GW - 164

MONITORING REPORTS

DATE:

2004-2007

Larson & Associates, Inc.
Environmental Consultants

RECEIVED

FEB 22 2007

February 17, 2007

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

VIA EMIAL: Jose.Quintana@safety.kleen.com

Re: Waste Material Profile, Wood Group ESP, Inc., 8426 North Dal Paso, Hobbs, New Mexico

Dear Jose:
Please find the waste material profile in Attachment A for the hazardous wastewater at the Wood Group ESP (WGESP) Hobbs Test Shop located at 8426 North Dal Paso, in Hobbs, New Mexico. The waste material profile was prepared by Larson and Associates, Inc., as agent to WGESP, and an expedited approval is requested so that the material may be removed from the location during the week of February 19, 2007. The New Mexico Environment Department (NMED) Hazardous Waste Bureau has been contacted for a one-time exemption to dispose of the wastewater. Please contact me at (432) 687-0901 or email mark@laenvironmental.com.
Sincerely,
Larson and Associates, Inc.

Mark J. Larson
Sr. Project Manager / President

Encl.

cc: Mr. James Valdez/NMED – Santa Fe
Mr. Wayne Price/NMOCD – Santa Fe
Mr. Larry Johnson/NMOCD – District 1
Mr. Jeff Beighle/WGESP
Mr. Mike Nieman/WGESP
Mr. Galen Goodman/WGESP
Mr. Mark Neinast/WGESP
Mr. Rod Burrola/WGESP

SAFETY-KLEEN
WASTE MATERIAL PROFILE

PROFILE #: _____

Customer #: _____ *Analytical Part #:* _____ *LOB #:* ☐28 ☐26 ☒24 ☐20 ☐19

Sales Name: Jose Quintana *Employee #:* 6758 *Rep Email:* jose.quintana@safety-kleen.com *Location/Branch #:* 600202

A. CUSTOMER INFORMATION

☐ *Check if Billing Same*

Generator: Wood Group ESP, Inc.
Facility Address (No P.O. Box): 8426 N. Dal Paso
City/State/Zip: Hobbs, NM 88240
Technical Contact: Galen Goodman
Phone: $32-848-0157 FAX: 432-689-2534
NAICS #: _____ ☐ CESQG ☐ SQG ☐ LQG EPA ID#: _____

Billing Company: Wood Group ESP, Inc.
Billing Address: 2707 S. County Road 1208
City/State/Zip: Midland, TX 79706
Billing Contact: Galen Goodman
Phone: 432-848-0157 *FAX:* 432-689-2534
Email: Galen.Goodman@woodgroup.com
State ID#: _____

B. SHIPPING INFORMATION

US DOT Shipping Name: _____
Hazardous Class/Division #: _____ UN/NA #: _____ Packing Group: _____ RQ: _____
Size: 5000 Container Type: tanker Quantity: 8500 gal. Frequency: one time

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material: haz-wastewater
Process Generating the Material: maintenance cleanup of wastewater recycler

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☒	☐	Contains UHCs/Constituents of Concern: List in section D
☐	☒	Regulated Medical/Infectious Waste	☐	☒	Exempt Waste: If yes, list ref. 40 CFR _____
☒	☐	Waste Subject to Benzene NESHAP regulations	☐	☒	*For Artesia, MS*: Does waste material contain, or is derived from, dioxin-listed wastes with F020-F023 or F027 waste codes?
☐	☒	TSCA Regulated PCB Waste: List PCB level in section D	☒	☐	State Hazardous Waste: List Codes _____
☐	☒	Regulated Ozone Depleting Substance	☒	☐	EPA Hazardous Waste: List Codes D002, D024, D025, D005, D007,D008, D018
☐	☒	CERCLA Regulated (Superfund) Waste			Source Code G 19 Form Code W 113 Mgt. Method H _____

D. MATERIAL COMPOSITION (Range Total > or = 100%) or ppm

haz wastewater	100%

☐ MSDS Attached **Total:** 100%

E. REACTIVE CHARACTERITSTICS

Yes☐ No☒ Oxidizer
Yes☐ No☒ React. Sulfides _____ ppm
Yes☐ No☒ Shock/Explosive
Yes☐ No☒ React. Cyanides _____ ppm
Yes☐ No☒ Polymerizable
Yes☐ No☒ Water/Air (Pyrophoric) React.
Yes☐ No☒ Other-Comments

Elemental Constituents (ppm):

☐ No detectable Elements Sb _____ As _____ Ba X
Be _____ Cd _____ Cr X Pb X Hg _____
Ni _____ Se _____ Ag _____ Tl _____ V _____

Metals Data based on: ☒TCLP ☐Total Analysis ☐Generator Knowledge (no testing)

F. PHYSICAL CHARACTERISTICS

Flash Point: >150 °F (if <73°F)
☐ 73-<100 ☐ 100-141 ☐ 142-<200 ☐ ≥200

pH Range: ☐ ≤2 ☒ >2-4 ☐ >4-10 ☐ >10-<12.5 ☐ ≥12.5

Phases 1 % Liquid 100% Viscosity cps >1
% Sludge _____ % Solid _____ % Halogens _____
BTU's/lb: <5000 Specific Gravity: >1

G. COMMENTS

_____

Customer Restrictions: ☐ Yes ☒ No

H. GENERATOR'S CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

Generator Signature: _____ Printed Name and Title: Mark J. Larson, Consultant Date: 02/17/2007

Rev: 02/28/05

Larson & Associates, Inc.
Environmental Consultants

RECEIVED

FEB 22 2007

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

February 17, 2007

VIA EMAIL: james.valdez@state.nm.us
VIA CERTIFIED MAIL

Mr. James Valdez
Management Analyst
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

Re: Request for One-Time Exemption for Disposal of Hazardous Wastewater, Wood Group ESP, Inc., 8426 North Dal Paso, Hobbs, New Mexico

Dear Mr. Valdez:
This letter is submitted to the New Mexico Environment Department (NMED) Hazardous Waste Bureau on behalf of Wood Group ESP, Inc. (WGESP) by Larson and Associates, Inc. (LA), its agent, to request a one-time exemption to dispose of approximately 8,250 gallons (196 barrels) of hazardous wastewater from the Hobbs Test Shop (Facility) located at 8426 North Dal Paso in Hobbs, New Mexico. The technical contact for WGESP is as follows:

Name:	Mr. Galen Goodman
Title:	Senior HES Advisor
Mailing Address:	2707 South County Road 1208 Midland, Texas 79706
Telephone (direct):	(432) 848-0157
Fax:	(432) 689-2534
Mobile:	(432) 557-5129
Email:	Galen.Goodman@woodgroup.com

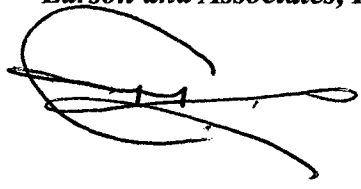
The Facility is a service center for electric submersible pumps used in the oil and gas industry and operates under New Mexico Oil Conservation Division (NMOCD) Discharge Permit GW-164. The Facility uses fresh water to flush waste from the pumps and dilute hydrochloric acid to remove scale. In August 2006, WGESP discovered that industrial equipment used to neutralize the pH of the process water had failed and resulted in a pH decrease that caused internal corrosion of the pump components and the accumulation of barium, chromium III and lead at concentrations above the NMED hazardous thresholds. Benzene and m,p-cresol were also detected in the process water. WGESP has discontinued the use of the industrial process equipment.

During a meeting with the NMOCD on January 11, 2007, Mr. Wayne Price, Environmental Bureau Chief, contacted the NMED Hazardous Waste Bureau Chief to discuss the opportunity for WGESP to obtain a one-time exemption for disposal of the hazardous wastewater. WGESP and LA representatives visited with you on January 11, 2007, and obtained the attached form.

Safety-Kleen Corporation (TXD981056690) located at 10607 WCR 127 in Midland, Texas, has been selected to transport the hazardous wastewater to Safety-Kleen Systems, Inc. (TXD077603371) located at 1722 Cooper Creek Road in Denton, Texas (TCEQ Waste Registration Number 65024) where the hazardous wastewater will be disposed in a regulatory-accepted manner. An expedited approval of this one-time exemption request would be greatly appreciated since transportation has been requested for February 20, 2007. Attachment A presents the completed one-time exemption form. Appendix B presents the wastewater laboratory analysis. Please contact Mr. Galen Goodman with questions at (432) 848-0157 or email Galen.Goodman@woodgroup.com I may be reached with questions at (432) 687-0901 or mark@laenvironmental.com.

Sincerely,

Larson and Associates, Inc.



Mark J. Larson, P.G., C.P.G., C.G.W.P.
Sr. Project Manager / President

Encl.

cc: Mr. Wayne Price/NMOCD – Santa Fe
Mr. Larry Johnson/NMOCD – District 1
Mr. Jeff Beighle/WGESP
Mr. Mike Nieman/WGESP
Mr. Galen Goodman/WGESP
Mr. Mark Neinast/WGESP
Mr. Rod Burrola/WGESP

ATTACHMENT A

One-Time Exemption Request Form

✳ Shipping Date : 02-20-2007 Provisional #:

Today's Date : 02-17-2007 Time : 15:35 CST
NMED Staff : Charlotte Duran

Requestor's Name : Mark J. Larson, Agent Phone #: (432) 687-0901

Facility Name : Wood Group ESP, Inc.
Physical Address: 8426 N. Dal Paso, Hobbs, NM 88240
Contact Person: Rod Burrola Phone #: (505) 738-1213

Facility Ownership : Wood Group ESP, Inc.
Address : 5500 S.E. 59th St., Oklahoma City, OK 73125

Type of Hazardous Waste Activity (description):
Process water containing low pH, chromium III, barium, lead, benzene, m,p-cresol resulting from failure of treatment process.

Amount of Waste:
Approximate volume: 8,250 gallons (196 barrels)

Waste Description (EPA Waste Codes):
D018 (benzene), D002 (corrosivity), D024/D025 (m,p-cresol), D005 (barium), D007 (chromium) and D008 (lead).

Transporter : Safety-Kleen Corporation (TXD981056690)
Address : 10607 WCR 127, Midland, Texas 79711

Final Destination (TSD) : Safety-Kleen Systems, Inc. (TXD077603371)
Address : 1722 Cooper Creek Road
Denton, Texas76208

Additional Information:

ATTACHMENT B

Laboratory Analysis

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail lab@traceanalysis.com

Analytical and Quality Control Report

Mark Larson
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx, 79710

Report Date: December 13, 2006

Work Order: 6120117

Project Name: Hobbs Facility
Project Number: 6-0142

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
110219	Wastewater	water	2006-11-29	15:00	2006-11-30

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 110219 - Wastewater

Analysis:	RCI (water)	Analytical Method:	S 1110	Prep Method:	N/A
QC Batch:	32687	Date Analyzed:	2006-12-11	Analyzed By:	SM
Prep Batch:	28436	Sample Preparation:	2006-12-07	Prepared By:	SM
Analysis:	RCI (water)	Analytical Method:	S 1010	Prep Method:	N/A
Analysis:	RCI (water)	Analytical Method:	ASTM D 5049-90/4978-95	Prep Method:	N/A

Parameter	Flag	Result	RL	Units	Dilution	RL
Reactivity		**non-reactive**			1	0.00
Hydrogen Sulfide		<10.0		mg/L	1	10.0
Hydrogen Cyanide		<2.50		mg/L	1	2.50
Corrosivity	[1]	**corrosive**		mm/yr	1	0.00
pH		< 2.5		s.u.	1	0.00
Flashpoint		> **150**		°F	1	0.00

Sample: 110219 - Wastewater

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	32579	Date Analyzed:	2006-12-05	Analyzed By:	DS
Prep Batch:	28351	Sample Preparation:	2006-12-05	Prepared By:	DS
		TCLP Extraction:	2006-12-05	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Pyridine		<0.0500		mg/L	1	0.0500
1,4-Dichlorobenzene (para)		<0.0500		mg/L	1	0.0500
o-Cresol		<0.0500		mg/L	1	0.0500
m,p-Cresol		**0.0923**		mg/L	1	0.0500
Hexachloroethane		<0.0500		mg/L	1	0.0500
Nitrobenzene		<0.0500		mg/L	1	0.0500
Hexachlorobutadiene		<0.0500		mg/L	1	0.0500
2,4,6-Trichlorophenol		<0.0500		mg/L	1	0.0500
2,4,5-Trichlorophenol		<0.0500		mg/L	1	0.0500
2,4-Dinitrotoluene		<0.0500		mg/L	1	0.0500
2,4-Dichlorophenoxyacetic acid		<0.0500		mg/L	1	0.0500
Hexachlorobenzene		<0.0500		mg/L	1	0.0500
2,4,5-Trichlorophenoxyproprionic acid		<0.0500		mg/L	1	0.0500
Pentachlorophenol		<0.0500		mg/L	1	0.0500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.177	mg/L	1	0.400	44	10 - 110.33
Phenol-d5		0.0776	mg/L	1	0.400	19	10 - 82.08
Nitrobenzene-d5		0.277	mg/L	1	0.400	69	26.72 - 155
2-Fluorobiphenyl		0.351	mg/L	1	0.400	88	35.89 - 150.5
2,4,6-Tribromophenol		0.478	mg/L	1	0.400	120	10 - 204.91
Terphenyl-d14		0.499	mg/L	1	0.400	125	33.98 - 168.85

[1] Corrosive by pH •

Sample: 110219 - Wastewater

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32539	Date Analyzed:	2006-12-06	Analyzed By:	RR
Prep Batch:	28309	Sample Preparation:	2006-12-06	Prepared By:	TS
		TCLP Extraction:	2006-12-05	Prepared By:	TS
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	32585	Date Analyzed:	2006-12-07	Analyzed By:	TS
Prep Batch:	28354	Sample Preparation:	2006-12-06	Prepared By:	TS
		TCLP Extraction:	2006-12-06	Prepared By:	TS

