Grauvogel & Associates

JAN 16 2004

January 13, 2004

City of South Bend
Community and Economic Development
1200 County-City Building
South Bend, IN 46601

Attention: Mr. Andy Laurent
Subject: Oliver Plow Phase III – Heating Oil Spill Waste Pile Disposal

Dear Andy:
Enclosed are the laboratory results documenting the composite characteristics of the waste soils generated from excavating the heating oil spill in October 2003. As reported in our earlier memorandum, the soil was found contaminated with heating oil absent of leachable toxic metals, organics and PCB's that would have rendered it an EPA hazardous waste. The pile contains 1,610 tons of heating oil contaminated, non-hazardous soil. This letter reports the results for additional samples collected for total RCRA metals and organics analysis necessary for determining if this soil can be disposed on site. The composite sample was generated by moving the entire pile with a backhoe, collecting 8 ounces of soil from each shovel, mixing all the individual 8-ounce samples together and then collecting an 8-ounce composite from these combined shovel samples. The results are summarized in Table 1.

As Table 1 illustrates TPH is the only parameter of concern for leaving this material on-site that was found in a substantial amount. All the other results were below their respective VRP and RISC values. The laboratory reports are attached for your records. The preliminary indication from Terry Baehr of Hull & Associates was that this soil could be used on-site based upon these results.

Direct further questions to my attention. Thank you for this opportunity to serve you.

Sincerely,
Grauvogel & Associates

Lawrence W. Grauvogel PE, CIH, CSP, CHMM

cc: L. Turley/Hull, T. Baehr/Hull

17660 Fall Creek Drive • Granger, Indiana 46530 • Phone 574.277.4770 • Fax 574.277.5281

Table 1: **Summary of Waste Soil Characteristics**
TPH, Organics, Metals and PCB's
Oliver Plow Phase III - Heating Oil Spill Waste Pile
December 18, 2003

Analyte	Total (mg/kg)	VRP Limit[1]	TCLP (mg/L)	RCRA Limit
RCRA Metals				
arsenic	<10	**612**	<0.1	**5.0**
barium	16.0	**10,000**	0.39	**100.0**
cadmium	<1	**1,020**	<0.02	**1.0**
chromium	4.8	**10,000**	<0.02	**5.0**
lead	23.9	**970**[a]	<0.05	**5.0**
mercury	0.41	**122.4**	<0.001	**0.2**
selenium	<10	**10,000**	<0.1	**1.0**
silver	<1	**10,000**	<0.005	**5.0**
Volatile Organics (VOC)				
benzene	<0.05	**16.63**	<0.02	**0.5**
carbon tetrachloride	<0.10	**31**[a]	<0.02	**0.5**
chlorobenzene	<0.05	**2,600**[a]	<0.02	**100.0**
chloroform	<0.05	**5.28**	<0.02	**6.0**
1,4-dichlorobenzene	<0.05	**2,416**	<0.02	**7.5**
1,2-dichloroethane	<0.05	**5.27**	<0.02	**0.5**
1,1-dichloroethylene	<0.10	**0.15**	<0.02	**0.7**
methyl ethyl ketone	<0.5	**1,000**	<0.2	**200.0**
tetrachloroethylene	<0.05	**101.2**	<0.02	**0.7**
trichloroethylene	<0.05	**24.97**	<0.02	**0.5**
vinyl chloride	<0.10	**56**[a]	<0.1	**0.2**
55 others	nd	**variable**		
Semi-Volatile Organics (SVOC)				
cresol (o.m.p)			<0.2	**200.0**
2,4-dinitrotoluene	<0.5	**4,080**	<0.2	**0.13**
hexachloro-1.3-butadiene	<0.5	**1.78**	<0.2	**0.5**
hexachlorobenzene	<0.5	**6.87**	<0.2	**0.13**
hexachloroethane	<0.5	**408**	<0.2	**3.0**
nitrobenzene	<0.5	**1,020**	<0.2	**2.0**
pentachlorophenol	<2.5	**483**	<2	**100.0**
pyridine	<0.5	[a]	<0.2	**5.0**
2,4,5-trichlorophenol	<0.5	**10,000**	<2	**400.0**
2,4,6-trichlorophenol	<0.5	**1,923**	<0.2	**2.0**
60 others	nd	**variable**		
TPH & Polychlorinated Biphenyls				
Arochlors 1016 - 1260	all <0.2	**7.53**		
TPH	3,490			

[1] 1996 IDEM Voluntary Remediation Program clean-up goals
[a] 2001 IDEM RISC limit for construction activities at industrial sites; no 1996 VRP established

CHAIN OF CUSTODY RECORD

PROJ. NO	PROJECT NAME
2162	Oliver Plow

SAMPLERS: (Print Name & Sign)
Matthew E. Richard

FIELD ID	DATE	TIME	COMP	GRAB	STATION LOCATION	Total No. of Containers	TPH (DRO)	VOC + PCB	SVOC	RCRA Metals	VOC (TCLP)	SVOC (TCLP)	RCRA Metals (TCLP)	Sample Type	TAT	Lab Order ID 0312.205 Lab Number
218-OP-FO	12/18/03		X		Oliver Plow Fuel Oil Pile	4	✓	✓	✓	✓			*			93472
218-OP-GP-C	12/18/03		X		OP- Green Paint - Clean	5		✓	✓	✓	✓	✓	✓			93473
					* Added per phone call from L.G. 1.7.04											

Relinquished By: (Signature)	Date	Time	Received By: (Signature)	EIS QUOTE NO:
Matthew E. Richard	12/18/03	2PM	S. Jones	
Relinquished By: (Signature)	Date	Time	Received By: (Signature)	Ship To:
Relinquished By: (Signature)	Date	Time	Received By: (Signature)	

NOTES: 1) If you were issued a quote number, it must appear on this document.
2) Instructions & area for comments are on reverse side.

