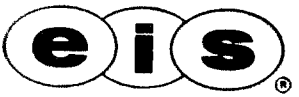
2/6/96



EIS ENVIRONMENTAL ENGINEERS, INC.

SUMMARY REPORT
SOIL, DRYWELL AND WASTE SAMPLING AND ANALYSIS AND EXCAVATION AND DISPOSAL OF SOIL 814/818 SOUTH LAFAYETTE BOULEVARD SOUTH BEND, INDIANA

FEBRUARY 6, 1996

PREPARED FOR
CITY OF SOUTH BEND
DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

PREPARED BY
EIS ENVIRONMENTAL ENGINEERS, INC.
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Project Geologist

H. Stephen Nye, P.E.
President

David D. Jeffers
Project Geologist

EXECUTIVE SUMMARY

EIS Environmental Engineers, Inc. (EIS) of South Bend, Indiana, collected and analyzed samples of soil and drywells and excavated and disposed of soil from the Site located at 814/818 South Lafayette Boulevard, South Bend, Indiana. This work addressed conditions identified in the EIS Phase 1 Environmental Assessment for the Site dated September 22, 1995, and was performed during the period of October 10, 1995, through January 5, 1996. The following summarizes the work and results:

- Sediment from two drywells located on the east side of the Site were sampled for Volatile Organic Compounds (VOC). Naphthalene, Toluene and Xylene were detected in each drywell. However, the concentration levels detected were below Indiana Department of Environmental Management (IDEM) Voluntary Cleanup Program (VCP) cleanup goals for soil from a non-residential site and were also below U.S. Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCL) for drinking water.

- Stained soil from two areas on the east side of the site were delineated, characterized by laboratory analysis, excavated and disposed at the Prairie View landfill. Laboratory analysis of clearance samples collected from below the stained soil detected VOC, TPH, Cadmium, Chromium and Lead. With the exception of Toluene at one location, the concentrations of VOC and TPH were below established IDEM VCP cleanup goals for soil or groundwater from a non-residential site and also below USEPA MCLs for drinking water.

  The Toluene concentration in soil at one clearance location did exceed the USEPA drinking water MCL. The level of Toluene detected probably would be incapable of leaching to the groundwater in sufficient concentration to actually exceed the USEPA drinking water MCL and also did not exceed IDEM VCP cleanup goals for groundwater at a non-residential site. The concentrations of the Metals detected in the clearance samples did not exceed either the background mean or the background mean plus three times the standard deviation. Therefore, the clearance sample data indicates that the remediation, with respect to the stained soil, has been successfully completed.

It is noted that both the clearance and background soil sample results indicated Metal concentrations that, if leached to the groundwater, might be capable of exceeding established USEPA drinking water MCLs for Cadmium and Chromium and the action level for Lead. The IDEM has not established a VCP cleanup goal for Lead in soil; however, the levels of Cadmium and Chromium in soil at the Site do not exceed the IDEM VCP cleanup goals for soil at a non-residential site. Also, the seriousness of possible adverse impact on the groundwater at the Site would be somewhat mitigated by the availability of city water to the property and surrounding properties.

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F Disposal application material mailed to Prairie View landfill

G Letter documenting approval to dispose soil at Prairie View landfill

H Statement of Origin, documenting the transport of excavated soil from the Site for disposal at the Prairie View landfill

1.0 INTRODUCTION

On September 11, 1995, EIS Environmental Engineers, Inc. (EIS) performed a Phase I Environmental Site Assessment at the former Miller Paint facility located at 814/818 South Lafayette Boulevard, South Bend, Indiana (the Site). The assessment report, submitted September 22, 1995, indicated the following conditions of concern:

- Two drywells located on the rear (east) portion of the property.
- Stained soil and residue located on the rear (east) portion of the property which appeared to be associated with paint materials that were used at the property.

In a letter dated October 5, 1995, EIS proposed that the sediment within the drywells be sampled and analyzed, that the stained soil be excavated and disposed at a landfill and that soil clearance, background and waste characterization samples be collected and analyzed. The November 7, 1995, letter authorizing EIS to proceed was issued by Joelle K. Webb of the South Bend Department of Community and Economic Development.

During the period of October 10, 1995, through January 5, 1996, EIS performed the sampling and analyses, applied for and received the required disposal permits and excavated and disposed of soil in accordance with the October 5, 1995 proposal. The following sections of this report provide a summary of this work and the results.

2.0 DRYWELL SAMPLING AND ANALYTICAL RESULTS

2.1 Drywell Sampling

The two drywell structures located on the rear (east) portion of the property were sampled by EIS on October 10, 1995. The samples (DW-1 and DW-2) consisted of sediment collected with a bucket dredge from the bottom of each drywell. The sample depths for drywells DW-1 and DW-2 were about seven (7) and five (5) feet below grade, respectively. The samples were submitted to the EIS laboratory for Volatile Organic Compound (VOC) analyses. Details regarding the sample collections and locations were recorded on a Sample Log and Site Sketch provided in Appendix C.

2.2 Drywell Sample Analytical Results

The complete analytical reports for the drywell samples are provided in Appendix A. These results are summarized in Table 2.1. Naphthalene, Toluene and Xylene were detected in the sediments collected from drywells. However, the detected concentrations were below established U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCL) for drinking water and below the Indiana Department of Environmental Management (IDEM), Voluntary Cleanup Program (VCP), Tier II cleanup goals for subsurface soils at non-residential sites. Corresponding USEPA Drinking Water MCLs and IDEM VCP cleanup goals are provided in Table 2.1 for comparison purposes.

TABLE 2.1

ANALYTICAL RESULT SUMMARY

DRYWELL SAMPLES[1]

Parameter	Results (ppm)		IDEM VCP Cleanup Goals[2] (ppm)	USEPA DWS MCL[3] (ppm)
	DW-1	DW-2		
Naphthalene	[0.051][3]	[0.094]	10,000.00	NE[5]
Toluene	0.054	0.17	1,000.00	1
Xylene (Total)	0.063	0.19	1,000.00	10

Notes:

(1) Drywell samples (DW-1 and DW-2) were collected October 10, 1995, from the Site located at 814/818 South Lafayette Boulevard, South Bend, Indiana.

(2) IDEM VCP Cleanup Goals = Indiana Department of Environmental Management, Voluntary Cleanup Program, Tier II Cleanup Goals for Subsurface Soils, Non-residential Scenario, February 1994.

(3) USEPA DWS MCL = U.S. Environmental Protection Agency, Drinking Water Standard, Maximum Contaminant Level, May 1995.

(4) [ ] = Detected but below Estimated Quantitation Limit, and the result shown is an estimate.

(5) NE = USEPA DWS MCL has not been established.

3.0 STAINED SOIL SAMPLING, ANALYSES, EXCAVATION AND REMOVAL

3.1 Soil Sampling for Waste Characterization and Landfill Permitting

Two separate areas of paint stained and discolored soil were observed along the east side of the Site. An EIS geologist probed the stained areas with a hand auger in order to delineate, on a visual and odor basis, the vertical and lateral extent of the stained soil. The first area covered approximately 81 square feet and was located near the north edge of the Site. The second area covered approximately 35 square feet and was located near an east door for the on-site building. The depth of staining in both areas was found to be about 0.75 to 1.5 feet below grade. Soil samples were collected from three locations (SC-1, SC-2 and SC-3) within the larger stained area and from two locations (SC-4 and SC-5) from the smaller area. Both waste characterization and soil clearance samples were collected from these five locations. The locations of the stained soil areas and sample locations are shown on a site sketch provided in Appendix C.

Stained soil for waste characterization analyses was collected on October 10, 1995, with a hand-auger from the stained interval at each of the five locations. The stained soil was composited into a single sample (WC-1) and submitted to the EIS laboratory for waste characterization parameters for landfill disposal purposes. An additional waste characterization sample (WC-2) for PCB analysis for landfill disposal purposes was collected on November 16, 1995, from locations adjacent to and from the same intervals as the October 10, 1995, samples.

The complete analytical reports for the waste characterization samples are provided in Appendix A. These results were used to apply to IDEM for a Special Waste Certification and to complete a Generator's Waste Profile Sheet in order to obtain permission to dispose the stained soil at the Prairie View landfill in Wyatt, Indiana. The Special Waste Certification Application and application fee was completed by EIS and mailed to IDEM on November 30, 1995. EIS received the Special Waste Certification

(No. 51083) from IDEM on January 2, 1995. A copy of the Certification is provided in Appendix E. A Generator's Waste Profile Sheet, Service Agreement, Waste Characterization Sample Logs and other documents required to obtain landfill approval for disposal were submitted by EIS to the Prairie View landfill on January 2, 1996. A copy of the information provided to Prairie View landfill is included in Appendix F. Prairie View landfill approved the disposal of soil on January 5, 1995. A letter documenting the approval to dispose is provided in Appendix G.

3.2 Soil Excavation and Landfill Disposal

Both areas of stained soil were excavated on January 5, 1996. The excavated soil was placed directly into a truck and immediately transported to the Prairie View landfill for disposal. An EIS geologist observed the excavation of all visually stained soil. The resulting excavations were approximately two (2) feet deep and were backfilled with clean sand. A copy of the Statement of Origin, documenting the transport of excavated soil from the Site for disposal at the Prairie View landfill is provided in Appendix H.

4.0 SOIL CLEARANCE AND BACKGROUND SAMPLING AND ANALYTICAL RESULTS

4.1 Soil Clearance Sampling

As indicated in Section 3.0, soil clearance samples (SC-1, SC-2, SC-3, SC-4 and SC-5) were collected from five (5) locations from two areas of stained surficial soil. The clearance samples were collected from depths ranging from 1.0 to 1.5 feet below grade from unstained soils that were located immediately below the stained soil. These samples were collected with a hand-auger by EIS on October 10, 1995, and were submitted to the EIS laboratory for VOC and Metals (Total Cadmium, Total Chromium, and Total Lead) analyses. Details regarding the sample collections and locations were recorded on a Sample Log and Site Sketch provided in Appendix C.

4.2 Soil Background Sampling

EIS collected four (4) background soil samples using a hand-auger (BG-1, BG-2, BG-3 and BG-4) from the Site on October 10, 1995. These samples were collected from an area of the Site that did not appear to have been covered by stained soil and were collected from the same soil type and at approximately the same depth as the soil clearance samples. The purpose of the background samples were to obtain data regarding background metals concentrations for comparison with the clearance sample results. These samples were submitted to the EIS laboratory for Metals analyses. Details regarding the sample collections and locations were recorded on a Sample Log and Site Sketch provided in Appendix C.

4.3 Soil Clearance and Background Analytical Results

The complete analytical reports for the soil clearance and background samples are provided in Appendix A. The VOC results for the clearance samples are summarized in Table 4.1. The Metals results for the soil clearance and background samples are provided in Table 4.2.

TABLE 4.1

ANALYTICAL RESULT SUMMARY FOR

VOLATILE ORGANIC COMPOUNDS, SOIL CLEARANCE SAMPLES [1]

Parameter	Results ppm					IDEM VCP Cleanup Goals[2]			USEPA DWS MCL[3] (ppm)
	SC-1	SC-2	SC-3	SC-4	SC-5	Surface Soils (ppm)	Subsurface Soil (ppm)	Groundwater (ppm)	
Ethylbenzene	0.070	ND[4]	ND	ND	0.071	1,000.00	1,000.00	10.2	0.7
Methyl Isobutyl Ketone	1.9	ND	ND	ND	ND	1,000.00	146.24	5.11	NE[5]
Napthalene	0.15	ND	0.15	ND	ND	10,000.00	10,000.00	4.09	NE
Toluene	**1.6**[7]	0.052	0.52	ND	0.20	1,000.00	1,000.00	20.4	1.0
1,2,4 Trimethylbenzene	[0.068]	ND	[0.065]	ND	ND	NE	NE	NE	NE
1,3,5 Trimethylbenzene	[0.065]	ND	[0.054]	ND	ND	NE	NE	NE	NE
m+p Xylenes	0.83	0.59	0.16	ND	0.32	1,000.00	1,000.00	20.4	10
o-Xylene	0.56	[0.046]	0.074	ND	0.13	1,000.00	1,000.00	20.4	10
TPH	20	ND	18	ND	ND	NE	NE	NE	NE

Notes:

(1) Soil clearance samples collected October 10, 1995, from below stained sediment from site located at 814/818 South Lafayette Boulevard, South Bend, Indiana.

(2) IDEM VCP Cleanup Goals = Indiana Department of Environmental Management, Voluntary Cleanup Program, Tier II Cleanup Goals for surface soils, subsurface soils and groundwater, Non-Residential Scenario, February 1994.

(3) USEPA DWS MCL = U.S. Environmental Protection Agency, Drinking Water Standard, Maximum Contaminant Level, May 1995.

(4) ND = Not Detected.

(5) NE = Cleanup goal or MCL has not been established.

(6) [ ] = Detected but below Estimated Quantitation Limit, and the result shown is an estimate.

(7) Bold indicates results exceed an IDEM VCP Cleanup Goal or USEPA DWS MCL.

TABLE 4.2

ANALYTICAL RESULT SUMMARY FOR

METALS, SOIL CLEARANCE AND BACKGROUND SAMPLES[1]

Clearance Soil Sample Results

Parameter	ppm				
	SC-1	SC-2	SC-3	SC-4	SC-5
Cadmium (Total)	<1.0	<1.0	1.7	<1.0	<1.0
Chromium (Total)	23.7	17.3	27.0	15.7	18.0
Lead (Total)	410	170	810	180	190

Background Soil Results

Parameter	ppm						
	BG-1	BG-2	BG-3	BG-4	Mean	SD[2]	Mean + (3xSD)
Cadmium (Total)	1.9	5.8	4.9	1.6	3.55	2.11	9.89
Chromium (Total)	41.4	60.6	34.4	30.0	41.6	13.51	82.13
Lead (Total)	160	470	580	320	382.5	182.64	930.4

Notes:

[1] Soil clearance and background samples collected October 10, 1995, from Site located at 814/818 South Lafayette Boulevard, South Bend, Indiana.

[2] SD = Standard Deviation.

[3] Mean + (3xSD) = Background mean plus three times the standard deviation.