Parameter	Flag	Result	RL	Units	Dilution	RL
TCLP Silver		<0.125		mg/L	1	0.125
TCLP Arsenic		<0.100		mg/L	1	0.100
TCLP Barium		**1.58**		mg/L	1	0.100
TCLP Cadmium		<0.0500		mg/L	1	0.0500
TCLP Chromium		**27.1**		mg/L	1	0.100
TCLP Mercury		<0.000500		mg/L	1	0.000500
TCLP Lead		**18.3**		mg/L	1	0.100
TCLP Selenium		<0.500		mg/L	1	0.500

Sample: 110219 - Wastewater

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	32765	Date Analyzed:	2006-12-12	Analyzed By:	JG
Prep Batch:	28501	Sample Preparation:	2006-12-12	Prepared By:	JG
		TCLP Extraction:	2006-12-12	Prepared By:	JG

Parameter	Flag	Result	RL	Units	Dilution	RL
Vinyl Chloride		<0.0500		mg/L	50	0.00100
1,1-Dichloroethene		<0.0500		mg/L	50	0.00100
2-Butanone (MEK)		<0.500		mg/L	50	0.0100
Chloroform		<0.0500		mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500		mg/L	50	0.00100
Benzene		**0.278**		mg/L	50	0.00100
Carbon Tetrachloride		<0.0500		mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500		mg/L	50	0.00100
Tetrachloroethene (PCE)	*B*	<0.0500		mg/L	50	0.00100
Chlorobenzene		<0.0500		mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500		mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.0	mg/L	50	50.0	102	70 - 130
Toluene-d8		51.5	mg/L	50	50.0	103	70 - 130
4-Bromofluorobenzene (4-BFB)		46.8	mg/L	50	50.0	94	70 - 130

Method Blank (1) QC Batch: 32539

QC Batch: 32539 | Date Analyzed: 2006-12-06 | Analyzed By: RR
Prep Batch: 28309 | QC Preparation: 2006-12-06 | Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Silver		<0.00780	mg/L	0.125
TCLP Arsenic		<0.0590	mg/L	0.1
TCLP Barium		<0.00340	mg/L	0.1
TCLP Cadmium		<0.00200	mg/L	0.05
TCLP Chromium		<0.00600	mg/L	0.1
TCLP Lead		<0.0370	mg/L	0.1
TCLP Selenium		<0.100	mg/L	0.5

Method Blank (1) QC Batch: 32579

QC Batch: 32579 | Date Analyzed: 2006-12-05 | Analyzed By: DS
Prep Batch: 28351 | QC Preparation: 2006-12-05 | Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
Pyridine		<0.0100	mg/L	0.05
1,4-Dichlorobenzene (para)		<0.0100	mg/L	0.05
o-Cresol		<0.0100	mg/L	0.05
m,p-Cresol		<0.0100	mg/L	0.05
Hexachloroethane		<0.0100	mg/L	0.05
Nitrobenzene		<0.0100	mg/L	0.05
Hexachlorobutadiene		<0.0100	mg/L	0.05
2,4,6-Trichlorophenol		<0.0100	mg/L	0.05
2,4,5-Trichlorophenol		<0.0100	mg/L	0.05
2,4-Dinitrotoluene		<0.0100	mg/L	0.05
2,4-Dichlorophenoxyacetic acid		<0.0100	mg/L	0.05
Hexachlorobenzene		<0.0100	mg/L	0.05
2,4,5-Trichlorophenoxyproprionic acid		<0.0100	mg/L	0.05
Pentachlorophenol		<0.0100	mg/L	0.05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.119	mg/L	1	0.400	30	10 - 110.33
Phenol-d5		0.111	mg/L	1	0.400	28	10 - 82.08
Nitrobenzene-d5		0.156	mg/L	1	0.400	39	26.72 - 155
2-Fluorobiphenyl		0.331	mg/L	1	0.400	83	35.89 - 150.5
2,4,6-Tribromophenol		0.298	mg/L	1	0.400	74	10 - 204.91
Terphenyl-d14		0.504	mg/L	1	0.400	126	33.98 - 168.85

Method Blank (1) QC Batch: 32585

QC Batch: 32585 | Date Analyzed: 2006-12-07 | Analyzed By: TS
Prep Batch: 28354 | QC Preparation: 2006-12-07 | Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Mercury		<0.0000360	mg/L	0.0005

Method Blank (1) QC Batch: 32765

QC Batch: 32765 Date Analyzed: 2006-12-12 Analyzed By: JG
Prep Batch: 28501 QC Preparation: 2006-12-12 Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Vinyl Chloride		<0.00675	mg/L	0.001
1,1-Dichloroethene		<0.00680	mg/L	0.001
2-Butanone (MEK)		<0.0266	mg/L	0.01
Chloroform		<0.00705	mg/L	0.001
1,2-Dichloroethane (EDC)		<0.00565	mg/L	0.001
Benzene		<0.00730	mg/L	0.001
Carbon Tetrachloride		<0.00395	mg/L	0.001
Trichloroethene (TCE)		<0.00585	mg/L	0.001
Tetrachloroethene (PCE)		0.0180	mg/L	0.001
Chlorobenzene		<0.00270	mg/L	0.001
1,4-Dichlorobenzene (para)		<0.0108	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	mg/L	50	50.0	105	70 - 130
Toluene-d8		51.0	mg/L	50	50.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)		44.7	mg/L	50	50.0	89	70 - 130

Duplicates (1)

QC Batch: 32687 Date Analyzed: 2006-12-11 Analyzed By: SM
Prep Batch: 28436 QC Preparation: 2006-12-07 Prepared By: SM

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Reactivity	non-reactive	non-reactive		1	0	20
Hydrogen Sulfide	0.00	0.00	mg/L	1	0	20
Hydrogen Cyanide	0.00	0.00	mg/L	1	0	20
Corrosivity	non-corrosive	non-corrosive	mm/yr	1	0	0
pH	6.78	6.78	s.u.	1	0	0.7
Flashpoint	> 150	> 150	°F	1	0	4.6

Laboratory Control Spike (LCS-1)

QC Batch: 32539 Date Analyzed: 2006-12-06 Analyzed By: RR
Prep Batch: 28309 QC Preparation: 2006-12-06 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Silver	1.19	mg/L	1	1.25	<0.00780	95	81.7 - 115
TCLP Arsenic	4.88	mg/L	1	5.00	<0.0590	98	83.1 - 110
TCLP Barium	9.48	mg/L	1	10.0	<0.00340	95	83.5 - 116
TCLP Cadmium	2.39	mg/L	1	2.50	<0.00200	96	86.7 - 108
TCLP Chromium	1.02	mg/L	1	1.00	<0.00600	102	84.9 - 118
TCLP Lead	4.95	mg/L	1	5.00	<0.0370	99	84.8 - 109
TCLP Selenium	4.52	mg/L	1	5.00	<0.100	90	79.7 - 101

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Silver	1.18	mg/L	1	1.25	<0.00780	94	81.7 - 115	1	20
TCLP Arsenic	4.83	mg/L	1	5.00	<0.0590	97	83.1 - 110	1	20
TCLP Barium	9.47	mg/L	1	10.0	<0.00340	95	83.5 - 116	0	20
TCLP Cadmium	2.38	mg/L	1	2.50	<0.00200	95	86.7 - 108	0	20
TCLP Chromium	1.02	mg/L	1	1.00	<0.00600	102	84.9 - 118	0	20
TCLP Lead	4.94	mg/L	1	5.00	<0.0370	99	84.8 - 109	0	20
TCLP Selenium	4.50	mg/L	1	5.00	<0.100	90	79.7 - 101	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32579 Date Analyzed: 2006-12-05 Analyzed By: DS
Prep Batch: 28351 QC Preparation: 2006-12-05 Prepared By: DS

Param		LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyridine		0.181	mg/L	1	0.400	<0.0100	45	12.6 - 50.02
1,4-Dichlorobenzene (para)		0.293	mg/L	1	0.400	<0.0100	73	13.67 - 139.56
o-Cresol		0.277	mg/L	1	0.400	<0.0100	69	18.58 - 114.05
m,p-Cresol		0.497	mg/L	1	0.400	<0.0100	124	10.62 - 252.59
Hexachloroethane		0.371	mg/L	1	0.400	<0.0100	93	25.17 - 146.78
Nitrobenzene		0.385	mg/L	1	0.400	<0.0100	96	26.78 - 144.08
Hexachlorobutadiene		0.422	mg/L	1	0.400	<0.0100	106	10 - 171.61
2,4,6-Trichlorophenol		0.408	mg/L	1	0.400	<0.0100	102	19.23 - 144.93
2,4,5-Trichlorophenol		0.434	mg/L	1	0.400	<0.0100	108	40.38 - 144.67
2,4-Dinitrotoluene		0.226	mg/L	1	0.400	<0.0100	56	18.51 - 158.26
2,4-Dichlorophenoxyacetic acid		0.375	mg/L	1	0.400	<0.0100	94	10 - 165.81
Hexachlorobenzene		0.371	mg/L	1	0.400	<0.0100	93	2.35 - 182.77
2,4,5-Trichlorophenoxyproprionic acid		0.480	mg/L	1	0.400	<0.0100	120	22.1 - 144.74
Pentachlorophenol	[2]	0.650	mg/L	1	0.400	<0.0100	162	10 - 156.72

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pyridine	0.166	mg/L	1	0.400	<0.0100	42	12.6 - 50.02	9	20
1,4-Dichlorobenzene (para)	0.276	mg/L	1	0.400	<0.0100	69	13.67 - 139.56	6	20
o-Cresol	0.261	mg/L	1	0.400	<0.0100	65	18.58 - 114.05	6	20

continued ...

[2]Pentachlorophenol out of conrol limits for LCS/LCSD. Matrix spike recoveries are within limits showing process is within control. •

control spikes continued...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
m,p-Cresol	0.455	mg/L	1	0.400	<0.0100	114	10.62 - 252.59	9	20
Hexachloroethane	0.358	mg/L	1	0.400	<0.0100	90	25.17 - 146.78	4	20
Nitrobenzene	0.378	mg/L	1	0.400	<0.0100	94	26.78 - 144.08	2	20
Hexachlorobutadiene	0.428	mg/L	1	0.400	<0.0100	107	10 - 171.61	1	20
2,4,6-Trichlorophenol	0.405	mg/L	1	0.400	<0.0100	101	19.23 - 144.93	1	20
2,4,5-Trichlorophenol	0.427	mg/L	1	0.400	<0.0100	107	40.38 - 144.67	2	20
2,4-Dinitrotoluene	0.217	mg/L	1	0.400	<0.0100	54	18.51 - 158.26	4	20
2,4-Dichlorophenoxyacetic acid	0.350	mg/L	1	0.400	<0.0100	88	10 - 165.81	7	20
Hexachlorobenzene	0.349	mg/L	1	0.400	<0.0100	87	2.35 - 182.77	6	20
2,4,5-Trichlorophenoxyproprionic acid	0.453	mg/L	1	0.400	<0.0100	113	22.1 - 144.74	6	20
Pentachlorophenol [3]	0.675	mg/L	1	0.400	<0.0100	169	10 - 156.72	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	0.0879	0.111	mg/L	1	0.400	22	28	10 - 110.33
Phenol-d5	0.0722	0.0674	mg/L	1	0.400	18	17	10 - 82.08
Nitrobenzene-d5	0.332	0.328	mg/L	1	0.400	83	82	26.72 - 155
2-Fluorobiphenyl	0.446	0.442	mg/L	1	0.400	112	110	35.89 - 150.5
2,4,6-Tribromophenol	0.415	0.390	mg/L	1	0.400	104	98	10 - 204.91
Terphenyl-d14	0.526	0.512	mg/L	1	0.400	132	128	33.98 - 168.85

Laboratory Control Spike (LCS-1)

QC Batch: 32585 | Date Analyzed: 2006-12-07 | Analyzed By: TS
Prep Batch: 28354 | QC Preparation: 2006-12-07 | Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Mercury	0.00527	mg/L	1	0.00500	<0.0000360	105	92.7 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Mercury	0.00481	mg/L	1	0.00500	<0.0000360	96	92.7 - 120	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 32765 | Date Analyzed: 2006-12-12 | Analyzed By: JG
Prep Batch: 28501 | QC Preparation: 2006-12-12 | Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Vinyl Chloride	5.40	mg/L	50	5.00	<0.00675	108	73.4 - 124
1,1-Dichloroethene	5.48	mg/L	50	5.00	<0.00680	110	81 - 119

continued...

[3] Pentachlorophenol out of conrol limits for LCS/LCSD. Matrix spike recoveries are within limits showing process is within control. •

control spikes continued . . .

