	
Chromium	11.4	0.5	mg/kg	
Cobalt	7.7	0.5	mg/kg	
Copper	16.6	0.5	mg/kg	
Iron	15,600	5.0	mg/kg	
Lead	12.7	0.5	mg/kg	
Magnesium	21,200	50	mg/kg	
Manganese	546	0.5	mg/kg	
Nickel	18.0	0.5	mg/kg	
Potassium	916	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	88	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	18.8	1.0	mg/kg	
Zinc	45.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	7.90		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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	10.8	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	0.015	0.005	mg/L	
Cobalt	< 0.1	0.1	mg/L	
Copper	0.020	0.005	mg/L	
Iron	17.9	0.1	mg/L	
Lead	0.013	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-03 (0-4)
Sample No: 19-7719-005

Date Collected: 12/16/19
Time Collected: 10:10
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 98.7*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.1*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 105.4*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 101.7*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 76.6*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 62.8*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 113.2*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 83*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 71.1*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	93.25		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/18/19		
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	94	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Benzoic acid	< 330	330	ug/kg	
Benzyl alcohol	< 330	330	ug/kg	
bis(2-Chloroethoxy)methane	< 330	330	ug/kg	
bis(2-Chloroethyl)ether	< 330	330	ug/kg	
bis(2-Chloroisopropyl)ether	< 330	330	ug/kg	
bis(2-Ethylhexyl)phthalate	< 330	330	ug/kg	
4-Bromophenyl phenyl ether	< 330	330	ug/kg	
Butyl benzyl phthalate	< 330	330	ug/kg	
Carbazole	< 330	330	ug/kg	
4-Chloroaniline	< 330	330	ug/kg	
4-Chloro-3-methylphenol	< 330	330	ug/kg	
2-Chloronaphthalene	< 330	330	ug/kg	
2-Chlorophenol	< 330	330	ug/kg	
4-Chlorophenyl phenyl ether	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.4	1.0	mg/kg	
Barium	9.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	157,000	50	mg/kg	
Chromium	5.2	0.5	mg/kg	
Cobalt	2.1	0.5	mg/kg	
Copper	6.1	0.5	mg/kg	
Iron	6,110	5.0	mg/kg	
Lead	7.2	0.5	mg/kg	
Magnesium	35,000	50	mg/kg	
Manganese	724	0.5	mg/kg	
Nickel	6.0	0.5	mg/kg	
Potassium	496	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.2	0.2	mg/kg	
Sodium	182	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	8.6	1.0	mg/kg	
Zinc	21.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.75		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	0.2	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-10 (0-4)
Sample No: 19-7719-009

Date Collected: 12/16/19
Time Collected: 9:35
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 100.6*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.7*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 108.1*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 106.4*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 81.6*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 61*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 93.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 88.4*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 74.2*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	80.78		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/18/19		
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	277	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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	537	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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	485	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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.9	1.0	mg/kg	
Barium	78.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	22,600	50	mg/kg	
Chromium	14.9	0.5	mg/kg	
Cobalt	5.5	0.5	mg/kg	
Copper	20.7	0.5	mg/kg	
Iron	14,000	5.0	mg/kg	
Lead	34.7	0.5	mg/kg	
Magnesium	13,100	50	mg/kg	
Manganese	419	0.5	mg/kg	
Nickel	13.0	0.5	mg/kg	
Potassium	886	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	501	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	19.7	1.0	mg/kg	
Zinc	67.0	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	0.06	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.72		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
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		0.084	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.099	0.005	mg/L	
Iron		86.5	0.1	mg/L	
Lead		0.056	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: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-11 (0-4)
Sample No: 19-7719-010

Date Collected: 12/16/19
Time Collected: 9:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 99.9*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.7*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 100.2*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 101.4*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 80*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 63*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 96.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 95.7*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 77.1*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	96.47		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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	2,760	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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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: 12/19/19		Preparation Date: 12/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.4	1.0	mg/kg	
Barium	11.8	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	109,000	50	mg/kg	
Chromium	5.1	0.5	mg/kg	
Cobalt	2.7	0.5	mg/kg	
Copper	9.7	0.5	mg/kg	
Iron	7,990	5.0	mg/kg	
Lead	4.0	0.5	mg/kg	
Magnesium	54,900	50	mg/kg	
Manganese	220	0.5	mg/kg	
Nickel	6.4	0.5	mg/kg	
Potassium	473	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	174	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C**		**Preparation Method 3050B**		
Analysis Date: 12/19/19		Preparation Date: 12/19/19		
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	11.9	1.0	mg/kg	
Zinc	17.7	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.66		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	0.2	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-12 (0-4)
Sample No: 19-7719-011

Date Collected: 12/16/19
Time Collected: 10:40
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 102.4*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.6*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 108.6*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 105.3*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 84.1*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 52.4*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 106.4*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 82.8*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 72.2*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	86.14		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/19/19		
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	111	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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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: 12/19/19		Preparation Date: 12/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.1	1.0	mg/kg	
Barium	66.0	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	29,100	50	mg/kg	
Chromium	15.1	0.5	mg/kg	
Cobalt	6.8	0.5	mg/kg	
Copper	21.9	0.5	mg/kg	
Iron	17,900	5.0	mg/kg	
Lead	98.9	0.5	mg/kg	
Magnesium	17,400	50	mg/kg	
Manganese	407	0.5	mg/kg	
Nickel	16.3	0.5	mg/kg	
Potassium	1,090	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.8	0.2	mg/kg	
Sodium	1,010	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/19/19 Preparation Date: 12/19/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	21.7	1.0	mg/kg	
Zinc	72.6	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.12		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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	3.6	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	0.014	0.005	mg/L	
Iron	9.6	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-13 (0-4)
Sample No: 19-7719-012