As indicated in Table 4.1, several VOC and Total Petroleum Hydrocarbon (TPH) were detected at one or more clearance sample locations. However, it is noted that, with the exception of Toluene at sample SC-1, all detected VOC were at concentrations below IDEM VCP cleanup goals for soil or groundwater for a non-residential site and also below USEPA drinking water MCLs. Toluene, detected at 1.6 ppm at sample SC-1, exceeded the USEPA drinking water MCL of 1.0 ppm. However, it is unlikely that the Toluene in the soil at location SC-1 would be capable, at the concentration detected, of leaching to the groundwater in sufficient quantities to actually exceed the drinking water MCL. It should also be noted that the Toluene concentration detected at sample SC-1 is below the IDEM VCP cleanup goal for groundwater at a non-residential site. TPH was detected at two clearance sample locations (20 ppm at SC-1 and 18 ppm at SC-3). However, the TPH concentrations detected are below the 100 ppm level generally used by IDEM as a cleanup goal for TPH in soil.

Table 4.2 summarizes the Metals results for the soil clearance and background samples. The background samples were required to obtain concentration of Metals in soils from areas at the Site that had not been impacted by the surface staining in order to evaluate the clearance sample results. The mean, standard deviation and the mean plus three times the standard deviation for the background results are provided in Table 4.2. Comparison of the clearance samples with the background data indicates the following:

- All clearance sample results for Total Cadmium and Total Chromium are less than the background mean.
- The clearance sample results for Total Lead are less than the background mean for samples SC-2, SC-4 and SC-5.

- The clearance sample results for Total Lead are greater than the background mean for samples SC-1 and SC-3. However, these results are not greater than the background mean plus three times the standard deviation, suggesting that the clearance samples do not significantly exceed the background mean.

The above evaluation indicates that the remediation, with respect to the stained soil, has been successfully completed. However, it should be noted that both the clearance and background soil samples indicated metals concentrations, that if leached to the groundwater, might be capable of exceeding established USEPA drinking water MCLs of 0.005 ppm for Cadmium and 0.1 ppm for Chromium and the action level of 0.015 ppm for Lead. However, the levels of Cadmium and Chromium in the soil at the Site do not exceed the IDEM VCP cleanup goals for soil at a non-residential site. Also, the seriousness of possible adverse impact on the groundwater at the Site would be somewhat mitigated by the availability of city water to the property and surrounding properties.

APPENDIX A

ANALYTICAL RESULTS

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29704
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-1
812/818 South Lafayette / Composite
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Ash	percent	92.6		10-17-95	Povlock,P					
Corrosivity (pH)	SU	6.8		10-30-95	Wright,C					
Cyanide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Flash Point (Open Cup)	fahrenheit	>201		10-31-95	Wright,C					
Paint Filter Liquids	liquid	NONE		10-12-95	Wright,C					
Solids, Total	percent	95.4	1	10-16-95	Povlock,P					
Sulfide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Arsenic,TCLP	mg/l	<0.1	0.1	10-24-95	Clear,N					
Barium,TCLP	mg/l	0.96	0.01	10-24-95	Clear,N					
Cadmium,TCLP	mg/l	0.01	0.01	10-24-95	Clear,N					
Chromium,TCLP	mg/l	0.21	0.01	10-24-95	Clear,N					
Lead,TCLP	mg/l	0.30	0.05	10-24-95	Clear,N	0.40	90	90	0	
Mercury,TCLP	mg/l	<0.002	0.002	10-25-95	Shane,D					
Selenium,TCLP	mg/l	<0.05	0.05	10-24-95	Clear,N					
Silver,TCLP	mg/l	<0.01	0.01	10-24-95	Clear,N					
Herbicides,TCLP		*		10-30-95	Clear,B					
Pesticides,TCLP		*		10-26-95	Clear,B					
SVOC,TCLP		*		10-27-95	Geels,S					
VOC,TCLP		*		10-27-95	Myers,N					

* See Attached TCLP ORGANICS REPORT

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

Recycled Paper

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-27-95
EIS Lab No: 30671
EIS Project No: 1456-8145-95
EIS Priority: 1
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-2
Composite Sample Of Stained Soil
Date Sampled: 11-17-95
Date Received: 11-17-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
PCB	mg/kg(wet)	<0.9	0.9	11-22-95	Clear,B
Extract PCB				11-20-95	Thompson,G

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Sample was iced upon receipt.
3. < = Not Detected at the Detection Limit (DL) shown.
4. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

EIS Lab No: 29704(continued)

PARAMETER	UNITS	RESULT	TEST DATE	ANALYST
Herbicide Extraction,TCLP			10-19-95	Thompson,G
Mercury Digestion,TCLP			10-24-95	Shane,D
Metals Digestion ICP,TCLP			10-13-95	Shane,D
Pesticide Extraction,TCLP			10-19-95	Thompson,G
SVOC Extraction,TCLP			10-19-95	Thompson,G
TCLP Extract Formation				
Extraction Started			10-12-95	Wright,C
Extraction Completed			10-13-95	Wright,C
Solids Content	percent	100		
Sample Weight Extracted	grams	150.0		
Filter Used (Whatman)	type	GF/F		
Initial pH	SU	6.9		
pH After Acid Addition	SU	1.7		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	3,000		
Extraction Fluid pH	SU	4.89		
Final Extract pH (18hrs)	SU	5.3		
TCLP Extract Formation (ZHE)				
Extraction Started			10-24-95	Nye,D
Extraction Completed			10-25-95	Nye,D
Solids Content	percent	100		
Sample Weight Extracted	grams	10.0		
Filter Used (Whatman)	type	GF/F		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	200		
Extraction Fluid pH	SU	4.90		

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.

CONCLUSION

This sample is satisfactory with respect to the analysis performed.

TCLP ORGANICS REPORT

SAMPLE ID: WC-1
812/818 South Lafayette / Composite

REPORT DATE: 11/13/95
EIS LAB NO: 29704

VOLATILE ORGANICS	- - mg/l - - RESULT	EQL
Benzene	ND	0.02
Carbon Tetrachloride	ND	0.02
Chlorobenzene	ND	0.02
Chloroform	ND	0.02
1,4-Dichlorobenzene	ND	0.02
1,2-Dichloroethane	ND	0.02
1,1-Dichloroethylene	ND	0.02
Methyl Ethyl Ketone	ND	0.2
Tetrachloroethylene	ND	0.02
Trichloroethylene	ND	0.02
Vinyl Chloride	ND	0.1
SEMI-VOLATILE ORGANICS		
o-Cresol	ND	0.1
m-Cresol	ND	0.1
p-Cresol	ND	0.1
Total Cresols	ND	0.3
2,4-Dinitrotoluene	ND	0.1
Hexachlorobenzene	ND	0.1
Hexachloro-1,3-butadiene	ND	0.1
Hexachloroethane	ND	0.1
Nitrobenzene	ND	0.1
Pentachlorophenol	ND	1.0
Pyridine	ND	0.1
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	0.1
PESTICIDES and HERBICIDES		
Chlordane	ND	0.02
Endrin	ND	0.001
Heptachlor (and its epoxides)	ND	0.001
Lindane	ND	0.001
Methoxychlor	ND	0.001
Toxaphene	ND	0.03
2,4-D	ND	0.013
2,4,5-TP(Silvex)	ND	0.01

NOTES
1. ND = Not Detected at the EQL shown
2. EQL = Estimated Quantitation Limit = Detection Limit

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29705
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: DW-1
Drywell Sediment
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	TEST DATE	ANALYST
Moisture	percent	26	10-16-95	Szkarlat,M
VOC		*	10-17-95	Williams,J
* See Attached ORGANICS REPORT				
Extract VOC			10-16-95	Williams,J

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Sample was iced upon receipt.
3. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

SAMPLE ID: DW-1
Drywell Sediment

REPORT DATE: 11/13/95
EIS LAB NO: 29705

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	ND	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	[0.051]	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	0.054	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	ND	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	ND	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.063	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	ND	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	ND	10

SAMPLE ID: DW-1
Drywell Sediment

REPORT DATE: 11/13/95
EIS LAB NO: 29705

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	118
2,4-Dichlorotoluene	60 - 125	122
Toluene,d8	90 - 120	105

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29706
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: DW-2
Drywell Sediment
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	TEST DATE	ANALYST
Moisture	percent	32	10-16-95	Szkarlat,M
VOC		*	10-17-95	Williams,J
* See Attached ORGANICS REPORT				
Extract VOC			10-16-95	Williams,J

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Sample was iced upon receipt.
3. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

SAMPLE ID: DW-2
Drywell Sediment

REPORT DATE: 11/13/95
EIS LAB NO: 29706

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	ND	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	[0.094]	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	0.17	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	ND	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	ND	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.14	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	0.050	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	ND	10

SAMPLE ID: DW-2
Drywell Sediment

REPORT DATE: 11/13/95
EIS LAB NO: 29706

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	119
2,4-Dichlorotoluene	60 - 125	122
Toluene,d8	90 - 120	106

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29707
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: SC-1
Clearance Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Moisture	percent	6.4		10-13-95	Szkarlat,M					
Cadmium,Total	mg/kg(wet)	<1.0	1	10-19-95	Clear,N	0				
Chromium,Total	mg/kg(wet)	23.7	2	10-19-95	Clear,N	18				
Lead,Total	mg/kg(wet)	410	4	10-19-95	Clear,N	16				
VOC		*		10-17-95	Williams,J					
* See Attached ORGANICS REPORT										
Extract VOC				10-16-95	Williams,J					
Metals Digestion (ICP)				10-16-95	Shane,D					

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.
8. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

SAMPLE ID: SC-1
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29707

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	0.070	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	1.9	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	0.15	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	1.6	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	[0.068]	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	[0.065]	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.83	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	0.56	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	20	10

SAMPLE ID: SC-1
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29707

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	92
2,4-Dichlorotoluene	60 - 125	122
Toluene,d8	90 - 120	112

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29708
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: SC-2
Clearance Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	7.8		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	<1.0	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	17.3	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	170	4	10-19-95	Clear,N
VOC		*		10-17-95	Williams,J
* See Attached ORGANICS REPORT					
Extract VOC				10-16-95	Williams,J
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

SAMPLE ID: SC-2
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29708

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	ND	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	ND	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	0.052	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	ND	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	ND	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.059	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	[0.046]	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	ND	10

SAMPLE ID: SC-2
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29708

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	83
2,4-Dichlorotoluene	60 - 125	106
Toluene,d8	90 - 120	108

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29709
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: SC-3
Clearance Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Moisture	percent	9.9		10-13-95	Szkarlat,M	4.3				
Cadmium,Total	mg/kg(wet)	1.7	1	10-19-95	Clear,N					
Chromium,Total	mg/kg(wet)	27.0	2	10-19-95	Clear,N					
Lead,Total	mg/kg(wet)	810	4	10-19-95	Clear,N					
VOC		*		10-17-95	Williams,J					
* See Attached ORGANICS REPORT										
Extract VOC				10-16-95	Williams,J					
Metals Digestion (ICP)				10-16-95	Shane,D					

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.
8. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

SAMPLE ID: SC-3
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29709

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	ND	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	0.15	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	0.52	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	[0.065]	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	[0.054]	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.16	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	0.074	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS(PH) ..	18	10

SAMPLE ID: SC-3
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29709

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	84
2,4-Dichlorotoluene	60 - 125	115
Toluene,d8	90 - 120	110

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29710
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: SC-4
Clearance Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	9.7		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	<1.0	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	15.7	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	180	4	10-19-95	Clear,N
VOC		*		10-17-95	Williams,J
* See Attached ORGANICS REPORT					
Extract VOC				10-16-95	Williams,J
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. This sample was submitted for VOC Quality Control analysis. Results of the Matrix Spike/Duplicate Spike are enclosed.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

SAMPLE ID: SC-4
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29710

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	ND	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	ND	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	ND	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	ND	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	ND	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	ND	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	ND	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	ND	10

SAMPLE ID: SC-4
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29710

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	101
2,4-Dichlorotoluene	60 - 125	123
Toluene,d8	90 - 120	106

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29711
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: SC-5
Clearance Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	11		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	<1.0	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	18.0	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	190	4	10-19-95	Clear,N
VOC		*		10-17-95	Williams,J
* See Attached ORGANICS REPORT					
Extract VOC				10-16-95	Williams,J
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Batch [organic] Quality Control data is enclosed. This data was generated at the time that this sample was analyzed but was performed on a different sample.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

SAMPLE ID: SC-5
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29711

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021
Reporting Units: ppm

Abbreviations and report symbols are explained on the following page

Sample Dilution: None
EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	0.5	t-1,3-Dichloropropene	ND	0.10
Benzene	ND	0.05	Diethyl Ether	ND	0.50
Bromobenzene	ND	0.05	Ethylbenzene	0.071	0.05
Bromochloromethane	ND	0.05	Hexachlorobutadiene	ND	0.10
Bromodichloromethane	ND	0.05	2-Hexanone	ND	0.50
Bromoform	ND	0.10	Isopropyl Benzene	ND	0.10
Bromomethane	ND	0.25	p-Isopropyltoluene	ND	0.10
n-Butyl Benzene	ND	0.10	Methylene Chloride	ND	0.10
sec-Butyl Benzene	ND	0.10	Methyl Ethyl Ketone	ND	0.50
tert-Butyl Benzene	ND	0.10	Methyl Isobutyl Ketone	ND	0.50
Carbon Tetrachloride	ND	0.10	Naphthalene	ND	0.10
Chlorobenzene	ND	0.05	n-Propyl Benzene	ND	0.05
Chlorodibromomethane	ND	0.05	Styrene	ND	0.05
Chloroethane	ND	0.25	tert-Butyl Methyl Ether	ND	0.10
Chloroform	ND	0.05	1,1,1,2-Tetrachloroethane	ND	0.10
1-Chlorohexane	ND	0.10	1,1,2,2-Tetrachloroethane	ND	0.05
Chloromethane	ND	0.25	Tetrachloroethene	ND	0.05
2-Chlorotoluene	ND	0.05	Tetrahydrofuran	ND	0.50
4-Chlorotoluene	ND	0.05	Toluene	0.20	0.05
1,2-Dibromoethane	ND	0.05	1,2,3-Trichlorobenzene	ND	0.05
1,2-Dichlorobenzene	ND	0.10	1,2,4-Trichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.10	1,1,1-Trichloroethane	ND	0.05
1,4-Dichlorobenzene	ND	0.10	1,1,2-Trichloroethane	ND	0.05
Dichlorodifluoromethane	ND	0.25	Trichloroethene	ND	0.05
1,1-Dichloroethane	ND	0.05	Trichlorofluoromethane	ND	0.10
1,2-Dichloroethane	ND	0.05	1,2,3-Trichloropropane	ND	0.25
1,1-Dichloroethene	ND	0.10	1,1,2-TCTFE*	ND	0.10
c-1,2-Dichloroethene	ND	0.05	1,2,4-Trimethylbenzene	ND	0.10
t-1,2-Dichloroethene	ND	0.05	1,3,5-Trimethylbenzene	ND	0.10
1,2-Dichloropropane	ND	0.05	Vinyl Chloride	ND	0.10
1,3-Dichloropropane	ND	0.10	m+p-xylenes	0.32	0.05
1,1-Dichloropropene	ND	0.10	o-xylene	0.13	0.05
c-1,3-Dichloropropene	ND	0.10	PETROLEUM HYDROCARBONS (PH)	ND	10