REPORT OF ANALYSIS

Mr Larry Grauvogel
Grauvogel & Associates
17660 Fall Creek Drive
Granger, IN 46530
Tel No: 277-4770
Fax No: 277-5281
PO No:
Project Name: Oliver Plow Works

Report Date: 1/7/04
EIS Order No: 031200205
EIS Sample No: 093472
EIS Project No: 2730-1000-03

Client Sample ID: 1218-OP-FO Fuel Oil Pile
Date Collected: 12/18/03
Date Received: 12/18/03
Collected By: M. Richard

This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

DEFINITIONS:

MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.
RDL = Reporting Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.
nd = Not Detected at the RDL value. If present, result is less than this value.
< = Not Detected at the numerical value shown. If present, result is less than this value.
[ ] = Result is Estimated due to matrix interferences or calibration curve exceedence.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

DRINKING WATER CERTIFICATIONS: Chemistry = C-71-02 Bacteriology = M-76-5

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above

SAMPLE RESULTS

CLIENT SAMPLE ID: 1218-OP-FO Fuel Oil Pile
CLIENT PROJECT: Oliver Plow Works
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 12/18/03

Report Date: 1/7/04
EIS Sample No: 093472
EIS Order No: 031200205
Date Received: 12/18/03

Parameter	Results	Units	RDL	MDL	Test Date	Analyst ID	Method
Moisture(%)	7.2	%	0.1	0.1	12/22/03	E21	160.3
TPH (DRO)	3490	mg/kg(wet)	400	20	12/23/03	E16	8015 M
METALS							
Arsenic,Total	<10	mg/kg(wet)	10	10	12/19/03	E09	6010
Barium,Total	16.0	mg/kg(wet)	1	1	12/19/03	E09	6010
Cadmium,Total	<1	mg/kg(wet)	1	1	12/19/03	E09	6010
Chromium,Total	4.8	mg/kg(wet)	2	2	12/19/03	E09	6010
Lead,Total	23.9	mg/kg(wet)	5	5	12/19/03	E09	6010
Selenium,Total	<10	mg/kg(wet)	10	10	12/19/03	E09	6010
Silver,Total	<1	mg/kg(wet)	1	1	12/19/03	E09	6010
SEMIVOLATILE ORGANICS							
Acenaphthene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Acenaphthylene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Aniline	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Anthracene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzidine	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Benzo(a)anthracene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzo(a)pyrene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzo(b)fluoranthene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzo(ghi)perylene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzo(k)fluoranthene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Benzoic acid	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Benzyl alcohol	nd	mg/kg(wet)	20	1	1/6/04	E01	8270 C
Bis(2-chloroethoxy)methane	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Bis(2-chloroethyl)ether	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Bis(2-chloroisopropyl)ether	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Bis(2-ethylhexyl)phthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Bromophenyl-phenylether (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Butyl benzyl phthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chloro-3-methylphenol (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chloroaniline (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chloronaphthalene (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chlorophenol (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chlorophenyl phenyl ether (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Chrysene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Di-n-butylphthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Di-n-octylphthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C

SAMPLE RESULTS

CLIENT SAMPLE ID: 1218-OP-FO Fuel Oil Pile
CLIENT PROJECT: Oliver Plow Works
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 12/18/03

Report Date: 1/7/04
EIS Sample No: 033472
EIS Order No: 031200205
Date Received: 12/18/03

Parameter	Results	Units	RDL	MDL	Test Date	Analyst ID	Method
Dibenzo(a,h)anthracene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dibenzofuran	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dichlorobenzene (1,2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dichlorobenzene (1,3)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dichlorobenzene (1,4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dichlorobenzidine (3,3')	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dichlorophenol (2,4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Diethyl phthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dimethyl phthalate	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dimethylphenol (2,4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dinitrophenol (2,4)	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Dinitrotoluene (2,4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Dinitrotoluene (2,6)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Diphenylhydrazine (1,2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Fluoranthene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Fluorene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Hexachlorobenzene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Hexachlorobutadiene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Hexachlorocyclopentadiene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Hexachloroethane	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Indeno(1,2,3-cd)pyrene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Isophorone	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Methyl-4,6-dinitrophenol (2)	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Methylnaphthalene (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Methylphenol (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Methylphenol (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Naphthalene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitroaniline (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitroaniline (3)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitroaniline (4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitrobenzene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitrophenol (2)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitrophenol (4)	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Nitroso-di-methylamine (normal)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitroso-di-n-propylamine (normal)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Nitroso-di-phenylamine (normal)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Pentachlorophenol	nd	mg/kg(wet)	50	2.5	1/6/04	E01	8270 C
Phenanthrene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Phenol	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C