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
2-Butanone (MEK)	4.60	mg/L	50	5.00	<0.0266	92	39.5 - 116
Chloroform	5.11	mg/L	50	5.00	<0.00705	102	77.4 - 113
1,2-Dichloroethane (EDC)	5.05	mg/L	50	5.00	<0.00565	101	77.2 - 120
Benzene	5.03	mg/L	50	5.00	<0.00730	101	80.2 - 106
Carbon Tetrachloride	5.20	mg/L	50	5.00	<0.00395	104	68.8 - 132
Trichloroethene (TCE)	5.38	mg/L	50	5.00	<0.00585	108	80.9 - 113
Tetrachloroethene (PCE)	4.96	mg/L	50	5.00	0.018	99	47.9 - 111
Chlorobenzene	5.21	mg/L	50	5.00	<0.00270	104	82.9 - 109
1,4-Dichlorobenzene (para)	5.14	mg/L	50	5.00	<0.0108	103	70.9 - 108

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Vinyl Chloride	5.07	mg/L	50	5.00	<0.00675	101	73.4 - 124	6	20
1,1-Dichloroethene	5.14	mg/L	50	5.00	<0.00680	103	81 - 119	6	20
2-Butanone (MEK)	4.36	mg/L	50	5.00	<0.0266	87	39.5 - 116	5	20
Chloroform	4.78	mg/L	50	5.00	<0.00705	96	77.4 - 113	7	20
1,2-Dichloroethane (EDC)	4.76	mg/L	50	5.00	<0.00565	95	77.2 - 120	6	20
Benzene [4]	5.47	mg/L	50	5.00	<0.00730	109	80.2 - 106	8	20
Carbon Tetrachloride	4.78	mg/L	50	5.00	<0.00395	96	68.8 - 132	8	20
Trichloroethene (TCE)	5.00	mg/L	50	5.00	<0.00585	100	80.9 - 113	7	20
Tetrachloroethene (PCE)	4.60	mg/L	50	5.00	0.018	92	47.9 - 111	8	20
Chlorobenzene	4.82	mg/L	50	5.00	<0.00270	96	82.9 - 109	8	20
1,4-Dichlorobenzene (para)	4.76	mg/L	50	5.00	<0.0108	95	70.9 - 108	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.4	51.1	mg/L	50	50.0	101	102	86.7 - 111
Toluene-d8	50.5	50.0	mg/L	50	50.0	101	100	93.6 - 108
4-Bromofluorobenzene (4-BFB)	46.4	45.1	mg/L	50	50.0	93	90	88.4 - 110

Matrix Spike (MS-1) Spiked Sample: 110458

QC Batch: 32539 Date Analyzed: 2006-12-06 Analyzed By: RR
Prep Batch: 28309 QC Preparation: 2006-12-06 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Silver	1.21	mg/L	1	1.25	<0.00780	97	80.3 - 117
TCLP Arsenic	4.71	mg/L	1	5.00	<0.0590	94	83.6 - 116
TCLP Barium	10.7	mg/L	1	10.0	0.904	98	81.2 - 113
TCLP Cadmium	2.49	mg/L	1	2.50	<0.00200	100	75 - 117
TCLP Chromium	1.20	mg/L	1	1.00	0.144	106	75 - 125
TCLP Lead	4.89	mg/L	1	5.00	0.186	94	79.8 - 110
TCLP Selenium	4.44	mg/L	1	5.00	<0.100	89	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[4]LCSD analyte out of range. LCS/LCSD has a RPD within limits. Therfore, LCS shows extraction occured properly.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Silver	1.21	mg/L	1	0.00	<0.00780	97	80.3 - 117	0	20
TCLP Arsenic	4.87	mg/L	1	0.00	<0.0590	97	83.6 - 116	3	20
TCLP Barium	10.7	mg/L	1	0.00	0.904	98	81.2 - 113	0	20
TCLP Cadmium	2.47	mg/L	1	0.00	<0.00200	99	75 - 117	1	20
TCLP Chromium	1.20	mg/L	1	0.00	0.144	106	75 - 125	0	20
TCLP Lead	4.85	mg/L	1	0.00	0.186	93	79.8 - 110	1	20
TCLP Selenium	4.60	mg/L	1	0.00	<0.100	92	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110465

QC Batch: 32579 Date Analyzed: 2006-12-05 Analyzed By: DS
Prep Batch: 28351 QC Preparation: 2006-12-05 Prepared By: DS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyridine	0.0714	mg/L	1	0.400	<0.0100	18	12.6 - 50.02
1,4-Dichlorobenzene (para)	0.311	mg/L	1	0.400	<0.0100	78	13.67 - 139.56
o-Cresol	0.292	mg/L	1	0.400	<0.0100	73	18.58 - 114.05
m,p-Cresol	0.529	mg/L	1	0.400	<0.0100	132	10.62 - 252.59
Hexachloroethane	0.407	mg/L	1	0.400	<0.0100	102	25.17 - 146.78
Nitrobenzene	0.424	mg/L	1	0.400	<0.0100	106	26.78 - 144.08
Hexachlorobutadiene	0.482	mg/L	1	0.400	<0.0100	120	10 - 171.61
2,4,6-Trichlorophenol	0.451	mg/L	1	0.400	<0.0100	113	19.23 - 144.93
2,4,5-Trichlorophenol	0.326	mg/L	1	0.400	<0.0100	82	40.38 - 144.67
2,4-Dinitrotoluene	0.211	mg/L	1	0.400	<0.0100	53	18.51 - 158.26
2,4-Dichlorophenoxyacetic acid	0.350	mg/L	1	0.400	<0.0100	88	10 - 165.81
Hexachlorobenzene	0.385	mg/L	1	0.400	<0.0100	96	2.35 - 182.77
2,4,5-Trichlorophenoxyproprionic acid	0.504	mg/L	1	0.400	<0.0100	126	22.1 - 144.74
Pentachlorophenol	0.602	mg/L	1	0.400	<0.0100	150	10 - 156.72

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Pyridine	0.0714	mg/L	1	0.400	<0.0100	18	12.6 - 50.02	0	20
1,4-Dichlorobenzene (para)	0.347	mg/L	1	0.400	<0.0100	87	13.67 - 139.56	11	20
o-Cresol	0.289	mg/L	1	0.400	<0.0100	72	18.58 - 114.05	1	20
m,p-Cresol	0.497	mg/L	1	0.400	<0.0100	124	10.62 - 252.59	6	20
Hexachloroethane	0.431	mg/L	1	0.400	<0.0100	108	25.17 - 146.78	6	20
Nitrobenzene	0.451	mg/L	1	0.400	<0.0100	113	26.78 - 144.08	6	20
Hexachlorobutadiene	0.523	mg/L	1	0.400	<0.0100	131	10 - 171.61	8	20
2,4,6-Trichlorophenol	0.471	mg/L	1	0.400	<0.0100	118	19.23 - 144.93	4	20
2,4,5-Trichlorophenol	0.347	mg/L	1	0.400	<0.0100	87	40.38 - 144.67	6	20
2,4-Dinitrotoluene	0.193	mg/L	1	0.400	<0.0100	48	18.51 - 158.26	9	20
2,4-Dichlorophenoxyacetic acid	0.369	mg/L	1	0.400	<0.0100	92	10 - 165.81	5	20
Hexachlorobenzene	0.402	mg/L	1	0.400	<0.0100	100	2.35 - 182.77	4	20
2,4,5-Trichlorophenoxyproprionic acid	0.496	mg/L	1	0.400	<0.0100	124	22.1 - 144.74	2	20
Pentachlorophenol	0.608	mg/L	1	0.400	<0.0100	152	10 - 156.72	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	0.106	0.126	mg/L	1	0.4	26	32	10 - 110.33
Phenol-d5	0.0683	0.0736	mg/L	1	0.4	17	18	10 - 82.08
Nitrobenzene-d5	0.370	0.365	mg/L	1	0.4	92	91	26.72 - 155
2-Fluorobiphenyl	0.458	0.482	mg/L	1	0.4	114	120	35.89 - 150.5
2,4,6-Tribromophenol	0.373	0.402	mg/L	1	0.4	93	100	10 - 204.91
Terphenyl-d14	0.505	0.519	mg/L	1	0.4	126	130	33.98 - 168.85

Matrix Spike (MS-1) Spiked Sample: 110458

QC Batch: 32585 Date Analyzed: 2006-12-07 Analyzed By: TS
Prep Batch: 28354 QC Preparation: 2006-12-07 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Mercury	0.00536	mg/L	1	0.00500	0.00041	99	80 - 119

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Mercury	0.00551	mg/L	1	0.00	0.00041	102	80 - 119	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 110465

QC Batch: 32765 Date Analyzed: 2006-12-12 Analyzed By: JG
Prep Batch: 28501 QC Preparation: 2006-12-12 Prepared By: JG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Vinyl Chloride	5.09	mg/L	50	5.00	<0.00675	102	70.7 - 124
1,1-Dichloroethene	5.30	mg/L	50	5.00	<0.00680	106	80.6 - 122
2-Butanone (MEK)	4.81	mg/L	50	5.00	<0.0266	96	22.8 - 139
Chloroform	4.96	mg/L	50	5.00	<0.00705	99	79.2 - 115
1,2-Dichloroethane (EDC)	4.86	mg/L	50	5.00	<0.00565	97	75.3 - 129
Benzene	5.54	mg/L	50	5.00	0.312	104	81.7 - 109
Carbon Tetrachloride	4.88	mg/L	50	5.00	<0.00395	98	68.6 - 135
Trichloroethene (TCE)	5.15	mg/L	50	5.00	<0.00585	103	82.3 - 115
Tetrachloroethene (PCE)	4.73	mg/L	50	5.00	<0.0135	95	45.9 - 114
Chlorobenzene	4.86	mg/L	50	5.00	<0.00270	97	82.9 - 111
1,4-Dichlorobenzene (para)	4.61	mg/L	50	5.00	<0.0108	92	69.6 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Vinyl Chloride	5.04	mg/L	50	5.00	<0.00675	101	70.7 - 124	1	20
1,1-Dichloroethene	5.28	mg/L	50	5.00	<0.00680	106	80.6 - 122	0	20
2-Butanone (MEK)	4.82	mg/L	50	5.00	<0.0266	96	22.8 - 139	0	20
Chloroform	4.92	mg/L	50	5.00	<0.00705	98	79.2 - 115	1	20

continued...

matrix spikes continued . . .

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,2-Dichloroethane (EDC)	4.88	mg/L	50	5.00	<0.00565	98	75.3 - 129	0	20
Benzene	5.54	mg/L	50	5.00	0.312	104	81.7 - 109	0	20
Carbon Tetrachloride	4.89	mg/L	50	5.00	<0.00395	98	68.6 - 135	0	20
Trichloroethene (TCE)	5.15	mg/L	50	5.00	<0.00585	103	82.3 - 115	0	20
Tetrachloroethene (PCE)	4.75	mg/L	50	5.00	<0.0135	95	45.9 - 114	0	20
Chlorobenzene	4.88	mg/L	50	5.00	<0.00270	98	82.9 - 111	0	20
1,4-Dichlorobenzene (para)	4.63	mg/L	50	5.00	<0.0108	93	69.6 - 114	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	50.5	50.2	mg/L	50	50	101	100	83.1 - 116
Toluene-d8	49.4	49.4	mg/L	50	50	99	99	90.7 - 109
4-Bromofluorobenzene (4-BFB)	46.1	46.1	mg/L	50	50	92	92	86 - 112

Standard (ICV-1)

QC Batch: 32539 Date Analyzed: 2006-12-06 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.126	101	90 - 110	2006-12-06
TCLP Arsenic		mg/L	1.00	0.992	99	90 - 110	2006-12-06
TCLP Barium		mg/L	1.00	1.00	100	90 - 110	2006-12-06
TCLP Cadmium		mg/L	1.00	0.987	99	90 - 110	2006-12-06
TCLP Chromium		mg/L	1.00	0.980	98	90 - 110	2006-12-06
TCLP Lead		mg/L	1.00	1.00	100	90 - 110	2006-12-06
TCLP Selenium		mg/L	1.00	1.02	102	90 - 110	2006-12-06

Standard (CCV-1)

QC Batch: 32539 Date Analyzed: 2006-12-06 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.132	106	90 - 110	2006-12-06
TCLP Arsenic		mg/L	1.00	1.07	107	90 - 110	2006-12-06
TCLP Barium		mg/L	1.00	1.04	104	90 - 110	2006-12-06
TCLP Cadmium		mg/L	1.00	1.06	106	90 - 110	2006-12-06
TCLP Chromium		mg/L	1.00	1.05	105	90 - 110	2006-12-06
TCLP Lead		mg/L	1.00	1.08	108	90 - 110	2006-12-06
TCLP Selenium		mg/L	1.00	1.07	107	90 - 110	2006-12-06

Standard (CCV-1)

QC Batch: 32579 Date Analyzed: 2006-12-05 Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyridine	[5]	mg/L	60.0	40.2	67	80 - 120	2006-12-05
1,4-Dichlorobenzene (para)		mg/L	60.0	59.7	100	80 - 120	2006-12-05
o-Cresol	[6]	mg/L	60.0	46.1	77	80 - 120	2006-12-05
m,p-Cresol	[7]	mg/L	60.0	44.9	75	80 - 120	2006-12-05
Hexachloroethane		mg/L	60.0	65.3	109	80 - 120	2006-12-05
Nitrobenzene		mg/L	60.0	57.7	96	80 - 120	2006-12-05
Hexachlorobutadiene	[8]	mg/L	60.0	74.4	124	80 - 120	2006-12-05
2,4,6-Trichlorophenol		mg/L	60.0	59.3	99	80 - 120	2006-12-05
2,4,5-Trichlorophenol		mg/L	60.0	53.6	89	80 - 120	2006-12-05
2,4-Dinitrotoluene		mg/L	60.0	71.8	120	80 - 120	2006-12-05
2,4-Dichlorophenoxyacetic acid	[9]	mg/L	60.0	84.1	140	80 - 120	2006-12-05
Hexachlorobenzene		mg/L	60.0	58.6	98	80 - 120	2006-12-05
2,4,5-Trichlorophenoxyproprionic acid		mg/L	60.0	67.2	112	80 - 120	2006-12-05
Pentachlorophenol		mg/L	60.0	63.1	105	80 - 120	2006-12-05

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		52.4	mg/L	1	60.0	87	80 - 120
Phenol-d5	[10]	47.3	mg/L	1	60.0	79	80 - 120
Nitrobenzene-d5		54.5	mg/L	1	60.0	91	80 - 120
2-Fluorobiphenyl		57.8	mg/L	1	60.0	96	80 - 120
2,4,6-Tribromophenol	[11]	75.4	mg/L	1	60.0	126	80 - 120
Terphenyl-d14		69.0	mg/L	1	60.0	115	80 - 120

Standard (ICV-1)

QC Batch: 32585 Date Analyzed: 2006-12-07 Analyzed By: TS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Mercury		mg/L	0.00500	0.00516	103	80 - 120	2006-12-07

Standard (CCV-1)