SAMPLE ID: SC-5
Clearance Soil

REPORT DATE: 11/13/95
EIS LAB NO: 29711

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 145	82
2,4-Dichlorotoluene	60 - 125	122
Toluene,d8	90 - 120	107

DEFINITIONS

- ppm = Parts per million = milligrams per kilogram (mg/kg) as received.
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29712
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: BG-1
Background Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	5.2		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	1.9	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	41.4	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	160	4	10-19-95	Clear,N
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29713
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: BG-2
Background Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Moisture	percent	5.6		10-13-95	Szkarlat,M					
Cadmium,Total	mg/kg(wet)	5.8	1	10-19-95	Clear,N		0.40	90	90	0
Chromium,Total	mg/kg(wet)	60.6	2	10-19-95	Clear,N		0.40	92	92	0
Lead,Total	mg/kg(wet)	470	4	10-19-95	Clear,N		0.40	98	95	3.1
Metals Digestion (ICP)				10-16-95	Shane,D					

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29714
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: BG-3
Background Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	8.5		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	4.9	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	34.4	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	580	4	10-19-95	Clear,N
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29715
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: BG-4
Background Soil
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Moisture	percent	6.9		10-13-95	Szkarlat,M
Cadmium,Total	mg/kg(wet)	1.6	1	10-19-95	Clear,N
Chromium,Total	mg/kg(wet)	30.0	2	10-19-95	Clear,N
Lead,Total	mg/kg(wet)	320	4	10-19-95	Clear,N
Metals Digestion (ICP)				10-16-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29716
EIS Project No: 1456-8106-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: TRIP BLANK
Deionized Water
Date Sampled: 10-09-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
Cadmium,Total	mg/l	<0.001	0.001	10-26-95	Clear,N
Chromium,Total	mg/l	<0.005	0.005	10-26-95	Clear,N
Lead,Total	mg/l	<0.005	0.005	10-26-95	Clear,N
VOC		*		10-17-95	Williams,J
* See Attached ORGANICS REPORT					
Metals Digestion (ICP)				10-26-95	Shane,D

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. Sample container(s) were properly preserved per USEPA protocols.
5. < = Not Detected at the Detection Limit (DL) shown.
6. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

2001 Rev (5-04-94)

SAMPLE ID: TRIP BLANK
Deionized Water

REPORT DATE: 11/13/95
EIS LAB NO: 29716

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

Analysis Method: 8021

Reporting Units: ppb

Abbreviations and report symbols are explained on the following page

Sample Dilution: None

EQL Multiplier: 1

COMPOUND NAME	RESULT	EQL	COMPOUND NAME	RESULT	EQL
Acetone	ND	10	t-1,3-Dichloropropene	ND	2
Benzene	ND	1	Diethyl Ether	ND	10
Bromobenzene	ND	1	Ethylbenzene	ND	1
Bromochloromethane	ND	1	Hexachlorobutadiene	ND	2
Bromodichloromethane	ND	1	2-Hexanone	ND	10
Bromoform	ND	2	Isopropyl Benzene	ND	2
Bromomethane	ND	5	p-Isopropyltoluene	ND	2
n-Butyl Benzene	ND	2	Methylene Chloride	ND	2
sec-Butyl Benzene	ND	2	Methyl Ethyl Ketone	ND	10
tert-Butyl Benzene	ND	2	Methyl Isobutyl Ketone	ND	10
Carbon Tetrachloride	ND	2	Naphthalene	ND	2
Chlorobenzene	ND	1	n-Propyl Benzene	ND	2
Chlorodibromomethane	ND	1	Styrene	ND	1
Chloroethane	ND	5	tert-Butyl Methyl Ether	ND	2
Chloroform	ND	1	1,1,1,2-Tetrachloroethane	ND	2
1-Chlorohexane	ND	2	1,1,2,2-Tetrachloroethane	ND	2
Chloromethane	ND	5	Tetrachloroethene	ND	1
2-Chlorotoluene	ND	1	Tetrahydrofuran	ND	10
4-Chlorotoluene	ND	1	Toluene	ND	1
1,2-Dibromoethane	ND	1	1,2,3-Trichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	2	1,2,4-Trichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	2	1,1,1-Trichloroethane	ND	1
1,4-Dichlorobenzene	ND	2	1,1,2-Trichloroethane	ND	1
Dichlorodifluoromethane	ND	5	Trichloroethene	ND	1
1,1-Dichloroethane	ND	1	Trichlorofluoromethane	ND	2
1,2-Dichloroethane	ND	1	1,2,3-Trichloropropane	ND	5
1,1-Dichloroethene	ND	2	1,1,2-TCTFE*	ND	2
c-1,2-Dichloroethene	ND	1	1,2,4-Trimethylbenzene	ND	2
t-1,2-Dichloroethene	ND	1	1,3,5-Trimethylbenzene	ND	2
1,2-Dichloropropane	ND	1	Vinyl Chloride	ND	2
1,3-Dichloropropane	ND	2	m + p-Xylenes	ND	1
1,1-Dichloropropene	ND	2	o-Xylene	ND	1
c-1,3-Dichloropropene	ND	2	PETROLEUM HYDROCARBONS	ND	200

SAMPLE ID: TRIP BLANK
Deionized Water

REPORT DATE: 11/13/95
EIS LAB NO: 29716

VOLATILE ORGANIC COMPOUNDS/PETROLEUM HYDROCARBONS

SURROGATE RECOVERY (Method 8021)

Compound Name	QC Limits	% Recovery
1,2-Dichloroethane,d4	70 - 130	113
2,4-Dichlorotoluene	70 - 130	99
Toluene,d8	90 - 120	101

DEFINITIONS

- ppb = Parts per billion = micrograms per liter (µg/l)
- ND = Not Detected
- NR = Not Required for analysis
- EQL = Estimated Quantitation Limit (in Reporting Units) and is the "Detection Limit" for samples not requiring dilutions. [If a sample requires a dilution, the EQL shown must be multiplied by the inverse of the dilution factor (EQL Multiplier)]. EIS reports do not list the adjusted EQL values.
- [ ] = Detected but below EQL and the result shown is an estimate.
- The * compound (1,1,2-TCTFE) is 1,1,2-Trichloro-1,2,2-trifluoroethane.
- Petroleum Hydrocarbons, if their presence is noted in this analysis, are reported in terms of #2 fuel oil. No attempt has been made to identify the product responsible for the Petroleum Hydrocarbon response. This analysis will not detect heavy distillates such as used oils, motor oils, hydraulic fluids.

TCLP AND HAZARDOUS WASTE CHARACTERIZATION LIMITS

Reference Analytical Methods

USEPA Hazardous Waste Number & Constituent Name		USEPA Limit (mg/l)	SW-846 Reference Method
VOLATILE ORGANICS			
D018	Benzene	0.5	8260
D019	Carbon Tetrachloride	0.5	8260
D021	Chlorobenzene	100.0	8260
D022	Chloroform	6.0	8260
D027	1,4-Dichlorobenzene	7.5	8260
D028	1,2-Dichloroethane	0.5	8260
D029	1,1-Dichloroethylene	0.7	8260
D035	Methyl Ethyl Ketone	200.0	8260
D039	Tetrachloroethylene	0.7	8260
D040	Trichloroethylene	0.5	8260
D043	Vinyl Chloride	0.2	8260
SEMI-VOLATILE ORGANICS			
D023	o-Cresol	200.0	8270
D024	m-Cresol	200.0	8270
D025	p-Cresol	200.0	8270
D026	Total Cresols	200.0	8270
D030	2,4-Dinitrotoluene	0.13	8270
D032	Hexachlorobenzene	0.13	8270
D033	Hexachloro-1,3-butadiene	0.5	8270
D034	Hexachloroethane	3.0	8270
D036	Nitrobenzene	2.0	8270
D037	Pentachlorophenol	100.0	8270
D038	Pyridine	5.0	8270
D041	2,4,5-Trichlorophenol	400.0	8270
D042	2,4,6-Trichlorophenol	2.0	8270
PESTICIDES AND HERBICIDES			
D020	Chlordane	0.03	8080
D012	Endrin	0.02	8080
D031	Heptachlor (and its expoxides)	0.008	8080
D013	Lindane	0.4	8080
D014	Methoxychlor	10.0	8080
D015	Toxaphene	0.5	8080
D016	2,4-D	10.0	8150
D017	2,4,5-TP (Silvex)	1.0	8150

USEPA Hazardous Waste Number & Constituent Name		USEPA Limit (mg/l)	SW-846 Reference Method
TCLP METALS			
D004	Arsenic	5.0	6010
D005	Barium	100.0	6010
D006	Cadmium	1.0	6010
D007	Chromium	5.0	6010
D008	Lead	5.0	6010
D009	Mercury	0.2	7470
D010	Selenium	1.0	6010
D011	Silver	5.0	6010
MISCELLANEOUS			
D001	Ignitability (°F)	<140	1010
D002	Corrosivity (SU)	2 - 12.5	9040
D003	Cyanide (Reactivity) (mg/kg)	250	9010
D003	Sulfide (Reactivity) (mg/kg)	500	9030
	TCLP Extract Formation		1311
	Paint Filter Liquids Test		9095

REFERENCE ANALYTICAL METHODS

EIS Lab No: 29707-29716
Reference Used **: 3

Test Description	Reference 1	2	3
Acidity ($CaCO_3$)	2310 B	305.1	
Alkalinity, Total ($CaCO_3$)	2320 B	310.2	
BOD_5 (Carbonaceous)	5210 B		
BOD_5 (Soluble)	5210 B	405.1	
BOD_5 (Total)	5210 B	405.1	
Chloride	4500-Cl E	325.3	9251
Chlorine, Residual	4500-Cl G	330.5	
COD	5220 D	410.4	
Coliform,Total + F.Coli Screen	9222 B		9132
Coliform, Fecal	9222 D		
Coliform, E.	*		
Coliform, Plate Count	9215 B		
Cyanide, Total	4500-CN E	335.3	9012
Cyanide, Reactive			7.3
Cyanide, Amenable	4500-CN G	335.1	9012
Fluoride	4500-F C	340.2	
Hardness ($CaCO_3$)	2340 C	130.1	
Nitrogen, Ammonia	4500-NH_3H	350.1	
Nitrogen, Nitrate	4500-NO_3F	353.2	9200
Nitrogen, Nitrate + Nitrite	4500-NO_3F	353.2	
Nitrogen, Nitrite	4500-NO_3F	353.2	
Nitrogen, Organic	4500-N A	351.2	
Nitrogen, Total Kjeldahl	4500-N B	351.2	
Oil & Grease(Freon Extraction)	5520 B	413.1	9070
Oil & Grease(Hydrocarbons)	5520 F		
pH	4500-H B	150.1	9040
Phenols, Total	5530 D	420.2	9066
Phosphrous, Total	4500-P F	365.1	
Phosphorus, Ortho	4500-P F	365.1	
Silica	4500-Si F	370.1	
Solids, Dissolved (180°C)	2540 C	160.1	
Solids, Suspended	2540 D	160.2	
Solids, Total	2540 B	160.3	
Solids, Volatile Suspended	2450 E	160.4	
Solids, Volatile Total	2540 E	160.4	
Specific Conductance	2510 B	120.1	9050
Sulfate	4500-SO_4F	375.2	9036
Sulfide, Total Acid Soluble	4500-S D	376.2	9030
Sulfide, Reactive			7.3
Surfacants, MBAS	5540 C	425.1	
Surfacants, CTAS	5540 D		
Total Organic Carbon	5310 C	415.2	9060
Total Organic Halogen	5320 B		9020

Test Description	Reference 1	2	3
Aluminum	3120 B	200.7	6010
Antimony	3120 B	200.7	6010
Arsenic	3120 B	200.7	6010
Barium	3120 B	200.7	6010
Beryllium	3120 B	200.7	6010
Bismuth	3111 B		
Boron	3120 B	200.7	6010
Cadmium	3120 B	200.7	6010
Calcium	3120 B	200.7	6010
Chromium	3120 B	200.7	6010
Chromium, Hex	3500-Cr D		7196
Cobalt	3120 B	200.7	6010
Copper	3120 B	200.7	6010
Iron	3120 B	200.7	6010
Lead	3120 B	200.7	6010
Magnesium	3120 B	200.7	6010
Mercury	3112 B	245.1	7470
Molybdenum	3111 D	246.1	7480
Nickel	3120 B	200.7	6010
Potassium	3111 B	258.1	7610
Selenium	3120 B	200.7	6010
Silicon	3120 B	200.7	6010
Silver	3120 B	200.7	6010
Sodium	3120 B	200.7	6010
Thallium	3120 B	200.7	6010
Tin	3120 B	200.7	6010
Titanium	3120 B	200.7	6010
Vanadium	3111 B	286.1	7910
Zinc	3120 B	200.7	6010

REFERENCES

1 - "Standard Methods for the Examination of Water and Wastewater" 18th Edition

2 - "Methods for Chemical Analysis of Water and Wastes" EPA-600/4-79-020

3 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" SW-846

* - Federal Register 40 CFR, Parts 141 and 142 Part III, June 29, 1989

** - More than one reference may be required to complete all tests

Group Tests, such as VOC, BETX, SVOC, PCB, TCLP are reported, along with the appropriate Test Methods, in special Report Packages

QUALITY CONTROL LIMITS
GENERAL CHEMISTRIES/HEAVY METALS
LABORATORY REPLICATE AND MATRIX SPIKE ANALYSIS

Parameter/Test Group	Laboratory Replicate (% RSD)	Matrix Spike/Duplicate Spike % R	Matrix Spike/Duplicate Spike % RPD
COD	20	-	-
Cyanide, Sulfide	15	75 - 125	20
Inorganics - Group 1	15	80 - 120	20
Alkalinity, Ammonia, Chloride Fluoride, Hardness, Hex Chrome, Nitrate, Nitrate + Nitrite, Nitrite, Phenols, Silica, Sulfate			
Inorganics - Group 2	15	-	-
BOD, Dissolved Solids, Oil & Grease, pH, Specific Conductance, Suspended Solids, Total Solids			
Metals (except Mercury)	15	80 - 120	20
Mercury	15	75 - 125	20
TKN, Phosphorus	20	80 - 120	25
TOH	20	75 - 125	25

Notes:

1. The limits above are employed for water and solid matrices.
2. % RSD is based on concentrations. % RPD is based on % Recovery.
3. The % RSD limits apply to parameters/test groups where the measured concentration is $\geq$ 5X Detection Limit. If the measured concentration is < 5X Detection Limit, the % RSD limit is 47% for all tests.
4. For MS/DMS, if the (Spike + Sample) yield concentrations <5X Detection Limit, the % RPD QC Limit = 67. The individual % R values should conform to the QC limits shown above.