Date Collected: 12/16/19
Time Collected: 9:45
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 98.2*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.1*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 102.5*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 110.9*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 86.8*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 66.8*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 109.3*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 89.6*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 81.3*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	82.42		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/19/19		
Acenaphthene	< 660	330	ug/kg	
Acenaphthylene	< 660	330	ug/kg	
Anthracene	< 660	330	ug/kg	
Benzidine	< 660	330	ug/kg	
Benzo(a)anthracene	< 660	330	ug/kg	
Benzo(a)pyrene	< 180	90	ug/kg	
Benzo(b)fluoranthene	< 660	330	ug/kg	
Benzo(k)fluoranthene	< 660	330	ug/kg	
Benzo(ghi)perylene	< 660	330	ug/kg	
Benzoic acid	< 660	330	ug/kg	
Benzyl alcohol	< 660	330	ug/kg	
bis(2-Chloroethoxy)methane	< 660	330	ug/kg	
bis(2-Chloroethyl)ether	< 660	330	ug/kg	
bis(2-Chloroisopropyl)ether	< 660	330	ug/kg	
bis(2-Ethylhexyl)phthalate	< 660	330	ug/kg	
4-Bromophenyl phenyl ether	< 660	330	ug/kg	
Butyl benzyl phthalate	< 660	330	ug/kg	
Carbazole	< 660	330	ug/kg	
4-Chloroaniline	< 660	330	ug/kg	
4-Chloro-3-methylphenol	< 660	330	ug/kg	
2-Chloronaphthalene	< 660	330	ug/kg	
2-Chlorophenol	< 660	330	ug/kg	
4-Chlorophenyl phenyl ether	< 660	330	ug/kg	
Chrysene	< 660	330	ug/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
Dibenzo(a,h)anthracene	< 180	90	ug/kg	
Dibenzofuran	< 660	330	ug/kg	
1,2-Dichlorobenzene	< 660	330	ug/kg	
1,3-Dichlorobenzene	< 660	330	ug/kg	
1,4-Dichlorobenzene	< 660	330	ug/kg	
3,3'-Dichlorobenzidine	< 1,320	660	ug/kg	
2,4-Dichlorophenol	< 660	330	ug/kg	
Diethyl phthalate	< 660	330	ug/kg	
2,4-Dimethylphenol	< 660	330	ug/kg	
Dimethyl phthalate	< 660	330	ug/kg	
Di-n-butyl phthalate	< 660	330	ug/kg	
4,6-Dinitro-2-methylphenol	< 3,200	1600	ug/kg	
2,4-Dinitrophenol	< 3,200	1600	ug/kg	
2,4-Dinitrotoluene	< 500	250	ug/kg	
2,6-Dinitrotoluene	< 520	260	ug/kg	
Di-n-octylphthalate	< 660	330	ug/kg	
Fluoranthene	< 660	330	ug/kg	
Fluorene	< 660	330	ug/kg	
Hexachlorobenzene	< 660	330	ug/kg	
Hexachlorobutadiene	< 660	330	ug/kg	
Hexachlorocyclopentadiene	< 660	330	ug/kg	
Hexachloroethane	< 660	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 660	330	ug/kg	
Isophorone	< 660	330	ug/kg	
2-Methylnaphthalene	< 660	330	ug/kg	
2-Methylphenol	< 660	330	ug/kg	
3 & 4-Methylphenol	< 660	330	ug/kg	
Naphthalene	< 660	330	ug/kg	
2-Nitroaniline	< 3,200	1600	ug/kg	
3-Nitroaniline	< 3,200	1600	ug/kg	
4-Nitroaniline	< 3,200	1600	ug/kg	
Nitrobenzene	< 520	260	ug/kg	
2-Nitrophenol	< 3,200	1600	ug/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
4-Nitrophenol	< 3,200	1600	ug/kg	
n-Nitrosodi-n-propylamine	< 180	90	ug/kg	
n-Nitrosodimethylamine	< 660	330	ug/kg	
n-Nitrosodiphenylamine	< 660	330	ug/kg	
Pentachlorophenol	< 660	330	ug/kg	
Phenanthrene	< 660	330	ug/kg	
Phenol	< 660	330	ug/kg	
Pyrene	< 660	330	ug/kg	
Pyridine	< 660	330	ug/kg	
1,2,4-Trichlorobenzene	< 660	330	ug/kg	
2,4,5-Trichlorophenol	< 660	330	ug/kg	
2,4,6-Trichlorophenol	< 660	330	ug/kg	
Total Metals **Method: 6010C**		**Preparation Method 3050B**		
Analysis Date: 12/19/19		Preparation Date: 12/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.6	1.0	mg/kg	
Barium	64.6	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	56,100	50	mg/kg	
Chromium	13.1	0.5	mg/kg	
Cobalt	8.4	0.5	mg/kg	
Copper	19.6	0.5	mg/kg	
Iron	14,900	5.0	mg/kg	
Lead	89.3	0.5	mg/kg	
Magnesium	34,600	50	mg/kg	
Manganese	547	0.5	mg/kg	
Nickel	16.6	0.5	mg/kg	
Potassium	1,260	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Sodium	1,460	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Total Metals	**Method: 6010C**		**Preparation Method 3050B**		
Analysis Date: 12/19/19			Preparation Date: 12/19/19		
Thallium		< 1.0	1.0	mg/kg	N
Vanadium		18.6	1.0	mg/kg	
Zinc		66.8	1.0	mg/kg	
Total Mercury	**Method: 7471B**				
Analysis Date: 12/18/19					
Mercury		< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2	**Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00					
pH @ 25°C, 1:2		8.41		Units	
TCLP Extraction	**Method: 1311**				
Analysis Date: 12/17/19					
TCLP Extraction		Complete			
TCLP Metals Method 1311	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/19/19			Preparation Date: 12/18/19		
Arsenic		< 0.010	0.010	mg/L	
Barium		1.1	1.0	mg/L	
Beryllium		< 1.00	1.0	mg/L	
Cadmium		0.008	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		4.7	0.1	mg/L	
Lead		0.251	0.005	mg/L	
Manganese		11.0	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		0.6	0.1	mg/L	
TCLP Mercury Method 1311	**Method: 7470A**				
Analysis Date: 12/18/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
Arsenic		0.035	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		0.106	0.005	mg/L	
Iron		93.2	0.1	mg/L	
Lead		0.418	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		0.4	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-14 (0-4)
Sample No: 19-7719-013