QC Batch: 32585 Date Analyzed: 2006-12-07 Analyzed By: TS

[5]Pyridine outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[6]o-Cresol outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[7]m,p-Cresol outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[8]Hexachlorobutadiene outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[9]2,4-Dichlorophenoxyacetic acid outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[10]Phenol-d5 outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.
[11]2,4,6-Tribromophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Mercury		mg/L	0.00500	0.00494	99	80 - 120	2006-12-07

Standard (CCV-1)

QC Batch: 32765 Date Analyzed: 2006-12-12 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		mg/L	50.0	52.8	106	80 - 120	2006-12-12
1,1-Dichloroethene		mg/L	50.0	50.7	101	80 - 120	2006-12-12
2-Butanone (MEK)		mg/L	50.0	45.8	92	80 - 120	2006-12-12
Chloroform		mg/L	50.0	50.3	101	80 - 120	2006-12-12
1,2-Dichloroethane (EDC)		mg/L	50.0	48.3	97	80 - 120	2006-12-12
Benzene		mg/L	50.0	53.8	108	80 - 120	2006-12-12
Carbon Tetrachloride		mg/L	50.0	50.4	101	80 - 120	2006-12-12
Trichloroethene (TCE)		mg/L	50.0	52.9	106	80 - 120	2006-12-12
Tetrachloroethene (PCE)		mg/L	50.0	52.4	105	80 - 120	2006-12-12
Chlorobenzene		mg/L	50.0	51.2	102	80 - 120	2006-12-12
1,4-Dichlorobenzene (para)		mg/L	50.0	49.9	100	80 - 120	2006-12-12

Report Date: December 13, 2006
6-0142

Work Order: 6120117
Hobbs Facility

Page Number: 14 of 14

6120117

CHAIN—OF—CUSTODY RECORD

LArson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Wood Group ESP
SITE MANAGER: M. Larson
PROJECT NO.: 6-0142
PROJECT NAME: Hobbs Facility
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TCLP Semi volatile	TCLP Volatiles	TCLP Metals (8)	Reactivity	Corrosivity	Ignitability	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
11/29/06	15:00	✓			Wastewater (See back)	5	✓	✓	✓	✓	✓	✓	110219	

SAMPLED BY: (Signature)
DATE: 11/29/06
TIME: 15:00

RELINQUISHED BY: (Signature)
DATE: 11/30/06
TIME: 0940

RELINQUISHED BY: (Signature)
DATE:
TIME:

RECEIVED BY: (Signature)
DATE:
TIME:

RECEIVED BY: (Signature)
DATE:
TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Trace Analysis, Inc.
ADDRESS: 5002 Basin St. Ste A-1
CITY: Midland STATE: Tx ZIP: 79703
CONTACT: A. Lorney PHONE: (432) 689-6301
RECEIVED BY: (Signature)
DATE: 11.30.06 TIME: 9:50 am

SAMPLE CONDITION WHEN RECEIVED:
4°C intact
Kimberly Bordin 12/1/06 10:40am

LA CONTACT PERSON: Mark Larson

SAMPLE TYPE: Water

lone Star P2104343

WA

all tests - Lubbock

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
NOV 09 2006
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Form C-138
Revised June 10, 2003

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☐ ☐Verbal Approval Received: Yes ☐ No ☐	4. Generator Electric Submersible Pump
	5. Originating Site Hobbs Pump Yard
2. Management Facility Destination Sundance Services Inc.	6. Transporter Unknown
3. Address of Facility Operator P.O. Box 1737 Eunice NM 88231	8. State New Mexico
7. Location of Material (Street Address or ULSTR) 8426 N. Dal Paso, Hobbs, NM 88241	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

The following analytical results are from Electric Submersible Pump's Hobbs Facility. This waste is generated by the washing off of oilfield rental tools. All equipment is washed into the sump and pumped to a waste water tank outside the building in a bermed area. I have attached a certificate of waste status and chain of custody. Sundance would like approval to accept this material into our Parabo Disposal Facility.

DENIED 11/15/06 BAJ

Received Hobbs NM

Estimated Volume 240 bbls. cy Known Volume (to be entered by the operator at the end of the haul) cy

SIGNATURE [signature] TITLE: President DATE: 11/2706
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Donna L. Roach TELEPHONE NO. 505-394-2511 x 201

E-MAIL ADDRESS ssidonna@aol.com

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

NOTE LAST PAGE - GJ 11.6.06

CERTIFICATE OF WASTE STATUS

NON-EXEMPT WASTE MATERIAL

ORIGINATING LOCATION: ESP 8426 N. Dal Paso Hobbs, N.M. 88240

SOURCE: Oil field Rinsate

DISPOSAL LOCATION: Sundance Services, Parabo Facility
P.O. Box 1737 Eunice, N.M.

As a condition of acceptance for disposal, I hearby certify that this waste is a non-exempt waste as defined by the Environmental Protection Agency's (EPA) July 1988 Regulatory Determination. To my knowledge, this waste will be analyzed pursuant to the provisions of 40 CFR Part 261 to verify the nature as non-hazardous. I further certify that to my knowledge no "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, Section 261.3.

I, the undersigned as the agent for Wood Group ESP concur with the status of the waste from the subject site.

Name Rodrigo Burrola

Title/Angency ESP

Address 8426 N. Dal Paso
Hobbs, N.M. 88240

Signature Rodrigo Burrola

Date 11-1-06

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of____

Company Name: Hard Group ESP
Project Manager: Rod
Address: 8426 W Del Paso
City: Hobbs State: NM Zip:
Phone #: 392 7997 Fax #:
Project #: Water Sample Project Owner:
Project Name:
Project Location:
Sampler Name:

BILL TO
P.O. #:
Company: ESP
Attn: Rod
Address: 8426 Del Paso
City: Hobbs
State: Zip:
Phone #:
Fax #:

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER	PRESERV: ACID/BASE	ICE / COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TULP
H11462-1	Water Sample				X								8/23/01		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: Date: 8/23/01 Time: | Received By:

Relinquished By: | Date: 8/23/01 Time: | Received By: (Lab Staff)

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

(505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
WOOD GROUP E S P
ATTN: ROD
0210 N. DAL PASO
HOBBS, NM 88240
FAX TO

Receiving Date: 08/23/06
Reporting Date: 08/24/06
Project Number: NOT GIVEN
Project Name: WATER SAMPLE
Project Location: NOT GIVEN
Lab Number: H21462-1
Sample ID: WATER SAMPLE

Analysis Date: 08/24/06
Sampling Date: 08/23/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

TCLP VOLATILES (ppm)	EPA LIMIT	Sample Result H21462-1	Method Blank	QC	%Recov	True Value QC
Vinyl Chloride	0.20	<0.005	<0.005	0.115	115	0.100
1,1-Dichloroethylene	0.7	<0.005	<0.005	0.082	82	0.100
Methyl Ethyl Ketone	200	0.208	<0.050	0.097	97	0.100
Chloroform	6.0	<0.005	<0.005	0.107	107	0.100
1,2-Dichloroethane	0.5	<0.005	<0.005	0.098	98	0.100
Benzene	0.5	0.014	<0.005	0.090	90	0.100
Carbon Tetrachloride	0.5	<0.005	<0.005	0.096	96	0.100
Trichloroethylene	0.5	<0.005	<0.005	0.106	106	0.100
Tetrachloroethylene	0.7	<0.005	<0.005	0.112	112	0.100
Chlorobenzene	100	<0.005	<0.005	0.107	107	0.100
1,4-Dichlorobenzene*	7.5	0.016	0.011	0.104	104	0.100

*Analyte detected at comparable levels in sample & method blank

	% RECOVERY
Fluorobenzene	109
Toluene-d8	115
Bromofluorobenzene	108

METHOD: EPA SW 846 8260; 1311

Burgess J. Austin, Ph.D.

8/24/06
Date

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
WOOD GROUP E.S.P.
ATTN: ROD
5210 N. DAL PASO
HOBBS, NM 88240
FAX TO:

Receiving Date: 08/23/06
Reporting Date: 08/28/06
Project Number: NOT GIVEN
Project Name: WATER SAMPLE
Project Location: NOT GIVEN
Lab Number: H11462-1
Sample ID: WATER SAMPLE

Analysis Date: 08/25/06
Sampling Date: 08/23/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

TCLP SEMIVOLATILES (ppm)	EPA LIMIT	Sample Result H11462-1	Method Blank	QC	% Recov	True Value QC
Pyridine	5.00	<0.050	<0.005	0.006	12	0.050
1,4-Dichlorobenzene	7.50	<0.050	<0.005	0.028	56	0.050
o-Cresol	200	<0.050	<0.005	0.036	72	0.050
m, p-Cresol	200	<0.050	<0.005	0.035	70	0.050
Hexachloroethane	3.00	<0.050	<0.005	0.024	48	0.050
Nitrobenzene	2.00	<0.050	<0.005	0.039	78	0.050
Hexachloro-1,3-butadiene	0.500	<0.050	<0.005	0.033	66	0.050
2,4,6-Trichlorophenol	2.00	<0.050	<0.005	0.047	94	0.050
2,4,5-Trichlorophenol	400	<0.050	<0.005	0.045	90	0.050
2,4-Dinitrotoluene	0.130	<0.050	<0.005	0.043	86	0.050
Hexachlorobenzene	0.130	<0.050	<0.005	0.046	92	0.050
Pentachlorophenol	100	<0.050	<0.005	0.049	98	0.050

	% RECOVERY
2-Fluorophenol	57
Phenol-d5	39
Nitrobenzene-d5	82
2-Fluorobiphenyl	87
2,4,6-Tribromophenol	105
Terphenyl-d14	106

METHODS: EPA SW-846 1311, 8270, 3510

Burgess J. A. Cooke, Ph. D.

8/28/06
Date

CARDINAL LABORATORIES

[illegible] BEECHWOOD · ABILENE, TX 79603
PHONE (325) 673-7001 · FAX (325) 673-7020 · 101 E. MARLAND · HOBBS, NM 88240

ANALYTICAL RESULTS FOR
WOOD GROUP E S P
ATTN: ROD
8426 N. DAL PASO
HOBBS, NM 88240
FAX TO:

Receiving Date: 08/23/06
Reporting Date: 09/05/06
Project Number: NOT GIVEN
Project Name: WATER SAMPLE
Project Location: NOT GIVEN

Sampling Date: 08/03/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: HM

TCLP METALS

LAB NO.	SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
ANALYSIS DATE		08/29/06	09/01/06	08/30/06	09/01/06	09/05/06	09/01/06	09/01/06	08/29/06
EPA MCL		5	5	100	1	5	5	0.2	1
H11461-1	WATER SAMPLE	< 1	< 1	18.0	< 0.1	6.31	3.57	< 0.02	< 0.1
Quality Control		0.149	2.79	67.7	0.99	2.01	1.83	0.0034	0.054
True Value QC		0.150	3.00	75.0	1.00	2.00	2.00	0.0040	0.050
% Recovery		99	93	90	99	101	92	85	108
Relative Standard Deviation		5.1	1.1	2.2	1.1	0.2	4.7	18	0.5
METHODS: EPA 1311, 600/4-91/0		206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2

Chemist

Date

H11461

[illegible]

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
WOOD GROUP E.S.P.
ATTN: ROD
8210 N. DAL PASO
HOBBS, NM 88240
FAX TO:

Receiving Date: 08/23/06
Reporting Date: 09/05/06
Project Number: NOT GIVEN
Project Name: WATER SAMPLE
Project Location: NOT GIVEN

Sampling Date: 08/23/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: HM/BC

9.13.06

LAB NO.	SAMPLE ID	REACTIVITY Sulfide (ppm)	REACTIVITY Cyanide (ppm)	CORROSIVITY (pH)	IGNITABILITY (°F)
ANALYSIS DATE		08/27/06	08/27/06	08/25/06	08/25/06
H11462-1	WATER SAMPLE	Not reactive	Not reactive	1.22	>140
Quality Control		NR	NR	7.00	NR
True Value QC		NR	NR	7.00	NR
% Recovery		NR	NR	100	NR
Relative Percent Difference		NR	NR	<0.1	NR

METHOD: EPA SW-846 7.3, 7.2, 1010, 1311; 40 CFR 261

Chemist

9/05/06
Date

H11462R

Highlander Environmental Corp.

Midland, Texas

October 7, 2004

Mr. Wayne Price
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Re: Soil Sample Collection for the Wood Group ESP, Inc. Facility Located in the NW/4, NW/4, NW/4, Section 35, Township 17 South, Range 38 East, Hobbs, Lea County, New Mexico

Dear Mr. Price:

Wood Group ESP, Inc. (ESP, INC.) has retained Highlander Environmental Corp. (Highlander) to collect soil samples at a concrete sump located at Wood Group ESP Facility located at 8426 North Dal Paso, Hobbs, New Mexico (Facility). The Facility is located in the NW/4, NW/4, NW/4, Section 35, Township 17 South, Range 38 East, Lea County, New Mexico. Figure 1 presents a Site location and topographic map.

Facility Background

The Facility operates under an NMOCD issued discharge plan (BW-164), and is a local service center for reconditioning electric submersible pumps, used in oil and gas production. The submersible pumps are delivered to the Facility, and initially cleaned to remove oil residues and scale. The cleaning process occurs in the shop building, on a concrete pad equipped with a fiberglass-lined collection sump and containment. The external surfaces are cleaned using a high-pressure washer. The internal surfaces are cleaned by circulating hydrochloric acid through the pump in a closed system. Wash water and acid drips drain to the collection sump, are transferred to an aboveground tank, and stored at the Facility until disposal is arranged.

After cleaning, the pumps are reconditioned, internally protected with a light coating of mineral oil, and placed on storage racks, located on the north, east and south sides of the Facility, until retrieved by the customer. Drummed chemicals (i.e.,

hydrochloric acid, etc.) are stored on concrete pads located on the east side of the shop building.