QUALITY ASSURANCE DATA SHEET

DUPLICATE MATRIX SPIKE ANALYSIS
VOLATILE ORGANIC COMPOUNDS/BETX

Sample ID: SC-4

EIS Lab No: 29710

Date Analyzed: 10-17-95
EPA Method: 8021
Sample Matrix: Soil
Units: ppm (as received)

THIS QC DATA IS APPLICABLE TO THE FOLLOWING EIS LABORATORY NUMBERS:

29705 - 29711, 29776

PRECISION as Relative Percent Difference

$$RPD = \frac{(\text{Matrix Spike \%R}) - (\text{Duplicate Spike \%R})}{(\text{Matrix Spike \%R}) + (\text{Duplicate Spike \%R})} \times 200$$

ACCURACY as Matrix Spike Recovery

$$\%R = \frac{(\text{Spike + Background}) - (\text{Background})}{(\text{Spike})} \times 100$$

Parameter	Spike Level	Back-ground	Matrix Spike Amount	Matrix Spike % R	Duplicate Spike Amount	Duplicate Spike % R	RPD	QC Limits %R	QC Limits RPD
Benzene	0.83		0.79	95	0.80	96	-1.0	66 - 142	21
Chlorobenzene	0.92		0.89	97	0.89	97	0	60 - 133	21
1,1-Dichloroethene	1.00		0.85	85	0.89	89	-4.6	59 - 172	22
Toluene	0.84		0.78	93	0.79	94	-1.1	59 - 139	21
Trichloroethene	0.80		0.78	98	0.79	99	-1.0	62 - 137	24

Composite for Waste Characterization

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1450	814595	Geo Dev - City of So Bend Const

SAMPLERS: (SIGNATURE) [signature]

SEE REVERSE SIDE FOR INSTRUCTIONS

ANALYSIS OR CONTAINER TYPES: 1 - 1 qt glass unpres; 2 - 40ml vial none

EIS LAB USE ONLY

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	1	2	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
10-10-95 1259		WC-1	3	1 G	2 G		29704	I/C	
		End of Record							

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	10-10-95	1546	walk-in cooler	walk-in cooler	10-11-95	1400	Colleen Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.
1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

CHAIN OF CUSTODY RECORD

RUSH

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	8145-95	SB - Dept. Comm. + Eco. Dev.

SAMPLERS: (SIGNATURE)

SEE REVERSE SIDE FOR INSTRUCTIONS

EIS LAB USE ONLY

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES (1 pint glass 40 ml vial)	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
11-17-95 1040		WC-2	1	C		30671	C	
		END OF Record						

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	11-17-95	1103	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE # | PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.
1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

Dry Well Sediment

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	814395	City of So. Bend Com+ [illegible]

SAMPLERS: (SIGNATURE) [signature]

SEE REVERSE SIDE FOR INSTRUCTIONS

ANALYSIS OR CONTAINER TYPES: [illegible]

EIS LAB USE ONLY

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
	10-10-95 1209	DW-1	2	2 G		29705	I/C	
	10-10-95 1217	DW-2	2	2 G		29706	↓	
End of Record								

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	10-10-95	1545	Walk in Cooler	Walk in Cooler	10-11-95	1400	[signature] Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.

1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

APPENDIX B

ORIGINAL CHAIN-OF-CUSTODY RECORDS

Soil Clearance

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	814595	City of So Bend Comm Dev.

SAMPLERS: (SIGNATURE) [signature]

SEE REVERSE SIDE FOR INSTRUCTIONS

ANALYSIS OR CONTAINER TYPES: 180cc unpres; 40cc mercury(?)

DATE AND TIME OF: COMPOSITE	GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	180cc unpres	40cc	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
	10-10-95 1337	SC-1	3	1 G	2 G		29707	I/C	
	10-10-95 1344	SC-2	3	1 G	2 G		29708	↓	
	10-10-95 1352	SC-3	3	1 G	2 G		29709	↓	
	10-10-95 1400	SC-4	3	1 G	2 G		29710	↓	
	10-10-95 1407	SC-5	3	1 G	2 G		29711	↓	
		End of Record							

EIS LAB USE ONLY

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	1542	10-10-95	Walk-in Cooler	Walk-in Cooler	10-11-95	1400	Allen Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.
1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

Background

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	814595	City of So Bend Dev. Comm

SAMPLERS: (SIGNATURE)

SEE REVERSE SIDE FOR INSTRUCTIONS

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES: TOC-Waters	REMARKS
	10-10-95 1436	BG-1	1	1 G	
	10-10-95 1443	BG-2	1	1 G	
	10-10-95 1450	BG-3	1	1 G	
	10-10-95 1455	BG-4	1	1 G	
		End of Record			

EIS LAB USE ONLY

EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
29712	I/C	
29713	↓	
29714		
29715		

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	10-10-95	1544	Walk in Cooler
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Walk in Cooler	10-11-95	1400	Colleen Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE # | PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.
1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	814595	City of So Bend Com+ Eco Dev.

SAMPLERS: (SIGNATURE) [signature]

SEE REVERSE SIDE FOR INSTRUCTIONS

ANALYSIS OR CONTAINER TYPES: 40cc vial w/ HCl; 120cc HNO3

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	40cc vial w/ HCl	120cc HNO3									REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
	1625 10-9-95	Trip Blank	3	G	G										29716	I/C	

EIS LAB USE ONLY

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	10/9/95	1630	[signature]	[signature]	10-10-95	1546	Walk in Cooler
Walk in Cooler	10-11-95	1400	Colleen Wright				

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC. 1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

INSTRUCTIONS

1. Along the slanted lines, write in the Container/Preservative from the list of allowable entries given below. For each sample, under each container type, indicate number of bottles. Total bottles per sample are entered in No. of Containers column.

2. Container sizes and preservative amounts are shown in the bottle displays in the prep room. Substitutions may be allowable - check with the lab.

3. Containers/Preservatives for various tests are shown below. Following descriptions are used as required: (FS) = French Square; (LM) = Large Mouth; (A) = Amber. If a sample is split between grab and composite bottles, you can indicate this as G or C in the slanted lines describing the container.

Container/Preservative-Water	Tests Which Can Be Performed From This Container
40 cc vial, HCl	VOC, TPH, BETX
40 cc vial, HCl, Ascorbic Acid	Trihalomethanes where THM at site is required.
Unpres, Plastic	Acidity, Alkalinity, BOD, Chloride, Fluoride, Hardness, Ortho Phosphorus, Silica, Solids (all kinds), Sp Cond, Sulfate, Surfactants, NITRATE FROM CHLORINATED WATER SOURCES ONLY, Nitrite, Cr^{+6}, pH
HNO_3, Plastic	Metals
H_2SO_4, Glass (FS)	Oil & Grease
H_2SO_4, Plastic	Ammonia, COD, Nitrate + Nitrite, Nitrate (non-Chlorinated Water), Total Phosphorus, TKN
H_2SO_4, Glass	TOH, TOC
H_2SO_4, Glass (A)	Phenol
NaOH, Plastic	Cyanide
NaOH+Zn, Plastic	Sulfide
Glass (A)*	SVOC
Glass (A)*	Pesticides/PCB
Glass (A)*	Herbicides

* Preservatives differ for drinking water and other waters. See bottle displays in prep room.

Type of Container - Soil	
40 cc vials	VOC, TPH and BETX
Unpres, Glass (LM)	All types of tests

4. Individual tests to be performed are to be specified on the EIS Laboratory Analysis Request Form. If a test is requested, and no information is shown above, check with the Laboratory.

APPENDIX C

FIELD DATA

Sheet 1 of 1

Project No. 8145-95

SAMPLE LOG

Client: South Bend - Department of Community & Economic Development Site Location 814/818 S. Lafayette - South Bend, IN Date 10-10-95

Equipment Used Hand auger, scoopula, dredge No. of Samples Collected 12 Container Size variable

Sample No.	Sample Location (See site sketch and Field Notes, Attached)	Time	Depth (Feet)	Type of Material	EIS Lab No.	Analysis Requested
DW-1	Drywell #1 ≈ 17' North and 13' East of Southeast corner of building.	1209	≈7'	Gravel, Sand, Mud, Organic Matter, etc	29705	VOC
DW-2	Drywell #2 ≈ 3' South and 19' East of Southeast corner of building.	1217	≈5'		29706	VOC
WC-1	Composite from 5 grabs (5 subsamples) located within the stain/residue areas.*	1259	—	Paint residue/stained soil, etc.	29704	TCLP and other Waste Char. Parameters.
SC-1	Soil Clearance #1 ≈2.5' North and 2.5' East of SC-2 in Area #1	137	≈1.0-1.5	Sandy Dark Brown Top-Soil with Trace Gravel	29707	VOC, Metals
SC-2	Soil Clearance #2 ≈11' North of DW-1 in Area #1	144	≈1.5-2.0	" "	29708	" "
SC-3	Soil Clearance #3 ≈2.5' North and 3.5' West of SC-2 in Area #1	152	≈1.0-1.5	" "	29709	" "
SC-4	Soil Clearance #4 ≈8.5' South and 1.5' West of DW-1 in Area #2	200	≈0.75-1.25	" "	29710	" "
SC-5	Soil Clearance #5 ≈2.5' West and 1.5' North of SC-4 in Area #2	207	≈0.75-1.25	" "	29711	" "
BG-1	Background #1 ≈10' South and 1' West of Southeast Blue fence corner.	236	" "	" "	29712	Metals
BG-2	Background #2 ≈6.5' South and 2' West of Southeast Blue fence corner.	243	" "	" "	29713	" "
BG-3	Background #3 ≈3' South and 3' West of Southeast Blue fence corner	250	" "	" "	29714	" "
BG-4	Background #4 ≈4.5' South and 1' West of Southeast Blue fence corner.	255	" "	" "	29715	" "

END OF RECORD

Comment: Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to each sample collection. * The 5 subsamples for composite sample WC-1 were collected directly above the clearance sample locations SC-1,2,3,4&5. See attached Field Notes and Site Sketch for more details.

Collectors Name David Jeffers

Sheet 1 Of 1

Project No. 8145-95

SOIL SAMPLE LOG

Client: South Bend Dept. of Comm. + Eco. Devel. Site Location 814/818 S. Lafayette - South Bend, IN Date 11-16-95

Equipment Used Hand Auger - Scoopula, glass pickle Jar. No. of Samples Collected 1 Container Size ≈ 300cc glass

Sample No.	Sample Location (see site map)	Time	Ft Depth	Type of Material	EIS Lab No.	Analysis Requested
*' WC-2	Composite sample, from 5 grab sample located within the stained areas.	10:40	(less than 0.75 to 1.0 foot)	Stained soil/residue and debri.	30671	PCB
		END	OF	RECORD		

Comment: -Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to sampling.

*' The 5 subsample From composite sample WC-2 were collected directly next to the (Oct. 10. 1995) clearance sample locations WC-1 and WC-1 ✓

Collectors Name David Jeffers

→ SC-1,2,3,4,+5. See Field Notes and Site Sketch for detail. Sample WC-2 is a resampling of WC-1 lab # 29704 to

EIS ENVIRONMENTAL ENGINEERS, INC.

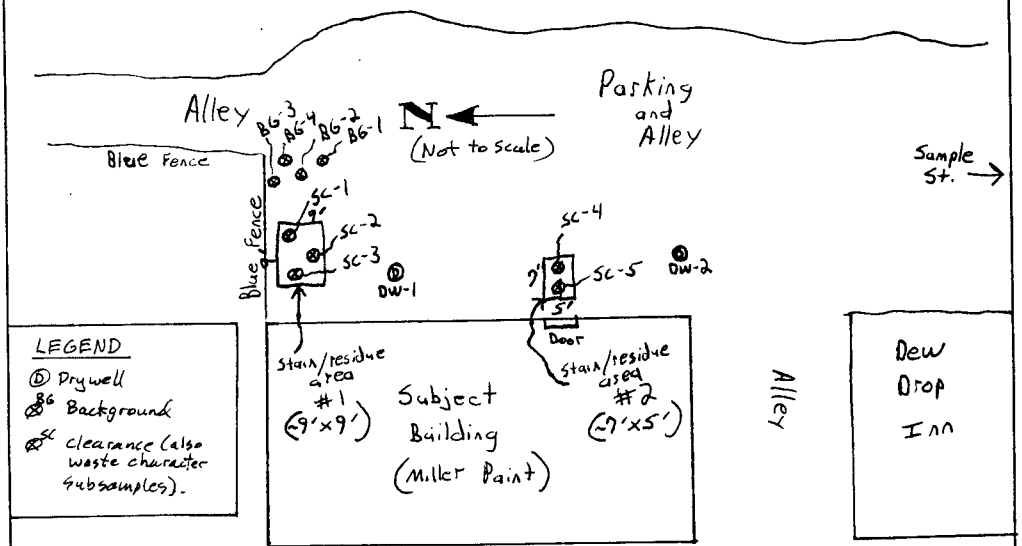
SHEET 1 OF 1
PROJECT SB - Dept. Comm. + Econ. Develop.
PROJECT NO. 8145-95 DATE 10-10-95
PREPARED BY DJ SCALE Not to Scale

Field Notes:

* Sample WC-1 (Waste Characterization) was collected from (five subsamples collected from) stained/residue locations (SC-1,2,3,4,5). 1/2 liter directly above the soil clearance locations of each grab sample was composited to make up sample WC-1.