Date Collected: 12/16/19
Time Collected: 9:50
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 100.2*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.4*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 109.5*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 96.3*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 83.8*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 64.6*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 104.5*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 97.3*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 75.3*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	82.90		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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: 12/19/19		Preparation Date: 12/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.0	1.0	mg/kg	
Barium	34.1	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	62,700	50	mg/kg	
Chromium	17.8	0.5	mg/kg	
Cobalt	9.1	0.5	mg/kg	
Copper	23.7	0.5	mg/kg	
Iron	19,000	5.0	mg/kg	
Lead	21.3	0.5	mg/kg	
Magnesium	32,100	50	mg/kg	
Manganese	338	0.5	mg/kg	
Nickel	25.4	0.5	mg/kg	
Potassium	2,520	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	211	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/19/19 Preparation Date: 12/19/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	20.4	1.0	mg/kg	
Zinc	54.2	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.15		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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 **Method: 7470A**				
Analysis Date: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
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		0.076	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.074	0.005	mg/L	
Iron		78.5	0.1	mg/L	
Lead		0.033	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: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-7-15 (0-4)
Sample No: 19-7719-014

Date Collected: 12/16/19
Time Collected: 9:55
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 94.6*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 101.6*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 100.6*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 93.2*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 70*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 58*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 93.7*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 81.8*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 70.4*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	83.14		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/19/19		
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: 12/19/19		Preparation Date: 12/19/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.4	1.0	mg/kg	
Barium	68.9	0.5	mg/kg	
Beryllium	0.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	14,500	50	mg/kg	
Chromium	19.9	0.5	mg/kg	
Cobalt	10.6	0.5	mg/kg	
Copper	23.2	0.5	mg/kg	
Iron	25,600	5.0	mg/kg	
Lead	16.2	0.5	mg/kg	
Magnesium	8,970	50	mg/kg	
Manganese	445	0.5	mg/kg	
Nickel	25.9	0.5	mg/kg	
Potassium	2,050	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	1.1	0.2	mg/kg	
Sodium	827	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/19/19 Preparation Date: 12/19/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	27.3	1.0	mg/kg	
Zinc	55.9	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.75		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
SPLP Extraction	**Method: 1312**				
Analysis Date: 12/17/19					
SPLP Metals Extraction		Complete			
SPLP Metals Method 1312	**Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19			Preparation Date: 12/18/19		
Arsenic		0.062	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		0.181	0.005	mg/L	
Cobalt		< 0.1	0.1	mg/L	
Copper		0.195	0.005	mg/L	
Iron		192	0.1	mg/L	
Lead		0.086	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		0.008	0.005	mg/L	
Zinc		0.4	0.1	mg/L	
SPLP Mercury Method 1312	**Method: 7470A**				
Analysis Date: 12/19/19					
Mercury		< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: DUP-3
Sample No: 19-7719-016

Date Collected: 12/16/19
Time Collected: 10:00
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 95.6*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 101.2*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 99.6*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 105.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 75.5*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 52.1*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 107*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 79.6*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 66.1*		*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: FAP 557 Golf Road (College Dr to East River Rd) Office Phone Number, if available: 847-705-4122

Physical Site Location (address, including number and street):
2816V-2(1600-2200 blocks of Golf Rd),2816V-4(1700 block of Golf Rd), 2816V-5(1700 block of Golf Rd)

City: Des Plaines State: IL Zip Code: 60016

County: Cook Township: Maine

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

Latitude: 42.05 (Decimal Degrees) Longitude: - 87.88 (-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): TBD Approximate End Date (mm/dd/yyyy): TBD

Estimated Volume of debris (cu. Yd.): 60

II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 557 Golf Road (College Dr to East River Rd) Latitude: 42.05000 Longitude: - 87.88000

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 in the Final PSI Rpt and borings 2816V-2-06 (IL Route 58 Sta 120+00, 25 Left), 2816V-4-01 (IL Route 58 Sta 122+00, 25 Right), 2816V-4-04 (IL Route 58 Sta 122+00, 25 Left), 2816V-5-01 (IL Route 58 Sta 125+00, 25 Right), and 2816V-5-02 (IL Route 58 Sta 126+00, 25 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. report #19-7697 and #19-7719. 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))