The Facility is not connected to a publicly owned treatment works (POTW). However, a septic system is located near the northwest corner of the Facility. A water well, used for non-potable purposes (i.e., wash water and rest rooms), is located approximately 50 feet southeast of the shop building. Figure 2 presents a Facility drawing.

Site Inspection and Regulatory

The New Mexico Oil Conservation Division (NMOCD) conducted an inspection of the Facility, in conjunction with the renewal of its discharge plan. The NMOCD addressed several issues identified during the inspection. The issues are summarized below:

1. Contaminated soil was observed on the east edge of the concrete containment (sump) located east of the shop. The soil impact appeared to from leakage from the east wall containment. The NMOCD recommended soil samples at this area to evaluate to the soils.

2. At the sump, the NMOCD recommended sampling the native soil underneath the concrete sump to evaluate for potential leakage.

Sump Soil Sampling

On September 10, 2004, Highlander Environmental personnel inspected and collected samples from the Facility. As requested by the NMOCD, soil samples were collected on the east side of the concrete containment, which measured 20' x 30' with a retaining wall height of 16". The impacted area measured approximately 3' x 20'. In addition, soil samples were collected at the concrete sump which measured 3.0' x 3.0' at a depth of 3.0' deep.

Soil samples were collected at each location using a stainless steel hand auger. Auger hole AH-1 was installed in the 3.0' x 3.0' sump area. In order to sample underneath the sump, the concrete was broken with a jackhammer to access the native soils. Soil samples were collected at 0-1' and 1-1.5' below the sump bottom. Deeper samples could not be collected due to a dense caliche formation. Once the soil samples were collected, the auger hole was grouted. Auger holes AH-2 and AH-3 were installed on the east edge outside the concrete containment. Soil samples were collected at AH-2 (0-1') and AH-3 (0-1' and (1-1.5'). The auger hole locations are shown in Figure 2.

The soil samples were collected, immediately placed in clean glass sample jars, labeled, placed in an ice chest, chilled, and transferred, under chain-of-custody control, for analyses. As requested by the NMCOD, the selected samples were analyzed for BTEX

(8021B), TPH (8015 Modified) and chloride (9253). The laboratory reports and chain of custody are shown in Appendix A. The soil sample results are summarized in Table 1.

Soil Sample Results

Referring to Table 1, the sump area did not show any significant impact to the subsurface soils. AH-1 showed a trace of TPH of 72.7 mg/kg at 0-1', which declined to 19.0 mg/kg at 1-1.5'. The BTEX analyses were below the method detection limit. In addition, the chloride concentrations were below 500 mg/kg.

In the area outside the containment, AH-2 and AH-3 samples did not show TPH or BTEX above the method detection limit at 0-1' and 1-1.5' below surface. The chloride concentrations were below 100 mg/kg. Based on the results, this area appears to have a surface impact.

Conclusions and Recommendations

Based the results, the sump area does not show a significant impact to the soils underneath the sump. The TPH and chloride concentrations detected appears have a minimal impact to the soils and do not appear to be an environmental concern. In order to prevent additional leakage from containment, ESP recommends the concrete containment and sump be coated with a urethane coating. This will be applied to the concrete to form a resistant barrier. The CIM 1000 Commercial Industrial Membrane specifications are shown in Appendix B.

On the surface impact outside the containment, ESP proposes to treat this area by tilling and applying nitrogen fertilizer and water to promote in-situ microbial degradation.

If you require any additional information or have any questions or comments concerning the assessment report, please call.

Sincerely,
Highlander Environmental Corp.

Ike Tavarez
Senior Project Manager

cc: Alfredo Bersosa, Wood Group ESP, Inc.

FIGURES

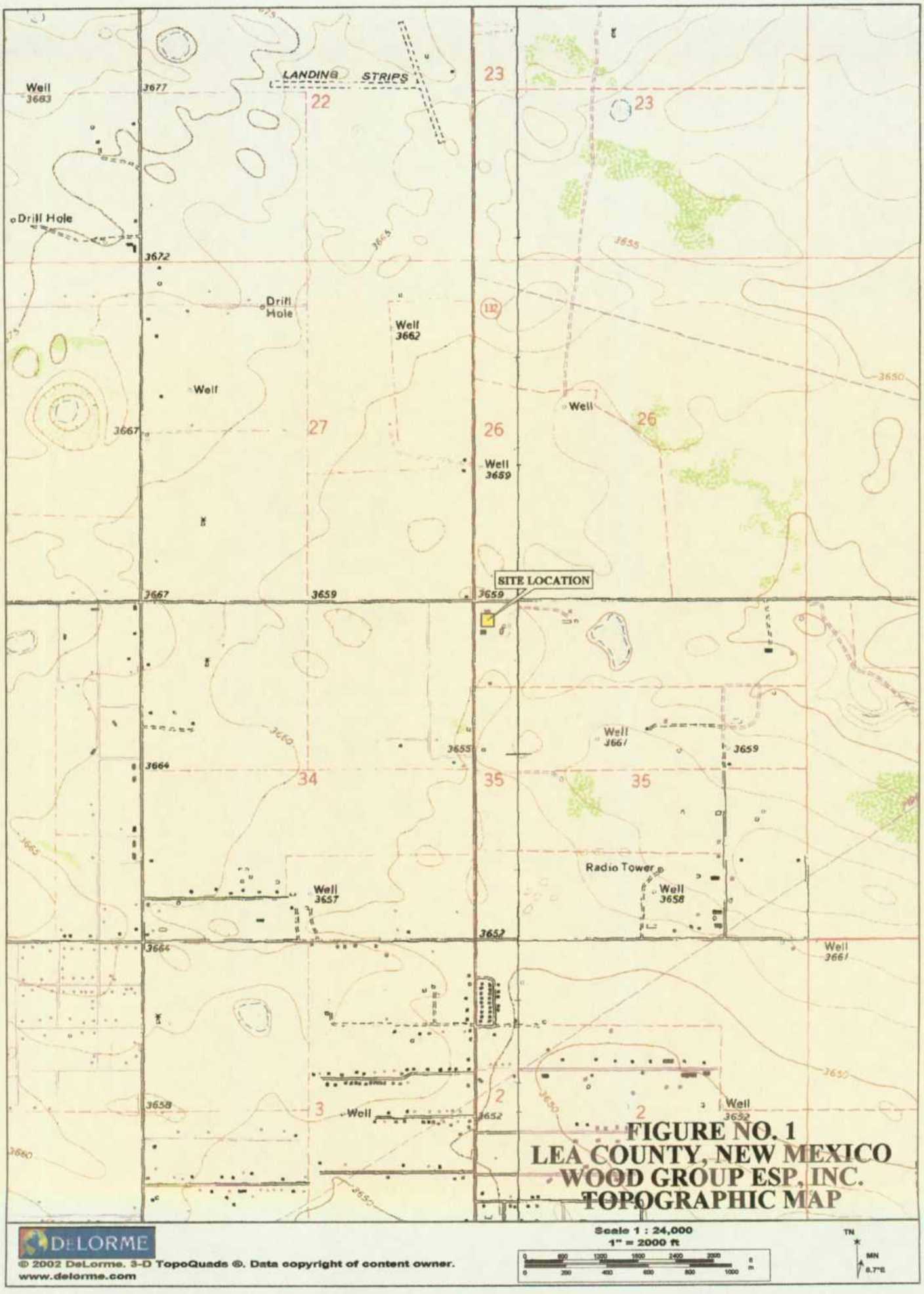
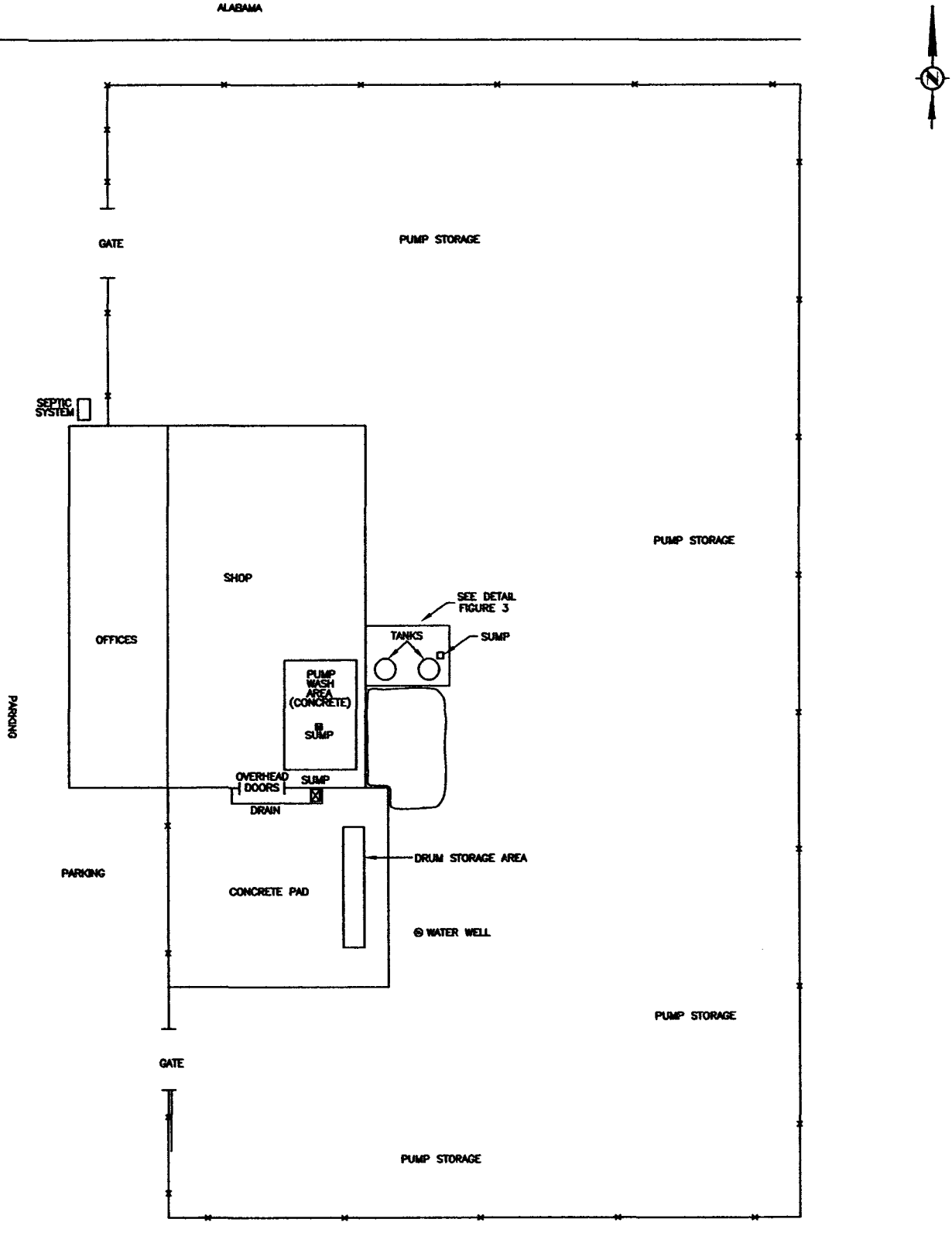


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
WOOD GROUP ESP, INC.
TOPOGRAPHIC MAP

Scale 1 : 24,000
1" = 2000 ft

TN
MN
8.7°E



NOT TO SCALE

DATE:	10/1/04
DWN. BY:	JJ
FILE:	C:\Wood Group\SITE-1

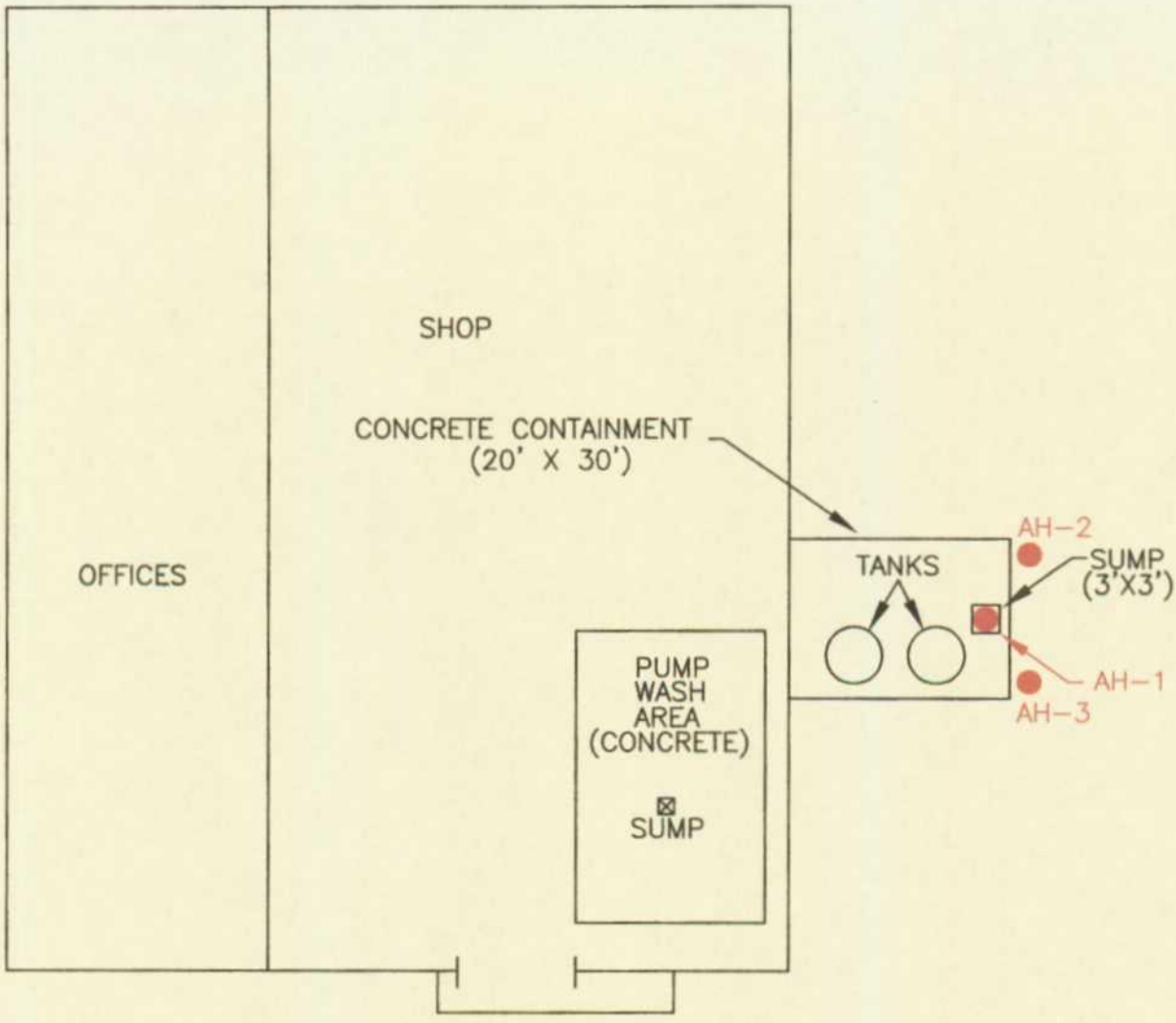
FIGURE NO. 2

LEA COUNTY, NEW MEXICO

WOOD GROUP ESP, INC.
HOBBS FACILITY

SITE MAP

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



● SAMPLE LOCATIONS (APPROXIMATE)