* Background samples (BG-1,2,3,4) were collected in an area that best typified the ~~SC~~ soil clearance sample soils and was likely not effected by the stain/residue areas. Refusal was met at 1.1/4' ~~down~~ during each background sample; therefore, each BG sample was collected from a depth of 0.25'-1.25'.

* Site Sketch: Showing General Sampling Locations for Drywell samples, Waste Characterization Samples, Clearance Samples and Background Samples. See Soil Sample Log for more detailed sample location data for 10-10-95 samples.



(814/818 S. Lafayette, South Bend, Indiana)

Lafayette Blvd.

APPENDIX D

INDIANA DEPARTMENTOF ENVIRONMENTAL MANAGEMENT (IDEM) SPECIAL WASTE CERTIFICATION APPLICATION

Special Waste Certification Application

Cashier, Room N1324
Indiana Department of Environmental Management
100 N. Senate Avenue
P.O. Box 7060
Indianapolis, Indiana 46206-7060
Telephone: 317/232-3111

For Office Use Only
Reviewer _____
Application No. _____

1. Generator Fee

Generator Fee: $250.00 per application PAID BY: 12860 (Check # or Money Order #)

2. Generator Information

Generator Facility Location	Generator Mailing Address
Name Dept. of Community and Economic Development City of South Bend	Name ←
Address 814/818 S. Lafayette Blvd.	Address 1200 County-City Building
South Bend (City) IN (State) 46601 (Zip)	South Bend (City) IN (State) 46601 (Zip)
County St. Joseph	County St. Joseph
Technical Contact and Telephone # John Stark 219-235-9371	Technical Contact and Telephone # ←

EPA Identification Number:

3. Contractor Information

Applicant (if other than generator)	Proposed Disposal Site
Name EIS Environmental Engineers	Name Prairie View Opp No 71-7
Address 1701 N. Ironwood Dr.	Address P.O. Box 128
	15505 Shively Rd.
South Bend (City) IN (State) 46635 (Zip)	Wyatt (City) IN (State) 46595 (Zip)
J.C. Spoeder, C.P.G. or Wanda Baxter-Potter, P.E. (219)277-5715	
Technical Contact and Telephone # ☒ Check box if you want a copy of certification.	Technical Contact and Telephone # Kelly Smith 219-546-4475

4. Regulatory Issues

Are any of the following occurring at your facility: (please check)

CERCLIS Clean-up ☐ Hazardous/Solid Waste Enforcement ☐ Corrective Action ☐

Air/Water Issues ☐ No Issues ☒ Other _____

List below in section 5 the waste stream for which certification is being requested under this application. If a number of similar waste streams are being combined for certification purposes (see instructions), list all the waste streams included within this combination. Separate applications must be submitted for each waste stream or each combination of waste streams requiring certification.

5. Waste(s) Information

Waste(s) Name(s)	Previous Certification No. (if applicable)
1.) Contaminated Soil	—
2.)	
3.)	
4.)	
5.)	
6.)	
7.)	
8.)	
9.)	
10.)	

Anticipated annual disposal quantity: Approx. 5 cubic yards

Check box if this is a one-time only disposal ☒

Type of disposal container(s) to be used: bulk solid

6. Sampling and Laboratory Information

Laboratory	Sample Collector
Name EIS Environmental Engineers	Name David D. Jeffers (EIS)
Address 1701 N. Ironwood Dr.	Address 1701 N. Ironwood Dr.
South Bend (City) IN (State) 46635 (Zip)	South Bend (City) IN (State) 46635 (Zip)
Technical Contact and Telephone# Andris Rozite 219-277-5715	Telephone # 219-277-5715

Special Waste Certification Application (page 3 of 3)

If certification is being requested for a combination of similar waste streams under this application, complete this page for each waste stream included in that combination.

7. Waste Characterization

Is the waste a listed hazardous waste as defined in 329 IAC 3.1? Yes___ No X

Does this waste contain PCB's or PCB items as defined in 329 IAC 4? Yes___ No X

Physical Characteristics: (attach MSD Sheets if Available)

Physical state: Solid

Percent solids 100 %

Fire, explosion, or spontaneous ignition hazard? Yes___ No X

Does this waste contain: Free liquids? No Asbestos? No Solvents? No

Odor? None X to Mild X Strong___ Describe:

Analytical Information

Sampling: Date sample was collected: 11/17/95 and 10/10/95 Sample type: grab___ composite X

Was a sampling plan used? Yes___ No X If so, provide a copy if requested (see instructions).

Is the sample representative of the waste? Yes. See Attachment

Results: attach original laboratory documentation i.e. TCLP (metal, pesticide, organics), corrosivity, ignitability, reactivity, or other. (Provide QA/QC upon request)

8. Process Description (attach additional pages if necessary)

During an Environmental Investigation of a former paint sales and services facility, stained and/or residue soil was found at the rear of the property. It was determined that the stained soil / residue should be removed immediately and disposed of at a sanitary landfill.

9. Generator Signature *

I hereby certify that the information in this application is true and accurate to the best of my knowledge, and that this waste is not a hazardous waste as defined in 329 IAC 3.1.

David D. Jeffers * / David D. Jeffers / 11-28-95

Signature (type or print name) Date

Title Project Geologist – EIS Environmental Engineers

* See permission to sign letter from generator dated Nov. 17, 1995 (enclosed).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SPECIAL WASTE FEE TRANSMITTAL

INSTRUCTIONS:

This form shall be used to transmit fees for all solid waste management special waste certification applications pursuant to 329 IAC 2-21-1 and is to accompany all payments. Make check or money order payable to the INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT. Upon completion, return this form, the appropriate fees, and the certification application to the following address:

CASHIER, Room N1324
Indiana Department of Environmental Management
100 N. Senate Avenue
P. O. Box 7060
Indianapolis, IN 46206-7060

SECTION A. APPLICANT(S) INFORMATION

Responsible Party: City of South Bend Department of Community and Economic Development

Mailing Address: (Street) 1200 County-City Building (City) South Bend

State: Indiana | Zip Code: 46601 | AC-Telephone Number: 219 - 235 - 9371

Generating Facility Name and County: City of South Bend Dept. of Community and Economic Development / St. Joseph

SECTION B. SPECIAL WASTE CERTIFICATION FEE SCHEDULE

SPECIAL WASTE CERTIFICATIONS (GENERATOR FEE). $250.00/Application

Application(s): (Please list all Special Waste Certification Applications being submitted with the corresponding waste streams to be certified under each. Please name the waste streams exactly as they are named on the application.)

1. Contaminated Soil.
2. _____
3. _____
4. _____
5. _____
6. _____

(Attach additional sheet if necessary)

TOTAL AMOUNT SUBMITTED: 12860 (Check # or Money Order #)

1 (No. of Applications) X $250 = TOTAL $ 250.00

Account #2830-412600-100700

7/95

City of South Bend
Joseph E. Kernan, Mayor

Community & Economic Development

Jon R. Hunt
Executive Director

Ann E. Kolata
Deputy Executive Director

November 17, 1995

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

EIS Environmental Engineers, Inc.
1701 North Ironwood Drive
South Bend, Indiana 46635

To Whom It May Concern:

This letter hereby authorizes **EIS Environmental Engineers, Inc.**, on our behalf to complete, sign, and/or provide information for any Special Waste Applications, Special Waste Permits, Special Waste Agreements, Special Waste Disposal Notifications, Special Waste Letters, and/or any forms related to the excavation, sampling, transport, characterization, and/or disposal of Special Waste atthe property located at 814/818 South Lafayette Blvd., South Bend, Indiana.

Sincerely,

Community & Economic Development
City of South Bend

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29704
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-1
812/818 South Lafayette / Composite
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Ash	percent	92.6		10-17-95	Povlock,P					
Corrosivity (pH)	SU	6.8		10-30-95	Wright,C					
Cyanide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Flash Point (Open Cup)	fahrenheit	>201		10-31-95	Wright,C					
Paint Filter Liquids	liquid	NONE		10-12-95	Wright,C					
Solids, Total	percent	95.4	1	10-16-95	Povlock,P					
Sulfide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Arsenic,TCLP	mg/l	<0.1	0.1	10-24-95	Clear,N					
Barium,TCLP	mg/l	0.96	0.01	10-24-95	Clear,N					
Cadmium,TCLP	mg/l	0.01	0.01	10-24-95	Clear,N					
Chromium,TCLP	mg/l	0.21	0.01	10-24-95	Clear,N					
Lead,TCLP	mg/l	0.30	0.05	10-24-95	Clear,N		0.40	90	90	0
Mercury,TCLP	mg/l	<0.002	0.002	10-25-95	Shane,D					
Selenium,TCLP	mg/l	<0.05	0.05	10-24-95	Clear,N					
Silver,TCLP	mg/l	<0.01	0.01	10-24-95	Clear,N					
Herbicides,TCLP		*		10-30-95	Clear,B					
Pesticides,TCLP		*		10-26-95	Clear,B					
SVOC,TCLP		*		10-27-95	Geels,S					
VOC,TCLP		*		10-27-95	Myers,N					

* See Attached TCLP ORGANICS REPORT

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS ENVIRONMENTAL ENGINEERS, INC. • 1701 North Ironwood Drive • South Bend, Indiana 46635 • 219/277-5715

TCLP ORGANICS REPORT

SAMPLE ID: MC-1
812/818 South Lafayette / Composite

REPORT DATE: 11/13/95
EIS LAB NO: 29704

	- - mg/l - -	
VOLATILE ORGANICS	RESULT	EQL
Benzene	ND	0.02
Carbon Tetrachloride	ND	0.02
Chlorobenzene	ND	0.02
Chloroform	ND	0.02
1,4-Dichlorobenzene	ND	0.02
1,2-Dichloroethane	ND	0.02
1,1-Dichloroethylene	ND	0.02
Methyl Ethyl Ketone	ND	0.2
Tetrachloroethylene	ND	0.02
Trichloroethylene	ND	0.02
Vinyl Chloride	ND	0.1
SEMI-VOLATILE ORGANICS		
o-Cresol	ND	0.1
m-Cresol	ND	0.1
p-Cresol	ND	0.1
Total Cresols	ND	0.3
2,4-Dinitrotoluene	ND	0.1
Hexachlorobenzene	ND	0.1
Hexachloro-1,3-butadiene	ND	0.1
Hexachloroethane	ND	0.1
Nitrobenzene	ND	0.1
Pentachlorophenol	ND	1.0
Pyridine	ND	0.1
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	0.1

NOTES
1. ND = Not Detected at the EQL shown
2. EQL = Estimated Quantitation Limit = Detection Limit

EIS Lab No: 29704(continued)

PARAMETER	UNITS	RESULT	TEST DATE	ANALYST
Herbicide Extraction,TCLP			10-19-95	Thompson,G
Mercury Digestion,TCLP			10-24-95	Shane,D
Metals Digestion ICP,TCLP			10-13-95	Shane,D
Pesticide Extraction,TCLP			10-19-95	Thompson,G
SVOC Extraction,TCLP			10-19-95	Thompson,G
TCLP Extract Formation				
Extraction Started			10-12-95	Wright,C
Extraction Completed			10-13-95	Wright,C
Solids Content	percent	100		
Sample Weight Extracted	grams	150.0		
Filter Used (Whatman)	type	GF/F		
Initial pH	SU	6.9		
pH After Acid Addition	SU	1.7		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	3,000		
Extraction Fluid pH	SU	4.89		
Final Extract pH (18hrs)	SU	5.3		
TCLP Extract Formation (ZHE)				
Extraction Started			10-24-95	Nye,D
Extraction Completed			10-25-95	Nye,D
Solids Content	percent	100		
Sample Weight Extracted	grams	10.0		
Filter Used (Whatman)	type	GF/F		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	200		
Extraction Fluid pH	SU	4.90		

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.

CONCLUSION

This sample is satisfactory with respect to the analysis performed.

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-27-95
EIS Lab No: 30671
EIS Project No: 1456-8145-95
EIS Priority: 1
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-2
Composite Sample Of Stained Soil
Date Sampled: 11-17-95
Date Received: 11-17-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
PCB	mg/kg(wet)	<0.9	0.9	11-22-95	Clear,B
Extract PCB				11-20-95	Thompson,G

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Sample was iced upon receipt.
3. < = Not Detected at the Detection Limit (DL) shown.
4. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

Composite for Whyte [illegible]

CHAIN OF CUSTODY RECORD

SEE REVERSE SIDE FOR INSTRUCTIONS

CLIENT NO.	PROJECT NO.	PROJECT NAME
1430	814595	[illegible handwriting]

SAMPLERS: (SIGNATURE) [signature]

DATE AND TIME OF: COMPOSITE	GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES: [illegible]	[illegible]								REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
10-10-95 1259		WC-1	3	G	G									29704	I/C	
		End of Record														

EIS LAB USE ONLY

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	10-10-95	1546	walk-in cooler	walk-in cooler	10-11-95	1400	Colleen Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC.

1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	8145-95	SB - Dept. Comm + Eco. Dev.