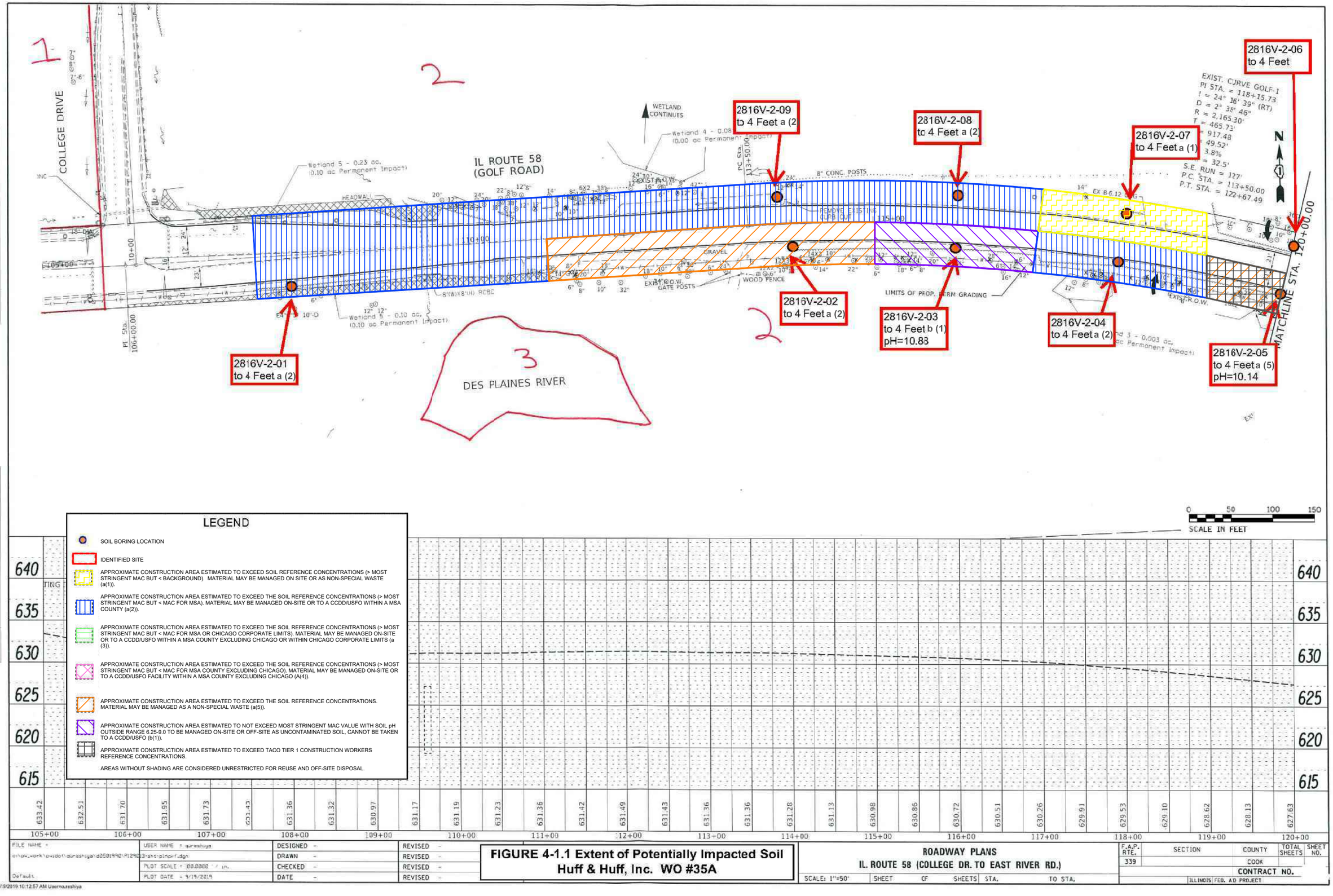
Company Name:	Huff & Huff, Inc. / GZA GeoEnvironmental, Inc.
Street Address:	915 Harger Road, Suite 330
City:	Oak Brook State: IL Zip Code: 60523
Phone:	630-684-9100

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

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

2/5/20
Date:

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



LEGEND

- SOIL BORING LOCATION
- IDENTIFIED SITE
- 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.