NOT TO SCALE

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

WOOD GROUP ESP, INC.
HOBBS FACILITY

SITE MAP

DATE: 10/1/04

DWN. BY: JJ

FILE:

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLE

Table 1
Wood Group ESP, Inc. Facility
Hobbs, Lea County, New Mexico

(concentrations in mg/kg)

Sample ID	Depth (ft)	TPH			B	T	E	X	Chloride
		DRO	GRO	Total					
AH-1	0-1	54.3	18.4	72.7	<0.025	<0.025	<0.025	<0.025	447
	1-1.5	19.0	<10.0	19.0	-	-	-	-	362
AH-2	0-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<20.0
AH-3	0-1	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	85.1
AH-3	1-1.5	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	<20.0

APPENDIX A

Analytical Report

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez
Highlander Environmental Corp.
1910 N. Big Spring St.
Midland, TX 79705

Project: Wood Group ESP/ Hobbs Facility
Project Number: 2232
Location: Lea County, NM

Lab Order Number: 4I14005

Report Date: 09/21/04

Highlander Environmental Corp.	Project: Wood Group ESP/ Hobbs Facility	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2232	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	09/21/04 12:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-1 (0-1)	4I14005-01	Soil	09/10/04 00:00	09/13/04 17:00
AH-1 (1-1.5')	4I14005-02	Soil	09/10/04 00:00	09/13/04 17:00
AH-2 (0-1)	4I14005-03	Soil	09/10/04 00:00	09/13/04 17:00
AH-3 (0-1)	4I14005-04	Soil	09/10/04 00:00	09/13/04 17:00
AH-3 (1-1.5')	4I14005-05	Soil	09/10/04 00:00	09/13/04 17:00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 (0-1) (4I14005-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI41715	09/15/04	09/15/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.7 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.4 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	**54.3**	10.0	mg/kg dry	1	EI41404	09/14/04	09/17/04	EPA 8015M	
Diesel Range Organics >C12-C35	**18.4**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**72.7**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*76.0 %*	*70-130*		"	"	"	"	
AH-1 (1-1.5') (4I14005-02) Soil									
Gasoline Range Organics C6-C12	**19.0**	10.0	mg/kg dry	1	EI41404	09/14/04	09/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**19.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*75.2 %*	*70-130*		"	"	"	"	
AH-2 (0-1) (4I14005-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI41715	09/15/04	09/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.3 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI41404	09/14/04	09/18/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.0 %*	*70-130*		"	"	"	"	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-3 (0-1) (4I14005-04) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI41715	09/15/04	09/16/04	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.6 %*	*80-120*		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI41404	09/14/04	09/19/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*73.2 %*	*70-130*		"	"	"	"	
AH-3 (1-1.5') (4I14005-05) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI41404	09/14/04	09/19/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.4 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp.	Project: Wood Group ESP/ Hobbs Facility	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2232	**Reported:**
Midland TX, 79705	Project Manager: Ike Tavarez	09/21/04 12:43

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 (0-1) (4I14005-01) Soil									
Chloride	**447**	20.0	mg/kg Wet	2	EI41718	09/14/04	09/17/04	SW 846 9253	
% Solids	**94.0**		%	1	EI41601	09/14/04	09/14/04	% calculation	
AH-1 (1-1.5') (4I14005-02) Soil									
Chloride	**362**	20.0	mg/kg Wet	2	EI41718	09/14/04	09/17/04	SW 846 9253	
% Solids	**92.0**		%	1	EI41601	09/14/04	09/14/04	% calculation	
AH-2 (0-1) (4I14005-03) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI41718	09/14/04	09/17/04	SW 846 9253	
% Solids	**84.0**		%	1	EI41601	09/14/04	09/14/04	% calculation	
AH-3 (0-1) (4I14005-04) Soil									
Chloride	**85.1**	20.0	mg/kg Wet	2	EI41718	09/14/04	09/17/04	SW 846 9253	
% Solids	**88.0**		%	1	EI41601	09/14/04	09/14/04	% calculation	
AH-3 (1-1.5') (4I14005-05) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI41718	09/14/04	09/17/04	SW 846 9253	
% Solids	**88.0**		%	1	EI41601	09/14/04	09/14/04	% calculation	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41404 - Solvent Extraction (GC)										
Blank (EI41404-BLK1)				Prepared: 09/14/04 Analyzed: 09/16/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*39.6*		*mg/kg*	*50.0*		*79.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.4*		*"*	*50.0*		*72.8*	*70-130*			
Blank (EI41404-BLK2)				Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*41.9*		*mg/kg*	*50.0*		*83.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.0*		*"*	*50.0*		*72.0*	*70-130*			
LCS (EI41404-BS1)				Prepared: 09/14/04 Analyzed: 09/16/04						
Gasoline Range Organics C6-C12	414	10.0	mg/kg wet	500		82.8	75-125			
Diesel Range Organics >C12-C35	469	10.0	"	500		93.8	75-125			
Total Hydrocarbon C6-C35	883	10.0	"	1000		88.3	75-125			
Surrogate: 1-Chlorooctane	*40.7*		*mg/kg*	*50.0*		*81.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.1*		*"*	*50.0*		*80.2*	*70-130*			
LCS (EI41404-BS2)				Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	465	10.0	mg/kg wet	500		93.0	75-125			
Diesel Range Organics >C12-C35	496	10.0	"	500		99.2	75-125			
Total Hydrocarbon C6-C35	961	10.0	"	1000		96.1	75-125			
Surrogate: 1-Chlorooctane	*43.2*		*mg/kg*	*50.0*		*86.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*39.1*		*"*	*50.0*		*78.2*	*70-130*			
Calibration Check (EI41404-CCV1)				Prepared: 09/14/04 Analyzed: 09/16/04						
Gasoline Range Organics C6-C12	440		mg/kg	500		88.0	80-120			
Diesel Range Organics >C12-C35	584		"	500		117	80-120			
Total Hydrocarbon C6-C35	1020		"	1000		102	80-120			
Surrogate: 1-Chlorooctane	*52.6*		*"*	*50.0*		*105*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.3*		*"*	*50.0*		*123*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41404 - Solvent Extraction (GC)										
Calibration Check (EI41404-CCV2)				Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	438		mg/kg	500		87.6	80-120			
Diesel Range Organics >C12-C35	520		"	500		104	80-120			
Total Hydrocarbon C6-C35	958		"	1000		95.8	80-120			
Surrogate: 1-Chlorooctane	*51.3*		*"*	*50.0*		*103*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.8*		*"*	*50.0*		*77.6*	*70-130*			
Matrix Spike (EI41404-MS1)		**Source: 4I14003-12**		Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	572	10.0	mg/kg dry	617	11.8	90.8	75-125			
Diesel Range Organics >C12-C35	773	10.0	"	617	53.9	117	75-125			
Total Hydrocarbon C6-C35	1350	10.0	"	1230	65.7	104	75-125			
Surrogate: 1-Chlorooctane	*56.7*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.2*		*"*	*50.0*		*112*	*70-130*			
Matrix Spike (EI41404-MS2)		**Source: 4I14004-06**		Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	533	10.0	mg/kg dry	549	ND	97.1	75-125			
Diesel Range Organics >C12-C35	616	10.0	"	549	ND	112	75-125			
Total Hydrocarbon C6-C35	1150	10.0	"	1100	ND	105	75-125			
Surrogate: 1-Chlorooctane	*56.4*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.1*		*"*	*50.0*		*82.2*	*70-130*			
Matrix Spike Dup (EI41404-MSD1)		**Source: 4I14003-12**		Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	661	10.0	mg/kg dry	617	11.8	105	75-125	14.4	20	
Diesel Range Organics >C12-C35	757	10.0	"	617	53.9	114	75-125	2.09	20	
Total Hydrocarbon C6-C35	1420	10.0	"	1230	65.7	110	75-125	5.05	20	
Surrogate: 1-Chlorooctane	*57.3*		*mg/kg*	*50.0*		*115*	*70-130*			
Surrogate: 1-Chlorooctadecane	*56.7*		*"*	*50.0*		*113*	*70-130*			
Matrix Spike Dup (EI41404-MSD2)		**Source: 4I14004-06**		Prepared: 09/14/04 Analyzed: 09/17/04						
Gasoline Range Organics C6-C12	507	10.0	mg/kg dry	549	ND	92.3	75-125	5.00	20	
Diesel Range Organics >C12-C35	609	10.0	"	549	ND	111	75-125	1.14	20	
Total Hydrocarbon C6-C35	1120	10.0	"	1100	ND	102	75-125	2.64	20	
Surrogate: 1-Chlorooctane	*54.0*		*mg/kg*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*36.9*		*"*	*50.0*		*73.8*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41715 - EPA 5030C (GC)										
Blank (EI41715-BLK1)				Prepared & Analyzed: 09/15/04						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*94.1*		*ug/kg*	*100*		*94.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*82.3*		"	*100*		*82.3*	*80-120*			
LCS (EI41715-BS1)				Prepared & Analyzed: 09/15/04						
Benzene	90.4		ug/kg	100		90.4	80-120			
Toluene	93.0		"	100		93.0	80-120			
Ethylbenzene	94.1		"	100		94.1	80-120			
Xylene (p/m)	214		"	200		107	80-120			
Xylene (o)	102		"	100		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	*87.1*		"	*100*		*87.1*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*99.1*		"	*100*		*99.1*	*80-120*			
Calibration Check (EI41715-CCV1)				Prepared: 09/15/04 Analyzed: 09/17/04						
Benzene	103		ug/kg	100		103	80-120			
Toluene	99.9		"	100		99.9	80-120			
Ethylbenzene	93.0		"	100		93.0	80-120			
Xylene (p/m)	209		"	200		104	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*116*		"	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*93.0*		"	*100*		*93.0*	*80-120*			
Matrix Spike (EI41715-MS1)	**Source: 4I14003-22**			Prepared: 09/15/04 Analyzed: 09/17/04						
Benzene	106		ug/kg	100	ND	106	80-120			
Toluene	107		"	100	ND	107	80-120			
Ethylbenzene	105		"	100	ND	105	80-120			
Xylene (p/m)	237		"	200	ND	118	80-120			
Xylene (o)	113		"	100	ND	113	80-120			
Surrogate: a,a,a-Trifluorotoluene	*116*		"	*100*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*104*		"	*100*		*104*	*80-120*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41715 - EPA 5030C (GC)										
Matrix Spike Dup (EI41715-MSD1)	**Source: 4I14003-22**			Prepared: 09/15/04 Analyzed: 09/17/04						
Benzene	98.2		ug/kg	100	ND	98.2	80-120	7.64	20	
Toluene	98.8		"	100	ND	98.8	80-120	7.97	20	
Ethylbenzene	98.8		"	100	ND	98.8	80-120	6.08	20	
Xylene (p/m)	223		"	200	ND	112	80-120	5.22	20	
Xylene (o)	107		"	100	ND	107	80-120	5.45	20	
Surrogate: a,a,a-Trifluorotoluene	*110*		"	*100*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*98.4*		"	*100*		*98.4*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41601 - General Preparation (Prep)										
Blank (EI41601-BLK1)				Prepared & Analyzed: 09/14/04						
% Solids	100		%							
Duplicate (EI41601-DUP1)		**Source: 4I13002-25**		Prepared & Analyzed: 09/14/04						
% Solids	89.0		%		89.0			0.00	20	
Batch EI41718 - Water Extraction										
Blank (EI41718-BLK1)				Prepared: 09/13/04 Analyzed: 09/17/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EI41718-MS1)		**Source: 4I13001-21**		Prepared: 09/13/04 Analyzed: 09/17/04						
Chloride	713	20.0	mg/kg Wet	500	213	100	80-120			
Matrix Spike Dup (EI41718-MSD1)		**Source: 4I13001-21**		Prepared: 09/13/04 Analyzed: 09/17/04						
Chloride	702	20.0	mg/kg Wet	500	213	97.8	80-120	1.55	20	
Reference (EI41718-SRM1)				Prepared & Analyzed: 09/17/04						
Chloride	5000	20.0	mg/kg Wet				80-120			

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 9-21-04

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Highlander

Date/Time: 9/13/04 17:00

Order #: 4I14005

Initials: CDK

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	6.0 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	(Not present)
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: -_____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

_____

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: WoodGroup ESP

SITE MANAGER: IKE Tavarez 425-3878

PROJECT NO.: 2232

PROJECT NAME: Wood Group, Hobbs Facility. Lea County, New Mexico

LAB I.D. NUMBER 414005	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 (9015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Chloride
-01	9/10/04		S			AH-1 (0-1)	1						X		X														X	
-02	9/10/04		S			AH-1 (1-1.5')	1								X														X	
-03	9/10/04		S			AH-2 (0-1)	1						X		X														X	
-04	9/10/04		S			AH-3 (0-1)	1						X		X														X	
-05	9/10/04		S			AH-3 (1-1.5')	1								X														X	
-06	9/10/04		S			AH-3 (2-2.5')	1								Add															

RELINQUISHED BY: (Signature) Date: 9/13/04 Time: 5:00pm

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) IKE Tavarez Ray Taylor Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL # HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: ECT.