SAMPLERS: (SIGNATURE)

SEE REVERSE SIDE FOR INSTRUCTIONS

EIS LAB USE ONLY

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES (1 pint glass vials)	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
11-17-95 1040		WC-2	1	C		0671	C	
		END OF Record						

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	11-17-95	1103					
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE # | PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC. 1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

Sheet 1 of 1

Project No. 8145-95

SAMPLE LOG

Client: South Bend-Department of Community & Economic Development Site Location 814/818 S. Lafayette - Southbend, IN Date 10-10-95

Equipment Used Hand auger, scoopula, dredge No. of Samples Collected 12 Container Size variable

Sample No.	Sample Location (See Site Sketch and Field Notes, Attached)	Time	Depth (Feet)	Type of Material	EIS Lab No.	Analysis Requested
DW-1	Drywell #1 ≈17' North and 13' East of southeast corner of building.	1209	≈7'	Gravel, Sand, Mud, Organic Matter, etc	29705	VOC
DW-2	Drywell #2 ≈2' South and 19' East of Southeast corner of building.	1217	≈5'		29706	VOC
WC-1	Composite from 5 grabs Samples located within the Stain/residue areas.*	1259	—	Paint residue/stained soil, etc.	29704	TCLP and other Waste Char. Parameters.
SC-1	Soil Clearance #1 ≈2.5' North and 2.5' East of SC-2 in Area #1	137	≈1.0-1.5	Sandy Dark Brown Top-Soil with Trace Gravel	29707	VOC, Metals
SC-2	Soil Clearance #2 ≈11' North of DW-1 in Area #1	144	≈1.5-2.0	" "	29708	" "
SC-3	Soil Clearance #3 ≈2.5' North and 3.5' West of SC-2 in Area #1	152	≈1.0-1.5	" "	29709	" "
SC-4	Soil Clearance #4 ≈8.5' South and 1.5' West of DW-1 in Area #2	200	≈0.75-1.25	" "	29710	" "
SC-5	Soil Clearance #5 ≈2.5' West and 1.5' North of SC-4 in Area #2	207	≈0.75-1.25	" "	29711	" "
BG-1	Background #1 ≈10' South and 1' West of Southeast Blue Fence Corner.	236	" "	" "	29712	Metals
BG-2	Background #2 ≈6.5' South and 1' West of Southeast Blue fence Corner.	243	" "	" "	29713	" "
BG-3	Background #3 ≈2' South and 2' West of Southeast Blue Fence Corner	250	" "	" "	29714	" "
BG-4	Background #4 ≈4.5' South and 1' West of Southeast Blue Fence Corner.	255	" "	" "	29715	" "

END OF RECORD

Comment: Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to each sample collection. * The 5 subsamples for composite sample WC-1 were collected directly above the clearance sample locations SC-1,2,3,4&5. See attached Field Notes and Site Sketch for more details.

Collectors Name David Jeffers

Sheet 1 Of 1

Project No. 8145-95

SOIL SAMPLE LOG

Client: South Bend Dept. of Comm. + Eco. Devel. Site Location 814/818 S. Lafayette - South Bend, IN Date 11-16-95

Equipment Used Hand Auger - Scoopula, glass pickle Jar. No. of Samples Collected 1 Container Size ≈ 300cc glass

Sample No.	Sample Location (see site map)	Time	Depth (less than 0.75' to 1.0 foot)	Type of Material	EIS Lab No.	Analysis Requested
*' WC-2	composite sample from 5 grab sample located within the stained areas.	10:40	Ft	stained soil/residue and debri.	30671	PCB
		END	OF	RECORD		

Comment: -Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to sampling.

*' The' 5 subsample From composite sample WC-2 were collected directly next to the (Oct. 19. 1995) and via reference sample locations

Collectors Name David Jeffers

↳ SC-1,2,3,4,5: See Field Notes and Site Sketch for detail

Sample WC-2 is a resampling of WC-1 lab # 29704 to obtain PCB results that were not obtained previously

EIS ENVIRONMENTAL ENGINEERS, INC.

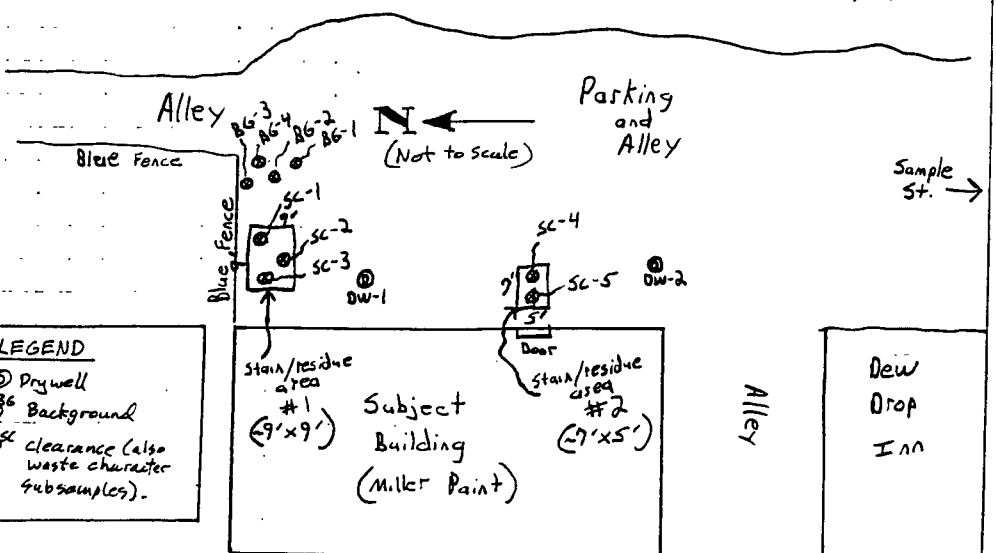
SHEET 1 OF 1
PROJECT SB - Dept. Comm. + Econ. Develop
PROJECT No. 8145-95 DATE 10-10-95
PREPARED BY DJ SCALE Not to Scale

Field Notes: (Waste Characterization) (Five subsamples collected from)

* Sample WC-1 was collected from stained/residue locations directly above the soil clearance locations (SC-1,2,3,4,5). 1/2 liter of each grab sample was composited to make up sample WC-1.

* Background samples (BG-1,2,3,4) were collected in an area that best typified the ~~SC~~ soil clearance sample soils and was likely not effected by the stain/residue areas. Refusal was met at 1,1/4' ~~down~~ during each background sample; therefore, each BG sample was collected from a depth of 0.25'-1.25'.

* Site Sketch: Showing General Sampling locations for Drywell samples, Waste Characterization Samples, Clearance Samples and Background Samples. See Soil Sample Log for more detailed sample location data for 10-10-95 samples.



APPENDIX E

IDEM SPECIAL WASTE DISPOSAL CERTIFICATION

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

Office of Solid and Hazardous Waste Management
Special Waste Certification No. 51083

Pursuant to 329 IAC 2-21-11, the following generator:

City of South Bend
Dept. of Community and Economic Development
814/818 South Lafayette Blvd.
South Bend, IN 46601

has received certification from the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, for the following waste stream(s):

Soil Contaminated with Paint Residue

These wastes may be disposed at any sanitary landfill specified under 329 IAC 2-21-3 as an acceptable site for the disposal of waste which is certified as a special waste. A list of acceptable disposal sites is available from the Solid Waste Permit Section at the above address or by calling 317/232-3111. General and Special Conditions that apply to this certification are indicated on the reverse side.

This certification shall expire exactly 5 years from the effective signature date below.

Gregory C. Lorenz, Chief
Special Waste Permit Section
Solid Waste Facilities Branch
Solid and Hazardous Waste Management

12/14/95
Date

General Conditions That Apply to All Special Waste Certifications:

1. The generator and/or the hauler shall provide the landfill with a copy of this certification along with advanced notification of intended disposal and provide a disposal notification form with each load disposed.
2. If nuisance or pollution conditions are created, immediate corrective action shall be taken.
3. Waste material(s) accepted under this certification shall be included on the Special Waste Monthly Report submitted to this Office by the landfill.
4. Special Waste(s) may not be disposed at any landfill subject to corrective action under 329 IAC 2-16-9 or at any landfill which fails to maintain compliance with 329 IAC 2.
5. It is the generator's responsibility to properly dispose of all wastes at acceptable sites. It is also the responsibility of the disposal site to notify the generators if the site's disposal status changes.
6. Any changes in the raw materials, the process(es) generating the waste, or the characteristics of the waste stream(s) shall be reported in writing to the IDEM and the disposal site prior to further disposal. If it is determined that the change is substantial, this certification shall be voided by written notification from IDEM.
7. The waste(s) shall not contain free liquids.
8. The waste(s) shall not present a fire or explosion hazard.

Special Conditions That Are Required For Disposal of the Waste(s) Will Be Indicated By The Reviewer's Initials:

_____ 1. A new TCLP shall be provided to the IDEM at the time of renewal of this certification. Each waste stream shall be analyzed separately.

(KW) 2. This is an intended one time only disposal. If the disposal quantity sustantially exceeds the amount anticipated, this Office shall be notified in accordance with General Condition Number 6.

Anticipated Disposal Quantity: 5 cubic yards

Reviewer/Date 12-12-95

cc: John Stark: City of South Bend Dept. of Comm. and Econ. Dev., 1200 County-City Bldg., South Bend, IN 46601
Wanda Baxter-Potter: EIS Environmental Engineers, 1701 N. Ironwood Dr., South Bend, IN 46635

APPENDIX F

DISPOSAL APPLICATION
PRAIRIE VIEW LANDFILL

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code

WMNA 194556

This form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only)

Decision Expiration Date: / /

Contractor Sales Rep#: ____

Service Agr. Renewal Date: / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: City of South Bend - Dept. of Community and Economic Development 2. SIC Code: —
3. Facility Address (site of waste generation): 814/818 S. Lafayette Blvd.
4. Generator City, State/Province: South Bend, Indiana 5. Zip/Postal Code: 46601
6. Generator USEPA/Federal ID #: NA 7. State/Province ID #: ____
8. Technical Contact: John Stark 9. Phone: (219) 235 - 9321

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: Contaminated Soil
2. Process Generating Waste: Spill Clean Up
3. Annual Amount/Units: one time Approx. 5 cubic yards 4. Type A ☒ Type B ☐
5. Special Handling Instructions/Supplemental Information: NONE
6. Incidental Waste Types and Amounts: NONE

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other ____
2. Supplemental Shipping Information: Tarped Dump Truck or Semi
3. Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6) 4. Hazard Class/ID #: —
5. Reportable Quantity/Units (lb/kg): — 6. Shipping Name: —

D. TECHNICAL MANAGER DECISION (Check One) ☐ **APPROVED** ☐ **DISAPPROVED** ☐ Check if additional information is attached

If Disapproved, Explain: ____

If Approved, Continue.

1. Management Method(s) ____
2. Precautions, Conditions, or Limitations on Approval: ____
3. For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☐ Attached
   If waived, explain why: ____
4. List Non-WMI Facility that is Approved to Manage this Waste: ____ Date: ____
   Tech. Mgr. Signature: ____ Name (Print): ____ Date: ____

E. MANAGEMENT FACILITY INFORMATION / DECISION

1. Proposed Management Facility: ____
2. Proposed Intermediate Transfer Facility: ____ 3. Transporter: ____
4. **Management Facility Gen. Mgr. Decision (Check One)** ☐ **APPROVED** ☐ **DISAPPROVED**
   If Disapproved, Explain: ____
   If Approved, List Precautions, Conditions, or Limitations on Approval: ____
   General Mgr Signature: ____ Name (Print): ____ Date: ____

Turn Page and Complete Side 2 (If Type B Special Waste only complete Part J of Side 2)

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

F. PHYSICAL CHARACTERISTICS OF WASTE (See Instructions)

1. Color	2. Does the waste have a strong incidental odor?	3. Physical State @ 70 F/21°C:	4. Layers	5. Specific Gravity	6. Free Liquids:
Brown - Black	☒ No ☐ Yes; if so, describe:	☒ Solid ☐ Semi-Solid ☐ Liquid ☐ Powder ☐ Other:	☐ Multi-layered ☐ Bi-layered ☒ Single Phased	≈ 2.65 Range	☐ Yes ☒ No Volume:

7. pH: ☐ ≤2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10- <12.5 ☐ ≥12.5 ☐ Range ☐ NA

8. Flash Point: ☐ None ☐ <140°F/60°C ☐ 140 - 199°F/60 - 93°C ☐ ≥200°F/93°C ☐ Closed Cup ☐ Open Cup

G. CHEMICAL COMPOSITION

	RANGE (MIN-MAX)
1. Analytical Report is Attached	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
Total:	%

2. Does the waste contain any of the following? (provide concentration if known):

	NO	or	LESS THAN	or	ACTUAL
PCBs	☒		☐ < 50 ppm		ppm
Cyanides	☒		☐ < 30 ppm		ppm
Sulfides	☒		☐ < 500 ppm		ppm

Please note: Unless analytical results are attached, the chemical composition identification should include, at a minimum, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Pesticides, Herbicides, and any other TCLP constituents that may be present in the waste. The total composition must be greater than or equal to 100%. (.0001% = 1 ppm or 1 mg/l)

3. Indicate method used to determine composition (if provided): ☒ TCLP and ☒ Total ☐ Other:

H. SAMPLING SOURCE (e.g., Drum, Lagoon, Pit, Pond, Tank, Vat) Various Random locations in contaminated are

I. REPRESENTATIVE SAMPLE CERTIFICATION

1. Print Sampler's Name: David D. Jeffers
2. Sample Date: 10/10/95 and 11/17/95
3. Sampler's Title: Project Geologist
4. Sampler's Employer (if other than Generator): EIS Environmental Engineers, Inc.

The sampler's signature certifies that any sample submitted is representative of the waste described above pursuant to 40 CFR 261 20(c) or equivalent rules.