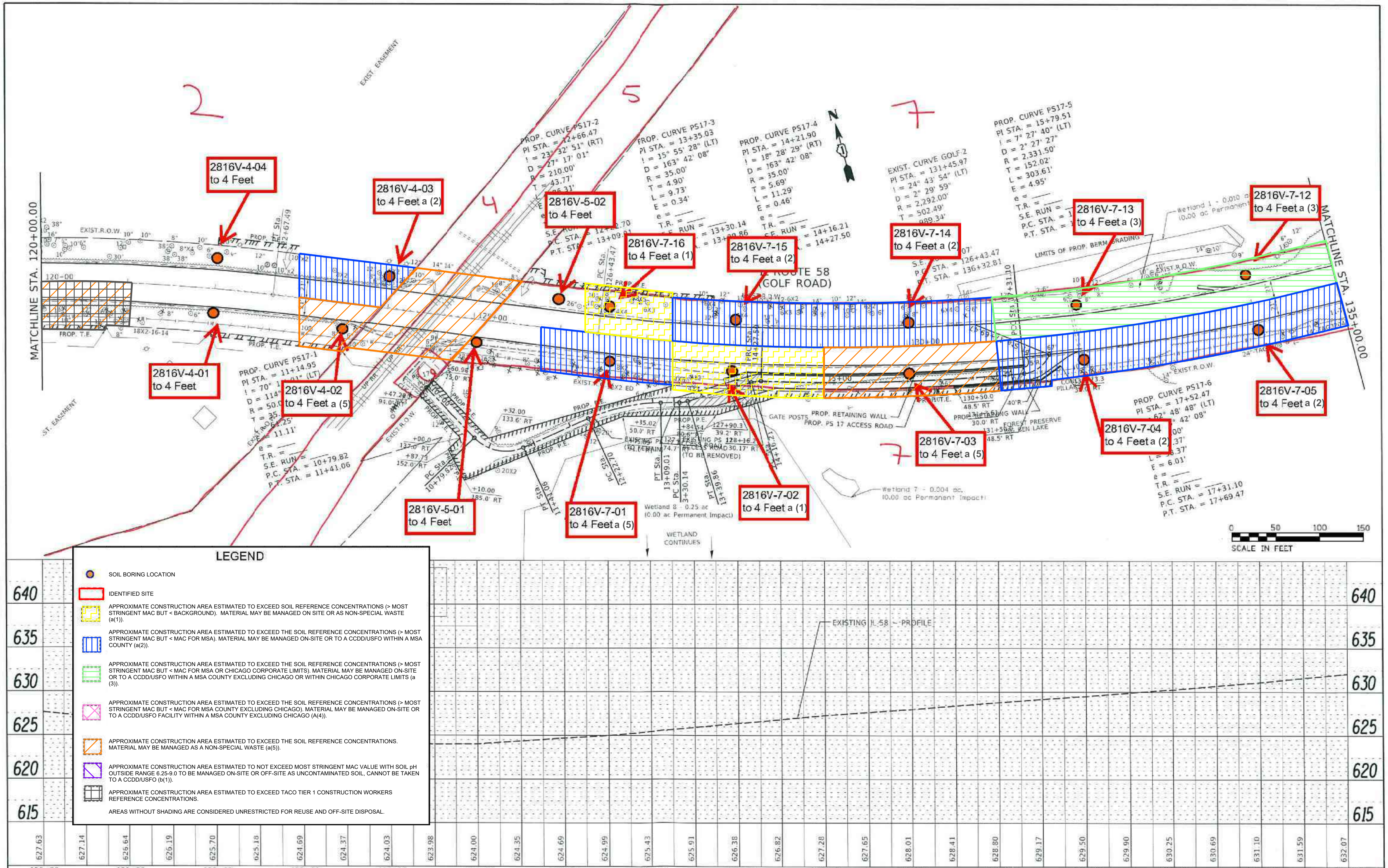
FIGURE 4-1.1 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #35A

FILE NAME = c:\pw_work\pwidot\qureshiya\d0501990\P129013-sht-plnprf.dgn	USER NAME = qureshiya	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 9/19/2019	DATE -	REVISED -

ROADWAY PLANS
IL. ROUTE 58 (COLLEGE DR. TO EAST RIVER RD.)
SCALE: 1"=50' | SHEET OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339		COOK		
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

P129013-sht-plnprf.dgn 9/19/2019 10:12:57 AM User=qureshiya



2816V-4-04
to 4 Feet
2816V-4-03
to 4 Feet a (2)
2816V-5-02
to 4 Feet
2816V-7-16
to 4 Feet a (1)
2816V-7-15
to 4 Feet a (2)
2816V-7-14
to 4 Feet a (2)
2816V-7-13
to 4 Feet a (3)
2816V-7-12
to 4 Feet a (3)
2816V-4-01
to 4 Feet
2816V-4-02
to 4 Feet a (5)
2816V-5-01
to 4 Feet
2816V-7-01
to 4 Feet a (5)
2816V-7-02
to 4 Feet a (1)
2816V-7-03
to 4 Feet a (5)
2816V-7-04
to 4 Feet a (2)
2816V-7-05
to 4 Feet a (2)
MATCHLINE STA. 120+00.00
MATCHLINE STA. 135+00.00
IL ROUTE 58
(GOLF ROAD)
EXIST. EASEMENT
SCALE IN FEET
EXISTING IL 58 ~ PROFILE
LEGEND
SOIL BORING LOCATION
IDENTIFIED SITE
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 #35A

ROADWAY PLANS
IL. ROUTE 58 (COLLEGE DR. TO EAST RIVER RD.)