SAMPLE RESULTS

CLIENT SAMPLE ID: 1218-OP-FO Fuel Oil Pile
CLIENT PROJECT: Oliver Plow Works
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 12/18/03

Report Date: 1/7/04
EIS Sample No: 0034?2
EIS Order No: 0312?0205
Date Received: 12/18/03

Parameter	Results	Units	RDL	MDL	Test Date	Analyst ID	Method
Pyrene	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Pyridine	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Trichlorobenzene (1,2,4)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Trichlorophenol (2,4,5)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
Trichlorophenol (2,4,6)	nd	mg/kg(wet)	10	0.5	1/6/04	E01	8270 C
VOLATILE ORGANICS							
Acetone	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Benzene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Bromobenzene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Bromochloromethane	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Bromodichloromethane	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Bromoform	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Bromomethane	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Butylbenzene (normal)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Butylbenzene (sec)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Butylbenzene (tert)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Carbon Tetrachloride	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Chlorobenzene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Chloroethane	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Chloroform	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Chloromethane	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Chlorotoluene (2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Chlorotoluene (4)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dibromo-3-chloropropane (1,2)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Dibromochloromethane	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dibromoethane (1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dibromomethane	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Dichlorobenzene (1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichlorobenzene (1,3)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichlorobenzene (1,4)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichlorodifluoromethane	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichloroethane (1,1)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichloroethane (1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichloroethene (1,1)	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Dichloroethene (c-1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichloroethene (t-1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Dichloropropane (1,2)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Dichloropropane (1,3)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Dichloropropane (2,2)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B

SAMPLE RESULTS

CLIENT SAMPLE ID: 1218-OP-FO Fuel Oil Pile
CLIENT PROJECT: Oliver Plow Works
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 12/18/03

Report Date: 1/7/04
EIS Sample No. 093472
EIS Order No: 0312000205
Date Received: 12/18/03

Parameter	Results	Units	RDL	MDL	Test Date	Analyst ID	Method
Dichloropropene (1,1)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Dichloropropene (c-1,3)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Dichloropropene (t-1,3)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Diethyl ether	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Ethylbenzene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Hexachlorobutadiene	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Hexanone (2-)	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Isopropylbenzene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Isopropyltoluene (para)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Methyl Ethyl Ketone (MEK)	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Methyl Isobutyl Ketone (MIBK)	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Methylbutylether (tert) (MTBE)	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Methylene chloride	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Naphthalene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Propylbenzene (normal)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Styrene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Tetrachloroethane (1,1,1,2)	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Tetrachloroethane (1,1,2,2)	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Tetrachloroethene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Toluene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichlorobenzene (1,2,3)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichlorobenzene (1,2,4)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichloroethane (1,1,1)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichloroethane (1,1,2)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichloroethene	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichlorofluoromethane	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trichloropropane (1,2,3)	nd	mg/kg(wet)	0.75	0.25	12/29/03	E04	8260 B
Trimethylbenzene (1,2,4)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Trimethylbenzene (1,3,5)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Vinyl acetate	nd	mg/kg(wet)	1.5	0.5	12/29/03	E04	8260 B
Vinyl Chloride	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B
Xylene (ortho)	nd	mg/kg(wet)	0.15	0.05	12/29/03	E04	8260 B
Xylenes (meta + para)	nd	mg/kg(wet)	0.3	0.1	12/29/03	E04	8260 B

SAMPLE RESULTS

CLIENT SAMPLE ID: 1218-OP-FO Fuel Oil Pile
CLIENT PROJECT: Oliver Plow Works
SAMPLE TYPE: Soil/Sludge/Solid
Date Collected: 12/18/03

Report Date: 1/12/04
EIS Sample No: 063472
EIS Order No: 0312000205
Date Received: 12/18/03

Parameter	Results	Units	RDL	MDL	Test Date	Analyst ID	Method
METALS							
Mercury,Total	0.41	mg/kg(wet)	0.1	0.2	1/8/04	E09	7471
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1221)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1232)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1242)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1248)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1254)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
PCB (AR1260)	nd	mg/kg(wet)	2	0.2	1/12/04	E01	8082
TCLP METALS							
Arsenic,TCLP	<0.1	mg/L	0.1	0.1	1/8/04	E09	6010
Barium,TCLP	0.39	mg/L	0.01	0.01	1/8/04	E09	6010
Cadmium,TCLP	<0.02	mg/L	0.02	0.02	1/8/04	E09	6010
Chromium,TCLP	<0.02	mg/L	0.02	0.02	1/8/04	E09	6010
Lead,TCLP	<0.05	mg/L	0.05	0.05	1/8/04	E09	6010
Selenium,TCLP	<0.1	mg/L	0.1	0.1	1/8/04	E09	6010
Silver,TCLP	<0.005	mg/L	0.005	0.005	1/8/04	E09	6010