5. Sampler's Signature

J. GENERATOR CERTIFICATION

By signing this profile sheet, the Generator certifies:

1. This waste is not a "Hazardous Waste" as defined by USEPA or Canadian Federal regulation and/or the state/province
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCB's (Polychlorinated Biphenyls)
3. The unshaded portions of this sheet and the attachments contain true and accurate descriptions of the waste material All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
4. The Generator has read and understands the Contractor's Definition of Special Waste included in Part B.5. of the attached instructions form All types and amounts of special wastes provided in incidental amounts have been identified in section B.6. of this form.
5. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20(c) or equivalent rules.
6. If any changes occur in the character of the waste, the Generator shall notify the Contractor prior to providing the waste to the Contractor

7. Signature
8. Title Project Geologist - EIS
9. Name (Type or Print) David D. Jeffers
10. Date 11-28-95

Prairie View Landfill
15505 Shively Road
P.O. Box 128
Wyatt, Indiana 46595
219/546-4475

SERVICE AGREEMENT
NON-HAZARDOUS WASTE DISPOSAL

The above-named disposal facility and corporation are referred to herein as "Facility" and "Contractor," respectively

CUSTOMER'S BILLING NAME
EIS Environmental Engineers, Inc.

CUSTOMER'S BILLING ADDRESS
1701 N. Ironwood Drive

CITY, STATE/PROVINCE, ZIP/POSTAL CODE
South Bend, Indiana 46635

CUSTOMER CONTACT
David Jeffers or J.C. Sparleder

PHONE NUMBER
(219) 277-5715

BANK REFERENCE
DUN & BRADSTREET

BANK CONTACT NA **PHONE NUMBER** ( )

Credit may be extended to Customer after appropriate credit information, in a form acceptable to Contractor, has been presented to and reviewed by Contractor. Contractor may, in its sole discretion, require a collateral deposit (in the form of cash, letter of credit or surety bond) acceptable to Contractor. It is the responsibility of the Customer to keep said collateral deposit current. Collateral deposits, where utilized, may be adjusted when there is an increase in disposal tonnage and/or rates. Collateral deficiencies must be corrected within 30 days of notice of required adjustment.

This is a legally binding contract, and Contractor agrees to provide and Customer agrees to accept the waste disposal services subject to the terms and conditions specified in this contract.

ESTIMATED ~~ANNUAL~~ AMOUNT OF WASTE FOR DISPOSAL:

(Include units e.g., cubic yards, pounds, kilograms)

SPECIAL INSTRUCTIONS:
* NO FREE LIQUIDS OR DRUMS ALLOWABLE. ALL LOADS MUST BE ACCOMPANIED BY A DISPOSAL NOTIFICATION WITH ORIGINAL SIGNATURES. ALL LOADS MUST BE TARPED.
* DRUMS ARE ACCEPTED ON A CASE BY CASE BASIS.

19.00 per yard
2.60 State & County fees

INCIDENTAL SPECIAL WASTE TYPES AND AMOUNTS:
Not 30

THE TERMS AND CONDITIONS ON REVERSE SIDE AND THE ATTACHED CONTRACTOR'S DEFINITION OF SPECIAL WASTE ARE PART OF THIS AGREEMENT

CUSTOMER
Authorized Signature
Title

CONTRACTOR
Representative
Title

TERMS AND CONDITIONS OF DISPOSAL SERVICE AGREEMENT

The Agreement. The entire agreement of the parties for the disposal of waste (the "Agreement") shall consist of this Service Agreement and any applicable Generator's Waste Profile Sheet(s).

Wastes Accepted at Facility. Customer warrants that the waste delivered to Contractor hereunder will not contain a regulated quantity of any hazardous, radioactive, or toxic waste or substance as defined by applicable Federal, state, local or provincial laws or regulations.

Special Waste. Customer acknowledges reading the attached Contractor's Definition of Special Waste (dated 02/92), and warrants that the waste delivered to Contractor hereunder will not contain any Special Waste unless and except: (1) as specifically described on Generator's Waste Profile Sheet(s) attached hereto or which Contractor later agrees to accept in writing; or (2) incidental amounts of Special Waste, as listed by Customer in the "Incidental Special Waste Types and Amounts", section of this form. The parties may incorporate additional Special Waste as part of this Agreement if prior to delivery of such waste to Contractor, Customer has provided a Generator's Waste Profile Sheet for such waste and Contractor has approved disposal of such waste in writing. Customer agrees to comply with precautions, limitations, and conditions contained in Contractor's written notice of approval of Special Waste.

Rights of Refusal/Rejection. Contractor has the right to refuse or reject after acceptance any load of wastes delivered to the Facility if the Contractor believes the Customer has breached (or is breaching) its warranties or agreements hereunder. If Customer delivers wastes in breach of any warranty or agreements herein, Contractor may in its sole discretion either remove and dispose of that waste and charge Customer for the costs or require Customer to promptly remo[illegible] waste.

Limited License to Enter. During the term of this Agreement, Customer shall have a license to enter the Facility for the limited purpose of, and only to the extent necessary for, off-loading waste at the location and in the manner directed by Contractor. Except in an emergency, or at the express direction of Contractor, Customer's personnel shall not leave the immediate vicinity of their vehicle. After off-loading the waste, Customer's personnel shall promptly leave the Facility. Under no circumstances shall Customer or its personnel engage in any scavenging of waste at the Facility. Contractor may refuse to accept waste from, and shall deny an entrance license to, any of Customer's personnel whom Contractor believes is under the influence of alcohol or other chemical substances.

Charges and Payment. Unless otherwise agreed in writing by the parties hereto, Customer agrees to pay Contractor's posted disposal rates which may change from time to time. Customer shall be liable for all taxes, fees, or other charges imposed upon the disposal of Customer's waste by Federal, state, local or provincial laws and regulations. Payment shall be made by Customer within ten (10) days after the date of the invoice from Contractor. In the event that any payment is not made when due, Contractor may terminate the Agreement. Customer agrees to pay a late fee for all past due payments not to exceed the maximum rate allowed by applicable law.

Term. This Agreement shall continue in effect until terminated by either party, with or without cause, upon forty-eight (48) hours notice. Customer's representations and warranties regarding the waste delivered and the mutual indemnities set forth herein shall survive termination of this Agreement.

Driver's Knowledge and Authority. Customer warrants that its drivers who deliver waste to the Facility have been advised by Customer of Contractor's prohibition of deliveries of hazardous, radioactive, or toxic waste to the Facility, of Contractor's restrictions on deliveries of Special Waste to the Facility, of the definitions of "hazardous waste" and "Special Waste" herein provided, and of the terms of this license to enter the Facility.

Indemnification. (a) Contractor agrees to indemnify, save harmless, and defend the Customer from and against any and all liabilities, claims, penalties, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorneys' fees), which it may hereafter incur, become responsible for, or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations, or orders caused solely by the negligent act, negligent omission or willful misconduct of Contractor's employees, or its subcontractors in the performance of the Agreement.

(b) Customer agrees to indemnify, save harmless, and defend Contractor from and against any and all liabilities, claims, penalties, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorneys' fees), which it may hereafter incur, become responsible for, or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations, or orders caused, in whole or in part by the Customer's breach of any warranty, term or provision of the Agreement, or any negligent act, negligent omission or willful misconduct of the Customer, its employees, or subcontractors in the performance of the Agreement.

Attorneys' Fees. In the event of a breach of the Agreement, the breaching party shall pay all reasonable attorneys' fees, collection fees and costs of the other party incident to any action brought to enforce the Agreement.

Assignment. Neither party may assign, transfer or otherwise vest in any other company, entity or person, any of its rights or obligations under the Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld, provided, however, that Contractor may, without any such prior written consent, assign its rights and/or obligations under the Agreement to a subsidiary or affiliate corporation.

Miscellaneous. The Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns. The Agreement shall be governed by and construed in accordance with the laws of the State in which the Facility is located.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

Office of Solid and Hazardous Waste Management
Special Waste Certification No. 51083

Pursuant to 329 IAC 2-21-11, the following generator:

City of South Bend
Dept. of Community and Economic Development
814/818 South Lafayette Blvd.
South Bend, IN 46601

has received certification from the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, for the following waste stream(s):

Soil Contaminated with Paint Residue

These wastes may be disposed at any sanitary landfill specified under 329 IAC 2-21-3 as an acceptable site for the disposal of waste which is certified as a special waste. A list of acceptable disposal sites is available from the Solid Waste Permit Section at the above address or by calling 317/232-3111. General and Special Conditions that apply to this certification are indicated on the reverse side.

This certification shall expire exactly 5 years from the effective signature date below.

Gregory C. Lorenz, Chief
Special Waste Permit Section
Solid Waste Facilities Branch
Solid and Hazardous Waste Management

12/14/95
Date

General Conditions That Apply to All Special Waste Certifications:

1. The generator and/or the hauler shall provide the landfill with a copy of this certification along with advanced notification of intended disposal and provide a disposal notification form with each load disposed.
2. If nuisance or pollution conditions are created, immediate corrective action shall be taken.
3. Waste material(s) accepted under this certification shall be included on the Special Waste Monthly Report submitted to this Office by the landfill.
4. Special Waste(s) may not be disposed at any landfill subject to corrective action under 329 IAC 2-16-9 or at any landfill which fails to maintain compliance with 329 IAC 2.
5. It is the generator's responsibility to properly dispose of all wastes at acceptable sites. It is also the responsibility of the disposal site to notify the generators if the site's disposal status changes.
6. Any changes in the raw materials, the process(es) generating the waste, or the characteristics of the waste stream(s) shall be reported in writing to the IDEM and the disposal site prior to further disposal. If it is determined that the change is substantial, this certification shall be voided by written notification from IDEM.
7. The waste(s) shall not contain free liquids.
8. The waste(s) shall not present a fire or explosion hazard.

Special Conditions That Are Required For Disposal of the Waste(s) Will Be Indicated By The Reviewer's Initials:

_____ 1. A new TCLP shall be provided to the IDEM at the time of renewal of this certification. Each waste stream shall be analyzed separately.

JLW 2. This is an intended one time only disposal. If the disposal quantity sustantially exceeds the amount anticipated, this Office shall be notified in accordance with General Condition Number 6.

Anticipated Disposal Quantity: 5 cubic yards

Reviewer/Date 12-12-95

cc: John Stark: City of South Bend Dept. of Comm. and Econ. Dev., 1200 County-City Bldg., South Bend, IN 46601
Wanda Baxter-Potter: EIS Environmental Engineers, 1701 N. Ironwood Dr., South Bend, IN 46635

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-13-95
EIS Lab No: 29704
EIS Project No: 1456-8145-95
EIS Priority: 4
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-1
812/818 South Lafayette / Composite
Date Sampled: 10-10-95
Date Received: 10-11-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST	QUALITY CONTROL RSD %	SPIKE LEVEL	MS %R	DMS %R	RPD %
Ash	percent	92.6		10-17-95	Povlock,P					
Corrosivity (pH)	SU	6.8		10-30-95	Wright,C					
Cyanide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Flash Point (Open Cup)	fahrenheit	>201		10-31-95	Wright,C					
Paint Filter Liquids	liquid	NONE		10-12-95	Wright,C					
Solids, Total	percent	95.4	1	10-16-95	Povlock,P					
Sulfide,Total	mg/kg(wet)	<5	5	10-20-95	Wright,C					
Arsenic,TCLP	mg/l	<0.1	0.1	10-24-95	Clear,N					
Barium,TCLP	mg/l	0.96	0.01	10-24-95	Clear,N					
Cadmium,TCLP	mg/l	0.01	0.01	10-24-95	Clear,N					
Chromium,TCLP	mg/l	0.21	0.01	10-24-95	Clear,N					
Lead,TCLP	mg/l	0.30	0.05	10-24-95	Clear,N	0.40	90	90	0	
Mercury,TCLP	mg/l	<0.002	0.002	10-25-95	Shane,D					
Selenium,TCLP	mg/l	<0.05	0.05	10-24-95	Clear,N					
Silver,TCLP	mg/l	<0.01	0.01	10-24-95	Clear,N					
Herbicides,TCLP		*		10-30-95	Clear,B					
Pesticides,TCLP		*		10-26-95	Clear,B					
SVOC,TCLP		*		10-27-95	Geels,S					
VOC,TCLP		*		10-27-95	Myers,N					

* See Attached TCLP ORGANICS REPORT

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

EIS Lab No: 29704(continued)

PARAMETER	UNITS	RESULT	TEST DATE	ANALYST
Herbicide Extraction,TCLP			10-19-95	Thompson,G
Mercury Digestion,TCLP			10-24-95	Shane,D
Metals Digestion ICP,TCLP			10-13-95	Shane,D
Pesticide Extraction,TCLP			10-19-95	Thompson,G
SVOC Extraction,TCLP			10-19-95	Thompson,G
TCLP Extract Formation			10-12-95	Wright,C
Extraction Started			10-13-95	Wright,C
Extraction Completed				
Solids Content	percent	100		
Sample Weight Extracted	grams	150.0		
Filter Used (Whatman)	type	GF/F		
Initial pH	SU	6.9		
pH After Acid Addition	SU	1.7		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	3,000		
Extraction Fluid pH	SU	4.89		
Final Extract pH (18hrs)	SU	5.3		
TCLP Extract Formation (ZHE)			10-24-95	Nye,D
Extraction Started			10-25-95	Nye,D
Extraction Completed				
Solids Content	percent	100		
Sample Weight Extracted	grams	10.0		
Filter Used (Whatman)	type	GF/F		
Extraction Fluid Used	number	1		
Extraction Fluid Amount	ml	200		
Extraction Fluid pH	SU	4.90		

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Reference Analytical Methods are enclosed.
3. Sample was iced upon receipt.
4. < = Not Detected at the Detection Limit (DL) shown.
5. DL = Detection Limit and is adjusted for dilutions/concentrations.
6. Quality Control definitions are as follows:
   %RSD = Precision of replicate analysis for this sample.
   Spike Level = Parameter Spike amount in units of the result.
   %R = Matrix Spike(MS)/Duplicate Matrix Spike(DMS) recovery.
   %RPD = Precision of Matrix Spike recovery values.
7. Inorganic Quality Control limits are enclosed.

CONCLUSION

This sample is satisfactory with respect to the analysis performed.