F.A.P. RTE. 339 | SECTION | COUNTY COOK | TOTAL SHEETS | SHEET NO.
CONTRACT NO.
ILLINOIS FED. AID PROJECT

USER NAME = qureshiya
PLOT SCALE = 100.0000 '/ in.
PLOT DATE = 9/19/2019

P129013-sht-plnprf.dgn 9/19/2019 10:13:05 AM User=qureshiya

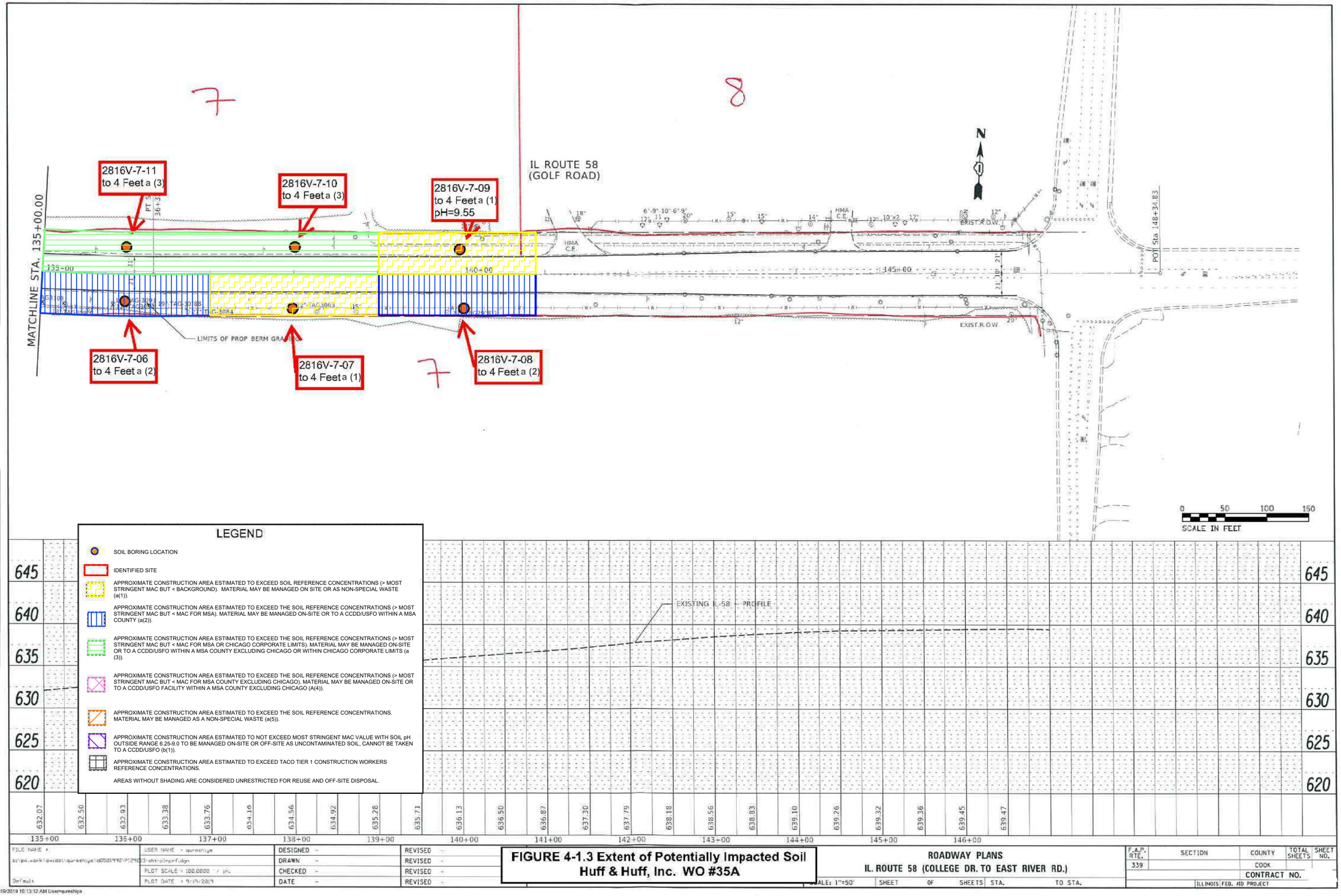


FIGURE 4-1.3 Extent of Potentially Impacted Soil
Huff & Huff, Inc. WO #35A

P129013-sht-plnprf.dgn 9/19/2019 10:13:12 AM User:qureshiya

LPC-663 Results
Soils for Unrestricted Reuse or Disposal at CCDD Facilities
IL Route 58 (College Dr. to East River Rd.), Cook County, IL
BDE Sequence No.: 18085
PTB: 178-008 / HH-1, WO# 035A