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Ally Reine

DATE: 9/13/04 TIME: 17:00

HIGHLANDER CONTACT PERSON: IKE Tavarez

Results by:

RUSH Charges Authorised: Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water A-Air SD-Solid S-Soil SL-Sludge O-Other

REMARKS: 402. glass 6.0°C

ANALYSIS REQUEST (Circle or Specify Method No.)

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

APPENDIX B

Information on CIM 1000 Commercial Industrial Membrane

C.I.M. Industries Inc.

CIM 1000

COMMERCIAL INDUSTRIAL MEMBRANE

COATING PROFILE

DESCRIPTION CIM 1000 is a liquid applied urethane coating that cures in hours to form a tough elastomeric membrane that adheres to most substrates, forming a chemical and abrasion resistant barrier for waterproofing, corrosion protection, and containment of water and most aqueous chemicals.

ADVANTAGES CIM 1000 has over 25 years of proven performance in demanding environments. It remains flexible and resilient and provides exceptional service in a broad range of applications.

- Forms a tough elastomeric membrane able to bridge cracks and joints.
- Impervious to water and most aqueous chemicals, providing a long lasting tank and pond liner.
- Asphalt extended urethane formula provides superior wear and weatherability for parking decks and containment areas.
- Adheres to and bridges between common construction materials such as concrete, steel and other metals, asphalt pavement, glass, wood, and most coatings.
- Environmentally sound, complying with the toughest VOC regulations.
- Can be repaired when damaged.
- Excellent abrasion resistance for severe wear applications.
- UV stable.
- Liquid, two-component urethane can be applied to complex shapes, multiple penetrations or to most geotextiles.

SURFACE PREPARATION

GENERAL: Substrates must be **clean and dry** with no oils, grease or loose debris. CIM Bonding Agent is recommended on all non-porous substrates. Perform adhesion tests to confirm adequacy of surface preparation. See C.I.M. Industries' specific substrate Instruction Guide for specific guidelines.

CONCRETE: ICRI-CSP 4-6 surface profile exposing aggregate. Concrete must exhibit minimum 3,000 psi compressive strength and be free of release agents and curing compounds. The substrate must be clean and dry (less than 5% moisture), and free of contaminates.

STEEL: Minimum 3 mil profile.
Immersion service – SSPC-SP10 / NACE No. 2 Near White Blast.
Non-Immersion service – SSPC-SP6 / NACE No. 3 Commercial Blast.
Use CIM Bonding Agent for greater adhesion.

OTHER METALS: SSPC-SP1 solvent clean and abrasive blast to roughen and degloss the surface. Use CIM Bonding Agent for greater adhesion.

GLASS: Thoroughly clean. CIM Bonding Agent must be used for increased adhesion. For immersion service roughen the surface.

WOOD: Substrate must be clean, dry and free of surface contamination.

PREVIOUS COATINGS AND LININGS: CIM 1000 may be applied over some existing coatings and linings and achieve acceptable performance. CIM Bonding Agent is recommended for greater adhesion. Finished system results vary due to a variety of project specific factors, including the service conditions to which the system is exposed. Therefore, C.I.M. Industries does not accept responsibility for determining the suitability of an existing coating as a substrate for CIM products. Owner shall perform adhesion tests on any existing coating or lining to determine suitability.

EARTH: Use CIM Scrim.

COLOR CIM 1000 is initially shiny black, turning dull over 3 to 6 months when exposed to direct sunlight. For a colored or reflecting surface finish, apply a tack coat over the basecoat and immediately broadcast white or colored aggregate into the coating. See C.I.M Industries' Instruction Guide, "Topcoats" (IG–7) for further instructions.

SOLIDS BY VOLUME 88% (1413 dry mils x sq. ft./gal.)

RECOMMENDED COVERAGE Recommended minimum thickness at all points of the coating is 60 wet mils. Higher coverages may be specified, but extended time is required to insure proper solvent release prior to placing the membrane in service. Contact C.I.M. Industries for additional information.

VOC 92 g/l (0.76 lb./gal.). CIM 1000 complies with the toughest VOC regulations.

C.I.M. Industries Inc.

CIM 1000
COMMERCIAL INDUSTRIAL MEMBRANE

TYPICAL PROPERTIES

Abrasion Resistance–Wt. Loss, Taber Abraser CS–17 Wheel 1000 gr./1000 rev. ASTM D4060	1.2 mg. Loss
Adhesion to Concrete (dry) Elcometer	350 psi
Deflection Temperature ASTM D648	below -60°F
Density (Approx.) Premix	8.0 lbs./gal.
Activator	10.1 lbs./gal.
Mixed & Cured	8.3 lbs./gal.
Elastomeric Waterproofing ASTM C836	exceeds all criteria
ASTM C957	exceeds all criteria
Electrical Resistivity, Volume ASTM D257, 50% RH, 23°C. 2" disc @ 100 mil thickness	1.9 x 10E14 ohm-cm
Extension to Break, min ASTM D412	400%
Flammability ASTM D2859	pass/combustible substrate
UL790	Class A[1]
Hardness, Shore A, min ASTM D2240 @ 77°F	60
Jet Fuel Resistance FS SS-S-200D	pass for joints
Membrane Performance Crack Bridging 10 cycles @ -15°F	greater than ⅛"
After heat aging	greater than ¼"
Membrane Weight (60 mil wet film thickness)	31 lbs./100 sq. ft.
Mix Ratio Weight	7:1
Volume	9:1
Mullen Burst Strength, min ASTM D751, 50 mil	150 psi
Permeability to Water Vapor ASTM E96 Method E, 100°F, 100 mil sheet	0.03 perms
Recovery from 100% extension: after 5 minutes	98%
after 24 hours	100%
Salt Spray ASTM B117	pass 2000 hrs.
Service Temperature	-60°F to 220°F
Softening Point, Ring & Ball ASTM D36	>325°F
Tear Strength ASTM D624 (Die C)	150 lbs./in.
Tensile Strength, min ASTM D 412, 100 mil sheet	900 psi
Weathering ASTM D822	pass 5000 hrs.

[1]Contact C.I.M. Industries for details regarding UL fire ratings

CHEMICAL RESISTANCE

CIM 1000 is resistant to a broad range of acids and alkalis. Consult C.I.M. Industries for additional information regarding chemical resistance after reviewing CIM 1000 Chemical Resistance Chart.

All information presented in this publication is believed to be accurate, but it is not to be construed as a guarantee of minimum performance. Test performance results are obtained in a controlled laboratory environment using procedures that may not represent actual operating environments.

THE INFORMATION PRESENTED IN THIS PUBLICATION IS SUBJECT TO CHANGE WITHOUT NOTICE. CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

www.cimindustries.com

C.I.M. Industries Inc.

CIM 1000

COMMERCIAL INDUSTRIAL MEMBRANE

GENERAL APPLICATION INFORMATION

USE **FOR PROFESSIONAL USE ONLY.**

PRECAUTIONS Avoid contamination with water or moisture. Keep all pails and jugs tightly closed until ready for use. All equipment, air supplies, and application substrates must be **ABSOLUTELY DRY.** Do not apply in wet weather or when rain is imminent or when the CIM 1000 or the substrate may become wet within 4 hours after coating. Use caution when applying CIM 1000 in confined spaces. See C.I.M. Industries' Instruction Guide, "Applying CIM Within Confined Spaces" (IG-9).

TEMPERATURE Surface should be at least 50°F (10°C) and must be 5°F (3°C) above the dew point. **DO NOT APPLY WHEN THE SUBSTRATE OR AMBIENT TEMPERATURE IS RISING OR COATING IS IN DIRECT SUNLIGHT.** CIM 1000 should be at least 60°F (15°C) when mixed and applied. CIM 1000 may be preheated to facilitate application at low temperatures, but working time will be reduced. See C.I.M. Industries' Instruction Guide "Applying CIM Membranes in Cold Weather" (IG-11).

EQUIPMENT Spray equipment requires large diameter hose and air supplied mastic gun. Airless pump may be used to provide fluid side pressure. See "Spray Application of CIM" (IG-12) or contact C.I.M. Industries for specific recommendations. Roller, squeegee, and trowel may also be used.

POT LIFE About 30 minutes. Working time depends on temperature and method of application. Spray application will be significantly shorter.

PRIMING Porous substrates such as wood and concrete should be primed with CIM 61 Epoxy Primer to minimize outgassing. The recoat window for CIM 61 Epoxy Primer shall be no longer than 48 hours. See CIM 61 Epoxy Primer Coating Profile for additional information. Perform adhesion tests to confirm adequacy of adhesion to primer.

MIXING **DO NOT THIN. DO NOT HAND MIX.** Begin mixing each pail (4.5 gal.) of CIM 1000 Premix using a power mixer (e.g. ½" drill and an eight inch mud mixer). Do not draw air into the mix. While mixing, slowly add one jug (0.5 gal.) of CIM 1000 Activator to the pail. Once the CIM 1000 Activator has been added, mix thoroughly for **3 FULL MINUTES.** The proportions are premeasured. **DO NOT ESTIMATE.** Mixing Jigs and Timers from C.I.M. Industries help eliminate mixing errors and increase productivity on the job. See C.I.M. Industries' Instruction Guide, "Mixing CIM Premix and Activator" (IG-8).

APPLICATION Apply CIM 1000 directly to a clean and dry substrate. Vertical surfaces will require multiple coats. See C.I.M. Industries' specific Substrate Instruction Guide for additional guidelines.

RECOATING CIM 1000 may be recoated in 1 hour and must be recoated soon after the coating no longer comes off on polyethylene (typically within 4 hours of mixing). If the membrane has cured longer than this time, the surface must be severely abraded using surface grinder or other mechanical means, and be free of dust and debris. Use CIM Bonding Agent for better adhesion. For immersion conditions, all coats shall be applied within 4 hours of each other, except at joint lines.

SPREAD RATE **Note: Coverages are theoretical and do not account for waste, spillage, irregular surfaces, or application technique. Consult CIM 1000 coverage chart for additional coverage information.**

CURING TIME CIM 1000 may be placed in service within 24 hours for non-aggressive service. Severe service applications may require a cure time of 72 hours or more. Contact C.I.M. Industries for specific recommendations.

CLEAN-UP Use mineral spirits for clean-up of uncured material. Spray equipment must be flushed regularly during application to prevent material from setting up in the hose and pump. Cured material is very difficult to remove. Soaking in solvent will soften the material and may assist in its removal.

CONTACT C.I.M. INDUSTRIES FOR SPECIFIC RECOMMENDATIONS AND INSTRUCTION GUIDES.

C.I.M. Industries Inc.

CIM 1000

COMMERCIAL INDUSTRIAL MEMBRANE

SHIPPING, STORAGE AND SAFETY DATA

WARNING **Flammable. Use only in well ventilated areas. Do not store or use near open flame, sparks or hot surfaces. Keep tightly closed. Avoid contact with moisture or water. Keep out of reach of children.**

SAFETY INFORMATION This product contains petroleum asphalt, petroleum distillates, amine compounds and/or other chemical ingredients. Adequate health and safety precautions should be observed during the storage, handling, application and curing. Refer to C.I.M. Industries' Material Safety Data Sheets for further details regarding the safe use of this product.

PACKAGING CIM 1000 is available in mixed units of **0.83** gallons and **5** gallons. Each unit consists of a container of premix and a smaller container of activator. Quantities have been premeasured to provide the proper mixing ratio, leaving sufficient room in the premix container to facilitate adequate mixing. **Do not estimate proportions.**

	Premix	Activator
SHIPPING Weights		
0.83 gallon kits	7.0 lbs. per can (28 lbs. per box of 4)	1 lb. per bottle (12 lbs. per carton of 12)
5.0 gallon units	40 lbs. per pail	5.5 lbs. per jug (44 lbs. per case of 8) (33 lbs. per case of 6)
Properties		
Flash Point	101°F	>250°F
Shipping Name	Coating Solution	Not Regulated
DOT Class	Class 3, UN1139, PGIII	Not Regulated
STORAGE		
Temperature	20°F to 110°F	70°F to 95°F
Shelf Life	2 years	6 months
NFPA	Class II	Non Flammable

WARRANTY & LIMITATION OF SELLER'S LIABILITY

C.I.M. Industries Inc. (C.I.M.) warrants that for a period of five (5) years from the date of shipment to the initial purchaser, the products, when mixed in proper ratios for the proper length of time, (a) will not become brittle or crack and (b) will provide a water barrier. Due to application variables beyond C.I.M.'s control which may affect results, C.I.M. makes no warranty of any kind, expressed or implied, including that of merchantability, other than that the products conform to C.I.M.'s current quality control standards at time of manufacture. If breach of warranty is established, the buyer's exclusive remedy shall be repayment of the purchase price of the non-conforming CIM membrane product or, at C.I.M.'s option, resupply of conforming product to replace the non-conforming product. The buyer expressly waives any claim to additional damages, including consequential damages.

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CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

FOR PROFESSIONAL USE ONLY.

www.cimindustries.com

C.I.M. Industries Inc.
23 Elm St., Peterborough, NH 03458
Tel: (800) 543-3458 (603) 924-9481
Fax: (603) 924-9482
Web site: www.cimindustries.com

C.I.M. Industries Inc.