TCLP ORGANICS REPORT

SAMPLE ID: WC-1
812/818 South Lafayette / Composite

REPORT DATE: 11/13/95
EIS LAB NO: 29704

	- - mg/l - -	
VOLATILE ORGANICS	RESULT	EQL
Benzene	ND	0.02
Carbon Tetrachloride	ND	0.02
Chlorobenzene	ND	0.02
Chloroform	ND	0.02
1,4-Dichlorobenzene	ND	0.02
1,2-Dichloroethane	ND	0.02
1,1-Dichloroethylene	ND	0.02
Methyl Ethyl Ketone	ND	0.2
Tetrachloroethylene	ND	0.02
Trichloroethylene	ND	0.02
Vinyl Chloride	ND	0.1
SEMI-VOLATILE ORGANICS		
o-Cresol	ND	0.1
m-Cresol	ND	0.1
p-Cresol	ND	0.1
Total Cresols	ND	0.3
2,4-Dinitrotoluene	ND	0.1
Hexachlorobenzene	ND	0.1
Hexachloro-1,3-butadiene	ND	0.1
Hexachloroethane	ND	0.1
Nitrobenzene	ND	0.1
Pentachlorophenol	ND	1.0
Pyridine	ND	0.1
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	0.1
PESTICIDES and HERBICIDES		
Chlordane	ND	0.02
Endrin	ND	0.001
Heptachlor (and its epoxides)	ND	0.001
Lindane	ND	0.001
Methoxychlor	ND	0.001
Toxaphene	ND	0.03
2,4-D	ND	0.013
2,4,5-TP (Silvex)	ND	0.01

NOTES
1. ND = Not Detected at the EQL shown
2. EQL = Estimated Quantitation Limit = Detection Limit

ANALYTICAL REPORT

Client:
Mr John Stark
Community & Economic Development
1200 County/City Bldg;227 Jefferson
South Bend In 46601
235-9021

Report Date: 11-27-95
EIS Lab No: 30671
EIS Project No: 1456-8145-95
EIS Priority: 1
Client P.O.#:
Certification: Indiana Drinking Water Certificate No. C-71-02

Invoice To:
Client

SAMPLE IDENTIFICATION
Sample ID: WC-2
Composite Sample Of Stained Soil
Date Sampled: 11-17-95
Date Received: 11-17-95

Report To: CLIENT

Extra Report To:

PARAMETER	UNITS	RESULT	DL	TEST DATE	ANALYST
PCB	mg/kg(wet)	<0.9	0.9	11-22-95	Clear,B
Extract PCB				11-20-95	Thompson,G

ADDITIONAL INFORMATION

1. Chain-of-Custody document is enclosed.
2. Sample was iced upon receipt.
3. < = Not Detected at the Detection Limit (DL) shown.
4. DL = Detection Limit and is adjusted for dilutions/concentrations.

QUALITY ASSURANCE OFFICER

LABORATORY DIRECTOR

Recycled Paper

Composite for Waste Characterization

CHAIN OF CUSTODY RECORD

CLIENT NO.	PROJECT NO.	PROJECT NAME	NO. OF CONTAINERS	SEE REVERSE SIDE FOR INSTRUCTIONS — ANALYSIS OR CONTAINER TYPES		REMARKS	EIS LAB USE ONLY		
1450	814595	City of So. Bend Comm't		TCLP unpres	VOC vial none				

SAMPLERS: (SIGNATURE) [signature]

DATE AND TIME OF COMPOSITE	GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	1	2	REMARKS	EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
10-10-95 1259		WC-1	3	1 G	2 G		29704	I/C	
		End of Record							

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
[signature]	10-10-95	1546	walk-in cooler	walk-in cooler	10-11-95	1400	Colleen Wright
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

MODE OF TRANSPORTATION

EIS VEHICLE # | PUBLIC

FIELD NOTES:

SHIPPING CHARGE

EIS ENVIRONMENTAL ENGINEERS, INC. 1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

CHAIN OF CUSTODY RECORD

RUSH

CLIENT NO.	PROJECT NO.	PROJECT NAME
1456	8145-95	SB - Dept Comm & Eco. Dev.

SAMPLERS: (SIGNATURE)

SEE REVERSE SIDE FOR INSTRUCTIONS

DATE AND TIME OF COMPOSITE	DATE AND TIME OF GRAB	PRIMARY SAMPLE DESCRIPTION	NO. OF CONTAINERS	ANALYSIS OR CONTAINER TYPES (1 pint glass 40 ml's)	REMARKS
11-17-95 1040		WC-2	1	C	
		END of Record			

EIS LAB USE ONLY

EIS LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
30671	Y	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
	11-17-95	1103	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

SAMPLE STATE
C = COLD
N = NOT COLD
I = INTACT
B = BROKEN

SHIPPING CHARGE

MODE OF TRANSPORTATION

EIS VEHICLE #

PUBLIC

FIELD NOTES:

EIS ENVIRONMENTAL ENGINEERS, INC. 1701 N. IRONWOOD DR. SOUTH BEND, IN 46635 (219) 277-5715

Sheet 1 of 1

Project No. 8145-28

SAMPLE LOG

Client: Community & Economic Development — South Bend Department of

Site Location 814/818 S. Lafayette - Southbend, IN

Date 10-10-95

Equipment Used Hand auger, scoopula, dredge

No. of Samples Collected 12

Container Size variable

Sample No.	Sample Location (See site sketch and Field Notes, Attached)	Time	Depth (Feet)	Type of Material	EIS Lab No.	Analysis Requested
DW-1	Drywell #1 ≈17' North and 13' East of South east corner of building.	1209	≈7'	Gravel, Sand, Mud, Organic Matter, etc	29705	VOC
DW-2	Drywell #2 ≈3' South and 17' East of Southeast corner of building.	1217	≈5'		29706	VOC
WC-1	Composite from 5 grabs Samples located within the stain/residue areas.*	1259	—	Paint residue/stained soil, etc.	29704	TCLP and other Waste Char. Parameters.
SC-1	Soil Clearance #1 ≈2.5' North and 2.5' East of SC-2 in Area #1	137	≈1.0-1.5	Sandy Dark Brown Top-Soil with Trace Gravel	29707	VOC, Metals
SC-2	Soil Clearance #2 ≈11' North of DW-1 in Area #1	144	≈1.5-2.0	" "	29708	" "
SC-3	Soil Clearance #3 ≈2.5' North and 3.5' West of SC-2 in Area #1	152	≈1.0-1.5	" "	29709	" "
SC-4	Soil Clearance #4 ≈8.5' South and 1.5' West of DW-1 in Area #2	200	≈0.75-1.25	" "	29710	" "
SC-5	Soil Clearance #5 ≈2.5' West and 1.5' North of SC-4 in Area #2	207	≈0.75-1.25	" "	29711	" "
BG-1	Background #1 ≈10' South and 1' West of Southeast Blue Fence Corner.	236	" "	" "	29712	Metals
BG-2	Background #2 ≈6.5' South and 2' West of Southeast Blue Fence Corner.	243	" "	" "	29713	" "
BG-3	Background #3 ≈3' South and 2' West of Southeast Blue Fence Corner	250	" "	" "	29714	" "
BG-4	Background #4 ≈4.5' South and 1' West of Southeast Blue Fence Corner.	255	" "	" "	29715	" "

END OF RECORD

Comment: Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to each sample collection. * The 5 subsamples for composite sample WC-1 were collected directly above the clearance sample locations SC-1,2,3,4&5. See attached Field Notes and Site Sketch for more details.

Collectors Name David Jeffers

Sheet 1 of

Project No. 8145-95

SOIL SAMPLE LOG

Client: South Bend Dept. of Comm. + Econ. Devel. Site Location 814/818 S. Lafayette - South Bend, IN Date 11-16-95

Equipment Used Hand Auger - Scoopula, glass pickle Jar. No. of Samples Collected 1 Container Size ≈ 300cc glass

Sample No.	Sample Location (see site map)	Time	Depth (less than 0.25 ft to 1 ft)	Type of Material	EIS Lab No.	Analysis Requested
WC-2	composite sample from 5 grab sample located within the stained areas.	10:40		stained soil/residue and debri.	30671	PCB
		END	OF	RECORD		

Comment: -Sampling equipment was decontaminated with non-phosphate detergent and deionized H_2O rinses prior to sampling. and WC-1

* The 5 subsample from composite sample WC-2 were collected directly next to the (Oct. 19. 1995) clearance sample locations

Collectors Name David Jeffers

↳ SC-1,2,3,4,5. See Field Notes and Site Sketch for detail. Sample WC-2 is a resampling of WC-1 lab # 29704 to obtain PCB results that were not obtained previously.

EIS ENVIRONMENTAL ENGINEERS, INC.

SHEET 1 OF 1

PROJECT SB - Dept. Comm. + Econ. Develop

PROJECT No. 8145-95 DATE 10-10-95

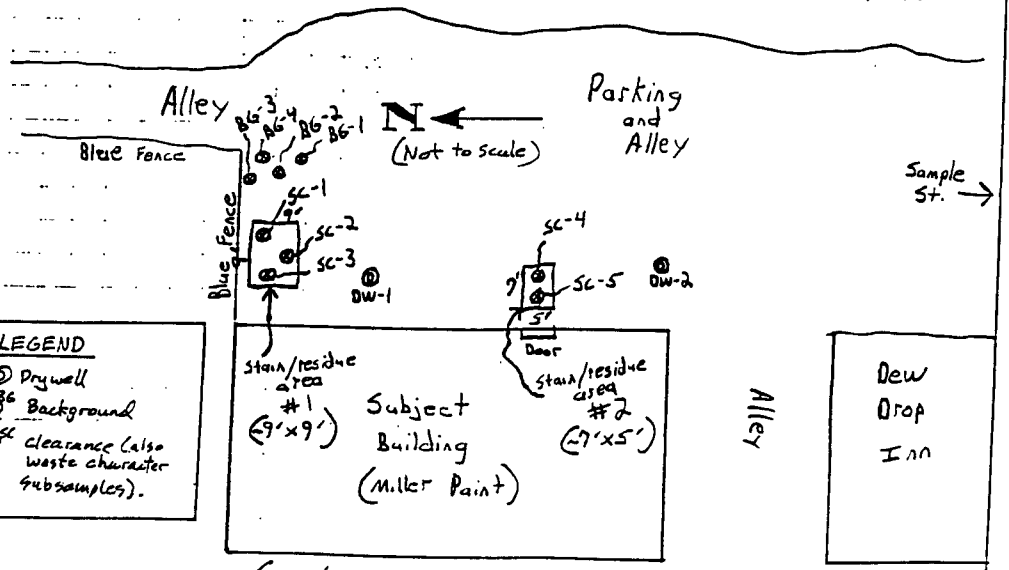
PREPARED BY DJ SCALE Not to Scale

Field Notes: (Waste Characterization)

* Sample WC-1 was collected from (five subsamples collected from) stained/residue locations directly above the soil clearance locations (SC-1,2,3,4,5). 1/2 liter of each grab sample was composited to make up sample WC-1.

* Background samples (BG-1,2,3,4) were collected in an area that best typified the ~~soil~~ soil clearance sample soils and was likely not effected by the stain/residue areas. Refusal was met at 1,3/4' ~~down~~ during each background sample; therefore, each BG sample was collected from a depth of 0.25'-1.25'.

* Site Sketch: Showing General Sampling Locations for Dry well Samples, Waste Characterization Samples, Clearance Samples and Background Samples. See Soil Sample Log for more detailed Sample location data for 10-10-95 Samples.



(814/818 S. Lafayette, South Bend, Indiana)

Lafayette Blvd.

City of South Bend
Joseph E. Kernan, Mayor

Community & Economic Development

Jon R. Hunt
Executive Director

Ann E. Kolata
Deputy Executive Director

November 17, 1995

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

EIS Environmental Engineers, Inc.
1701 North Ironwood Drive
South Bend, Indiana 46635

To Whom It May Concern:

This letter hereby authorizes **EIS Environmental Engineers, Inc.**, on our behalf to complete, sign, and/or provide information for any Special Waste Applications, Special Waste Permits, Special Waste Agreements, Special Waste Disposal Notifications, Special Waste Letters, and/or any forms related to the excavation, sampling, transport, characterization, and/or disposal of Special Waste atthe property located at 814/818 South Lafayette Blvd., South Bend, Indiana.

Sincerely,

Community & Economic Development
City of South Bend

APPENDIX G

APPROVAL LETTER
PRAIRIE VIEW LANDFILL

Prairie View Recycling & Disposal Facility
PO. Box 128
15505 Shively Road
Wyatt, Indiana 46595
219/546-4475

A Waste Management Company

January 5, 1996

David Jeffers
EIS
1701 N. Ironwood Dr
South Bend, IN 46635

RE: WMNA194556 EXP. 03/31/96
State Permit # 51083 EXP. 12/14/00

Dear Rozite

Your Contaminated Soil from City of South Bend has been approved for disposal at Prairie View RDF. Listed below are the conditions under which we may accept your waste.

- No free liquids allowed.
- Disposal notification required with each load.

Thank you for choosing Prairie View RDF for your special waste disposal needs.
Please contact me with any questions or concerns at (219) 546-4475

Sincerely yours,

Kelly Smith

Kelly Smith
Special waste and
Division Compliance Coordinator

APPENDIX H

STATEMENT OF ORIGIN DOCUMENTING THE TRANSPORT OF EXCAVATED SOIL FROM THE SITE FOR DISPOSAL AT THE PRAIRIE VIEW LANDFILL

STATEMENT OF ORGIN OF SOLID WASTE WITHIN INDIANA

182084

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (I). I hereby certify under oath that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

REFERENCE NO. 21001

X _____ (Name of Vehicle Operator)

X _____ Signature of Vehicle Operator Date

County or State (if other than Indiana)	Percentage of Load	Type of Waste *
X + S/L/C	100	3

*** Type of Waste**

1. Municipal Solid Waste
2. Construction
3. MSW - Other
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other

GROSS: 30.08
TARE: 19.87
NET: 10.21

COUNTY: ST JOE

PRAIRIE VIEW R D F
15505 SHIVELY ROAD
P O BOX 128
WYATT IN 46595
(219)546-4475

COMMENTS:

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	BATCH NO.
0000488	921	KD	12:06:01	01/05/96	

CUSTOMER:
L I S ENVIRONMENTAL
1 01 N IRONWOOD DR
SOUTH BEND IN 46615

MANIFEST NO.
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
TAX	STATE & COUNTY FEES THANK YOU FOR YOUR BUSINESS	0.00	

COPY 2