Boring ID	Soil Reference Concentrations [a/]	Soil Remediation Objective for Construction Workers [b/]	Soil Remediation Objective for Residential Exposure [c/]	2816V-2-06	2816V-4-01	2816V-4-04	2816V-5-01	2816V-5-02
Sample Depth, ft				(0-4)	(0-4)	(0-4)	(0-4)	(0-4)
Sample Date				12/16/2019	12/13/2019	12/16/2019	12/13/2019	12/16/2019
Excavation Area(s)				2816V-2	2816V-4		2816V-5	
[ISGS Site No.(s)]								
Parameter								
Laboratory soil pH (s.u.)	6.25 - 9.0	---	---	8.75	8.26	8.36	8.34	7.53
VOCs, mg/kg								
Toluene	12	42	650	**0.0055**	<0.005	<0.005	<0.005	<0.005
SVOCs, mg/kg								
Benzo(a)pyrene	0.09 / 1.3 / 2.1	17	0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Metals, mg/kg								
Antimony	5	82	31	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	11.3 / 13	61	13	**2.7**	**6.3**	**5.3**	**8.9**	**3.9**
Barium	1,500	14,000	5500	**20**	**21.5**	**9.9**	**46.2**	**31.2**
Beryllium	22	410	160	<0.5	<0.5	<0.5	**0.6**	<0.5
Cadmium	5.2	200	78	<0.5	<0.5	<0.5	<0.5	<0.5
Calcium	---	---	---	**60700**	**127000**	**60600**	**70300**	**42600**
Chromium	21	690	230	**5**	**5.5**	**5.2**	**20.2**	**13**
Cobalt	20	12,000	4700	**3.9**	**2.9**	**4.9**	**11.7**	**7.6**
Copper	2,900	8,200	2900	**6.1**	**12.2**	**11**	**29.5**	**15.8**
Iron	15,000 / 15,900	---	---	**7480**	**10400**	**12600**	**23200**	**15100**
Lead	107	700	400	**3.6**	**4.8**	**6.2**	**12.4**	**6.9**
Magnesium	325,000	730,000	325000	**35500**	**62200**	**30300**	**35400**	**19400**
Manganese	630 / 636	4,100	1600	**539**	**761**	**344**	**458**	**282**
Mercury	0.89	0.1	10	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel	100	4,100	1600	**10.4**	**9.8**	**11.6**	**32.2**	**21.2**
Potassium	---	---	---	**351**	**540**	**466**	**3510**	**2340**
Selenium	1.3	1,000	390	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	4.4	1,000	390	**0.3**	**0.4**	**0.5**	**0.9**	**0.7**
Sodium	---	---	---	**113**	**179**	**91**	**1040**	**157**
Thallium	2.6	160	6.3	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	550	1,400	550	**8.6**	**9.2**	**9.9**	**24**	**15.3**
Zinc	5,100	61,000	23000	**18.5**	**27.8**	**23.2**	**43.8**	**28.9**
TCLP Metals, mg/L	Class I Groundwater [d/]							
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010
Barium	2			<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	0.004			<1.00	<1.00	<1.00	<1.00	<1.00
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.1			<0.005	<0.005	<0.005	<0.005	<0.005
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1
Copper	0.65			<0.1	<0.1	<0.1	<0.1	<0.1
Iron	5			<0.1	<0.1	<0.1	<0.1	<0.1
Lead	0.0075			<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	0.15			**1.5**	**1.7**	**0.4**	**2.2**	**1**
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010
Silver	0.05			<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	5			<0.1	<0.1	<0.1	<0.1	<0.1
SPLP Metals, mg/L	Class I Groundwater [d/]							
Arsenic	0.05			<0.010	<0.010	<0.010	<0.010	<0.010
Barium	2			<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium	0.004			<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium	0.005			<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	0.1			<0.005	<0.005	<0.005	**0.013**	**0.009**
Cobalt	1			<0.1	<0.1	<0.1	<0.1	<0.1
Copper	0.65			<0.005	<0.005	**0.005**	**0.009**	**0.005**
Iron	5			**1.8**	**0.2**	**2.8**	**8.6**	**5.1**
Lead	0.0075			<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	0.15			<0.1	<0.1	<0.1	<0.1	<0.1
Mercury	0.002			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.1			<0.1	<0.1	<0.1	<0.1	<0.1
Selenium	0.05			<0.010	<0.010	<0.010	<0.010	<0.010
Silver	0.05			<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	5			<0.1	<0.1	<0.1	<0.1	<0.1

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

[a/] Soil reference concentrations from MAC table. Background values for MSA counties are included as 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

[b/] Soil Remediation Objective for Construction Workers, most stringent of the Ingestion or Inhalation exposure

[c/] Soil Remediation Objective for Residential expsoure, most stringent of the Ingestion or Inhalation exposure

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

Bold indicates concentration detected

Shaded values indicate concentration exceeds reference concentration

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	88.12		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	5.5	5.0	ug/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/19/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	2.7	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	60,700	50	mg/kg	
Chromium	5.0	0.5	mg/kg	
Cobalt	3.9	0.5	mg/kg	
Copper	6.1	0.5	mg/kg	
Iron	7,480	5.0	mg/kg	
Lead	3.6	0.5	mg/kg	
Magnesium	35,500	50	mg/kg	
Manganese	539	0.5	mg/kg	
Nickel	10.4	0.5	mg/kg	
Potassium	351	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Sodium	113	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	8.6	1.0	mg/kg	
Zinc	18.5	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.75		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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	1.5	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	1.8	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-2-06 (0-4)
Sample No: 19-7719-002

Date Collected: 12/16/19
Time Collected: 10:20
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 101.4*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 104.1*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.4*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 107*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 74.6*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 60.5*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 96.6*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 92.8*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 71.7*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	87.74		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	6.3	1.0	mg/kg	
Barium	21.5	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	127,000	50	mg/kg	
Chromium	5.5	0.5	mg/kg	
Cobalt	2.9	0.5	mg/kg	
Copper	12.2	0.5	mg/kg	
Iron	10,400	5.0	mg/kg	
Lead	4.8	0.5	mg/kg	
Magnesium	62,200	50	mg/kg	
Manganese	761	0.5	mg/kg	
Nickel	9.8	0.5	mg/kg	
Potassium	540	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Sodium	179	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	9.2	1.0	mg/kg	
Zinc	27.8	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.26		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/16/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	0.2	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-4-01 (0-4)
Sample No: 19-7697-006

Date Collected: 12/13/19
Time Collected: 10:40
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 101.5*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 103.1*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.6*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 101.6*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 72.4*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 52.2*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 90.8*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 89.8*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 67.7*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	87.52		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	5.3	1.0	mg/kg	
Barium	9.9	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	60,600	50	mg/kg	
Chromium	5.2	0.5	mg/kg	
Cobalt	4.9	0.5	mg/kg	
Copper	11.0	0.5	mg/kg	
Iron	12,600	5.0	mg/kg	
Lead	6.2	0.5	mg/kg	
Magnesium	30,300	50	mg/kg	
Manganese	344	0.5	mg/kg	
Nickel	11.6	0.5	mg/kg	
Potassium	466	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Sodium	91	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	9.9	1.0	mg/kg	
Zinc	23.2	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	8.36		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	2.8	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-4-04 (0-4)
Sample No: 19-7719-006

Date Collected: 12/16/19
Time Collected: 10:15
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 95*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 100.9*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.5*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 99.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 75.8*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 60.9*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 93.6*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 89.6*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 72.5*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/16/19				
Total Solids	84.43		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/19/19				
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: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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: 12/17/19		Preparation Date: 12/17/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	8.9	1.0	mg/kg	
Barium	46.2	0.5	mg/kg	
Beryllium	0.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	70,300	50	mg/kg	
Chromium	20.2	0.5	mg/kg	
Cobalt	11.7	0.5	mg/kg	
Copper	29.5	0.5	mg/kg	
Iron	23,200	5.0	mg/kg	
Lead	12.4	0.5	mg/kg	
Magnesium	35,400	50	mg/kg	
Manganese	458	0.5	mg/kg	
Nickel	32.2	0.5	mg/kg	
Potassium	3,510	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.9	0.2	mg/kg	
Sodium	1,040	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/17/19 Preparation Date: 12/17/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	24.0	1.0	mg/kg	
Zinc	43.8	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/17/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/17/19 10:30				
pH @ 25°C, 1:2	8.34		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/16/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/18/19 Preparation Date: 12/17/19				
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: 12/17/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/16/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/18/19		Preparation Date: 12/17/19		
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	0.009	0.005	mg/L	
Iron	8.6	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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71 IL38
Sample ID: 2816V-5-01 (0-4)
Sample No: 19-7697-008

Date Collected: 12/13/19
Time Collected: 11:00
Date Received: 12/16/19
Date Reported: 12/23/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 97.9*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.8*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 98.1*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 84.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 67.4*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 64.9*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 86.6*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 90.4*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 75.3*		*50 - 100*	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total **Method: 2540B**				
Analysis Date: 12/17/19				
Total Solids	85.63		%	
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds **Method: 5035A/8260B**				
Analysis Date: 12/20/19				
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: 12/20/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Semi-Volatile Compounds **Method: 8270C**		**Preparation Method 3540C**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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: 12/18/19		Preparation Date: 12/18/19		
Antimony	< 1.0	1.0	mg/kg	
Arsenic	3.9	1.0	mg/kg	
Barium	31.2	0.5	mg/kg	
Beryllium	< 0.5	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Calcium	42,600	50	mg/kg	
Chromium	13.0	0.5	mg/kg	
Cobalt	7.6	0.5	mg/kg	
Copper	15.8	0.5	mg/kg	
Iron	15,100	5.0	mg/kg	
Lead	6.9	0.5	mg/kg	
Magnesium	19,400	50	mg/kg	
Manganese	282	0.5	mg/kg	
Nickel	21.2	0.5	mg/kg	
Potassium	2,340	50	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.7	0.2	mg/kg	
Sodium	157	50	mg/kg	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Total Metals **Method: 6010C** **Preparation Method 3050B**				
Analysis Date: 12/18/19 Preparation Date: 12/18/19				
Thallium	< 1.0	1.0	mg/kg	N
Vanadium	15.3	1.0	mg/kg	
Zinc	28.9	1.0	mg/kg	
Total Mercury **Method: 7471B**				
Analysis Date: 12/18/19				
Mercury	< 0.05	0.05	mg/kg	
pH @ 25°C, 1:2 **Method: 9045D 2004**				
Analysis Date: 12/18/19 11:00				
pH @ 25°C, 1:2	7.53		Units	
TCLP Extraction **Method: 1311**				
Analysis Date: 12/17/19				
TCLP Extraction	Complete			
TCLP Metals Method 1311 **Method: 6010C** **Preparation Method 3010A**				
Analysis Date: 12/19/19 Preparation Date: 12/18/19				
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: 12/18/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
SPLP Extraction **Method: 1312**				
Analysis Date: 12/17/19				
SPLP Metals Extraction	Complete			
SPLP Metals Method 1312 **Method: 6010C**		**Preparation Method 3010A**		
Analysis Date: 12/20/19		Preparation Date: 12/18/19		
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	0.005	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: 12/19/19				
Mercury	< 0.0005	0.0005	mg/L	

First Environmental Laboratories, Inc

IL ELAP / NELAC Certification # 100292

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

Analytical Report

Client: HUFF & HUFF INC.
Project ID: IDOT WO #35 81.0220509.71
Sample ID: 2816V-5-02 (0-4)
Sample No: 19-7719-007

Date Collected: 12/16/19
Time Collected: 10:05
Date Received: 12/17/19
Date Reported: 12/27/19

Results are reported on a dry weight basis.

Analyte		Result	R.L.	Units	Flags
Sample QC Summary:	***Surrogate Recovery***				
Method	*Analyte*	*QC Result*		*%R Limits Low High*	
5035A/8260B	*4-Bromofluorobenzene (Surr)*	*%R: 96.5*		*86 - 117*	
5035A/8260B	*d8-Toluene (Surr)*	*%R: 102.3*		*90 - 110*	
5035A/8260B	*Dibromofluoromethane (Surr)*	*%R: 104.3*		*77 - 120*	
8270C	*2,4,6-Tribromophenol (Surr)*	*%R: 92.8*		*59 - 131*	
8270C	*2-Fluorobiphenyl (Surr)*	*%R: 76.5*		*45 - 112*	
8270C	*2-Fluorophenol (Surr)*	*%R: 62.5*		*41 - 84*	
8270C	*d14-Terphenyl (Surr)*	*%R: 87*		*56 - 120*	
8270C	*d5-Nitrobenzene (Surr)*	*%R: 89.5*		*35 - 105*	
8270C	*Phenol-d5 (surr)*	*%R: 75.9*		*50 - 100*	