CIM 1000
COMMERCIAL INDUSTRIAL MEMBRANE

CHEMICAL RESISTANCE*

The following chart is a general guide to the resistance of CIM 1000 Membrane to various types of exposure. Although we believe this information to be reliable, C.I.M. Industries Inc. has no control over any particular application, installation, or exposure of CIM 1000 Membrane; and suitable tests should be carried out by the user.

Where chemical concentrations are listed, the designated rating applies to all concentrations up to and including the concentration indicated.

Except as indicated by a footnote, the maximum service temperature is 140F (60C) for continuous service.

Consult C.I.M. Industries for additional information regarding chemical resistance.

Acetic Acid, Glacial	S	Hydrogen Sulfide,	
Acetic Acid, 25%	R2	Vapor Over Sat. Solution	R
Acetic Acid, 10%	R	Methanol	R1
Ammonium Hydroxide, 50%	NR	Nitric Acid, 10%	R2
Ammonium Hydroxide, 10%	R2	Outdoor Exposure	R
Biological Oxidation Ponds	R	Phosphoric Acid, 10%	R
Chlorine,		Sewage Disposal Plant	
Saturated Solution in Water	R1	(Act. Sludge Sed. Tanks)	R
Citric Acid, 10%	R	Sodium Hydroxide, 10%	R
Copper Sulfate (Sat.)	R	Sodium Hydroxide, 50%	R1
Crude Oil	S	Sodium Hypochlorite, 15%	R
Diesel Fuel	S	Soil Burial	R
Ethylene Glycol		Sodium Silicate, 34%	R
(Antifreeze Solution)	R1	Strawberry Juice	R
Ferric Chloride, 42%	R	Sulfuric Acid, 30% or less	R
Hydrochloric Acid, 10%	R2	Trisodium Phosphate, 10%	R
Hydrofluoric Acid, 10%	R2	Water, Salt	R
Hydrogen Sulfide,		Wine (for floor protection)	R
Saturated Solution in Water	R		

Footnote:

R Suitable for continuous immersion.
S Suitable for splash and spillage conditions.
R1 Maximum service temperature limited to 80F.
R2 Maximum service temperature limited to 120F.
NR Not recommended for this service.

Information presented here is believed to be accurate, but it is not to be construed as a guarantee of minimum performance. Test performance results are obtained in a controlled laboratory environment under procedures that may not represent actual operating environments.

THE INFORMATION PRESENTED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

FOR PROFESSIONAL USE ONLY.

Highlander Environmental Corp.

Midland, Texas

May 17, 2000

Mr. Wayne Price
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Results of Soil and Groundwater Sample Collection, Wood Group ESP, Inc. (BW-164), NW/4, NW/4, NW/4, Section 35, Township 17 South, Range 38 East, Lea County, New Mexico

Dear Mr. Price:

Wood Group ESP, Inc. (ESP, INC.) has retained Highlander Environmental Corp. (Highlander) to collect soil and groundwater samples at its service center (Facility), located near Hobbs, New Mexico. The samples were collected at the request of the New Mexico Oil Conservation Division (NMOCD), in response to an inspection of the facility during renewal of the Facility's discharge plan (BW-164). The Facility address and contact information are as follows:

Name:	Wood Group ESP, Inc.
Mailing Address:	P. O. Box 596
	Hobbs, New Mexico 88241
Street Address:	8426 North Dal Paso
	Hobbs, New Mexico 88242
Telephone:	(505) 392-7999
Fax:	(505) 392-8190

The Facility is located in the NW/4, NW/4, NW/4 Section 35, Township 17 South, Range 38 East, Lea County, New Mexico. Figure 1 presents a Site location and topographic map.

1.0 Facility Description

The Facility operates under an NMOCD issued discharge plan (BW-164), and is a local service center for reconditioning electric submersible pumps, used in oil and gas production. The submersible pumps are delivered to the Facility, and initially cleaned to remove oil residues and scale. The cleaning process occurs in the shop building, on a concrete pad equipped with a fiberglass-lined collection sump and containment. The external surfaces are cleaned using a high-pressure washer. The internal surfaces are cleaned by circulating hydrochloric acid through the pump in a closed system. Wash water and acid drips drain to the collection sump, are transferred to an aboveground tank, and stored at the Facility until disposal is arranged. After cleaning, the pumps are

reconditioned, internally protected with light coating of mineral oil, and placed on storage racks, located on the north, east and south sides of the Facility, until retrieved by the customer. Drummed chemicals (i.e., hydrochloric acid, etc.) are stored on concrete pads located on the east side of the shop building.

The Facility is not connected to a publicly owned treatment works (POTW). However, a septic system is located near the northwest corner of the Facility. A water well, used for non-potable purposes (i.e., wash water and rest rooms), is located approximately 50 feet southeast of the shop building. Figure 2 presents a Facility drawing.

2.0 Regulatory Summary

The NMOCD conducted an inspection of the Facility on January 27, 2000, in conjunction with renewal of the Facility's discharge plan. The NMOCD conditionally approved the discharge plan on February 4, 2000, and requested ESP, INC. to address several issues, including:

- Collecting groundwater samples from the water well for laboratory analysis;
- Addressing apparent contaminated soil near the south edge of the drive-way (south of the shop), drum storage area, and pump storage area;
- Installing containment in areas showing evidence of leaks and spills reaching ground surface, including the drive-way pad, drum and pump storage areas; and
- Preparing a storm water run-off plan for the Facility.

Highlander prepared a work plan to address the issues raised by the NMOCD including, collection of soil samples from two locations near the south end of the driveway and three locations at the drum storage area, and collecting groundwater samples from the water well.

The NMOCD also identified areas of stained soil beneath pump storage racks located east and north of the shop building. The stained soil was the result of light mineral oil that had seeped from pumps stored on the racks. The pumps are internally coated with a light film of the mineral oil (Rocon #2) after the pumps are cleaned and reconditioned. The mineral oil prevents corrosion of the internal pump workings during storage. A manufacture's Material Safety Data Sheet (MSDS) was provided to the NMOCD, and revealed that the mineral oil has a toxicity rating of 0 (insignificant). In the work plan, ESP, INC. proposed to treat areas the mineral oil stained areas with nitrogen fertilizer to promote in-situ microbial degradation. The work plan was approved on April 4, 2000. Appendix A presents an electronic communication from the NMOCD to Highlander approving the work plan.

3.0 Investigation Results

Soil and groundwater samples were collected at the Facility on April 10, 2000. Soil samples were collected in the drum storage area (HA-1, HA-2, and HA-3) and near the

south end of the driveway (HA-4 and HA-5) using a stainless steel hand auger. Soil samples were collected at each location from 0 to 1 feet and at 3 feet below ground surface (BGS). Figure 2 presents a Site drawing, and sample locations HA-1 through HA-5.

Each soil sample was immediately placed in a clean glass sample jar, labeled, placed in an ice chest, chilled, and transferred, under chain-of-custody control, to Trace Analysis, Inc., located in Lubbock, Texas. A portion of each sample was also retained in a clean plastic sample bag, and field screened for hydrocarbon vapors. After approximately fifteen minutes at ambient temperature, the concentration of organic vapors in the headspace of the sealed bag was measured using a photoionization detector (PID). The PID, a Thermo Environmental Instruments, Model 580B, was calibrated prior to use with an isobutylene standard. The highest PID reading was observed at 6.4 parts per million (ppm) in samples from locations HA-3, 3 feet BGS and HA-5, 3 feet BGS. Appendix B presents the calibration notes for the PID.

The shallow soil sample from each location was analyzed for gasoline and diesel range petroleum hydrocarbons (TPH), by method SW-846-8015 modified. In accordance with NMOCD guidelines (Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993), the soil samples were not analyzed for benzene, toluene, ethylbenzene, xylene (collectively referred to as BTEX), since PID readings were below 100 ppm. Table 1 presents a summary of the PID and TPH analyses. Appendix C presents the laboratory reports.

Groundwater samples were collected from the well located southeast of the shop. Depth-to-groundwater was measured at 71.63 feet below ground surface, and the well was reportedly drilled to about 130 feet BGS. Approximately 360 gallons of water were pumped from the well prior to sample collection. Groundwater samples were collected from a spigot located near at the well, and analyzed for New Mexico Water Quality Control Commission (NMWQCC) human health and domestic water supply standards, including volatile and semi-volatile organics (8260C and 8270B), MTBE, 1 and 2-methylnaphthalene, total (unfiltered) metals, anions, cations and total dissolved solids (TDS). Table 2 presents a summary of the total metals analyses. Table 3 presents a summary of the general chemistry analyses. Appendix C presents the laboratory reports.

Referring to Table 1, no detectable levels of TPH were reported in the shallow soil samples (0 - 1 feet BGS) from locations HA-1 through HA-5. No volatile or semi-volatile parameters, including MTBE, or 1 and 2-methylnaphthalene were reported in the groundwater samples above test method detection limits. The only total metal compound reported in the groundwater sample was barium (0.04 milligrams per liter). The New Mexico Water Quality Control Commission (NMWQCC) human health standard for barium is 1.0 milligram per liter. All remaining parameters are within threshold limits established by the NMWQCC.

No contaminant levels were detected in soil or groundwater, above NMOCD or NMWQCC threshold limit values, based on samples collected on April 10, 2000.

4.0 Containment and Runoff Structures

Wood Group ESP, INC. has designed and initiated installation of structures to contain runoff from the driveway and yard areas. A new drum storage area has also been designed, and initiated south of the shop building. Figure 2 shows the locations for the structures. Figure 3 and Figure 4 present detailed diagrams for the drum and driveway runoff containment structures, respectively.

4.1 Drum Containment Structure

The drum containment structure is constructed south of the shop building, on the over the existing driveway slab. The structure is constructed of concrete, and measures approximately 7 feet (width) x 40 feet (length) x 16 inches (height). The drum containment structure is equipped with a concrete sump, centrally located in the containment structure. The concrete sump measures approximately 2 x 2 x 2 feet, and is equipped with a sealed fiberglass liner. A corrugated steel roof, anchored to the containment structure by tubular steel supports, protects the containment structure. Fluids from accidental spills or precipitation flow to the sump, where it is picked up with a vacuum pump, and transferred to above ground storage tanks, located east of the shop.

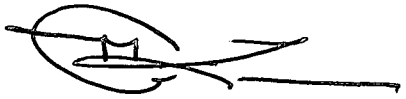
4.2 Driveway Runoff Containment

The driveway runoff containment structure consists of a concrete trough, measuring approximately 3 feet wide, by 1 foot deep, located adjacent to the south side of the shop. The containment system is designed to contain wash water from the shop floor before it runs down the driveway. The concrete drain is equipped with a reinforced steel grate, and captured water flows to a collection sump, located east of the overhead door. The concrete sump measures approximately 3 feet (width) x 4 feet (length) x 4 feet (depth), and is equipped with a sealed fiberglass liner. Water captured in the sump is picked up with a vacuum pump and transferred to above ground storage tanks located east of the shop.

4.3 Storm Water Containment and Monitoring

Wood Group ESP, INC. has designed and installed a storm water containment structure, based on the facility's topography. The facility topography generally slopes from northwest to southeast. Wood Group ESP, INC. installed an earthen containment beam along the south property boundary to capture storm water prior to moving off the facility. The berm is designed to allow storm water to flow to a catchment area near the southeast corner of the facility. Captured storm water will be visually inspected for hydrocarbon sheen, and if present, the water will be immediately pick up and disposed at a NMOCD permitted disposal facility. If no sheen is present, the water will be allowed to evaporate and percolate into the subsoil.

Please call if you have questions,
Sincerely,
Highlander Environmental Corp.



Mark J. Larson, CPG, CGWP
Senior Project Manager

Encl.

cc: Larry Merworth, Wood Group ESP, Inc.
Chris Williams, NMOCD - Hobbs District

Tables

Table 1: Summary of Laboratory Analysis of Soil Samples
Wood Group ESP, Inc.
Hobbs Service Center
Lea County, New Mexico

Sample Location	Sample Depth (ft)	PID (ppm)	GRO mg/kg	DRO mg/kg	TPH mg/kg
HA-1	0 - 1	3.6	<5	<50	<55
	3	3.2	-	-	-
HA-2	0 - 1	4.0	<5	<50	<55
	3	4.0	-	-	-
HA-3	0 - 1	4.0	<5	<50	<55
	3	6.4	-	-	-
HA-4	0 - 1	5.6	<5	<50	<55
	3	4.0	-	-	-
HA-5	0 - 1	5.6	<5	<50	<55
	3	6.4	-	-	-

Notes: All samples collected on April 10, 2000, and analyzed by Trace Analyses, Inc., Lubbock, Texas

1. ppm: Parts per million
2. mg/kg: Milligrams per kilogram
3. <: Analyte concentration below test method detection limit
4. -: No data available

Table 2: Summary of Total Metals Analysis of Groundwater Samples from Water Well, Wood Group ESP, INC. - Hobbs Facility Lea County, New Mexico

Sample Location	Sample Date	Arsenic mg/L	Barium mg/L	Cadmium mg/L	Chromium mg/L	Lead mg/L	Mercury mg/L	Selenium mg/L	Silver mg/L
Water Well	04/10/00	<0.01	0.04	<0.005	<0.01	0.03	<0.0002	<0.01	<0.002

Notes: Analysis performed by Trace Analyses, Inc., Lubbock, Texas

1. mg/L: Milligrams per liter
2. <: Analyte concentration below test method detection limit

Table 3: Summary of General Chemistry Analysis of Groundwater Samples from Water Well, Wood Group ESP, INC., Hobbs Facility Lea County, New Mexico

Sammple No.	Sample Date	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	TDS (mg/L)
W W-1	04/10/00	3.5	19	73	44	44	1.8	100	193	260	5.0	500

Note: All analysis performed by Trace Analysis, Inc., Lubbock, Texas
1. mg/L: Denotes analyte concentration in milligrams per liter
2. <: Denotes analyte concentration below test method detection limit

Figures

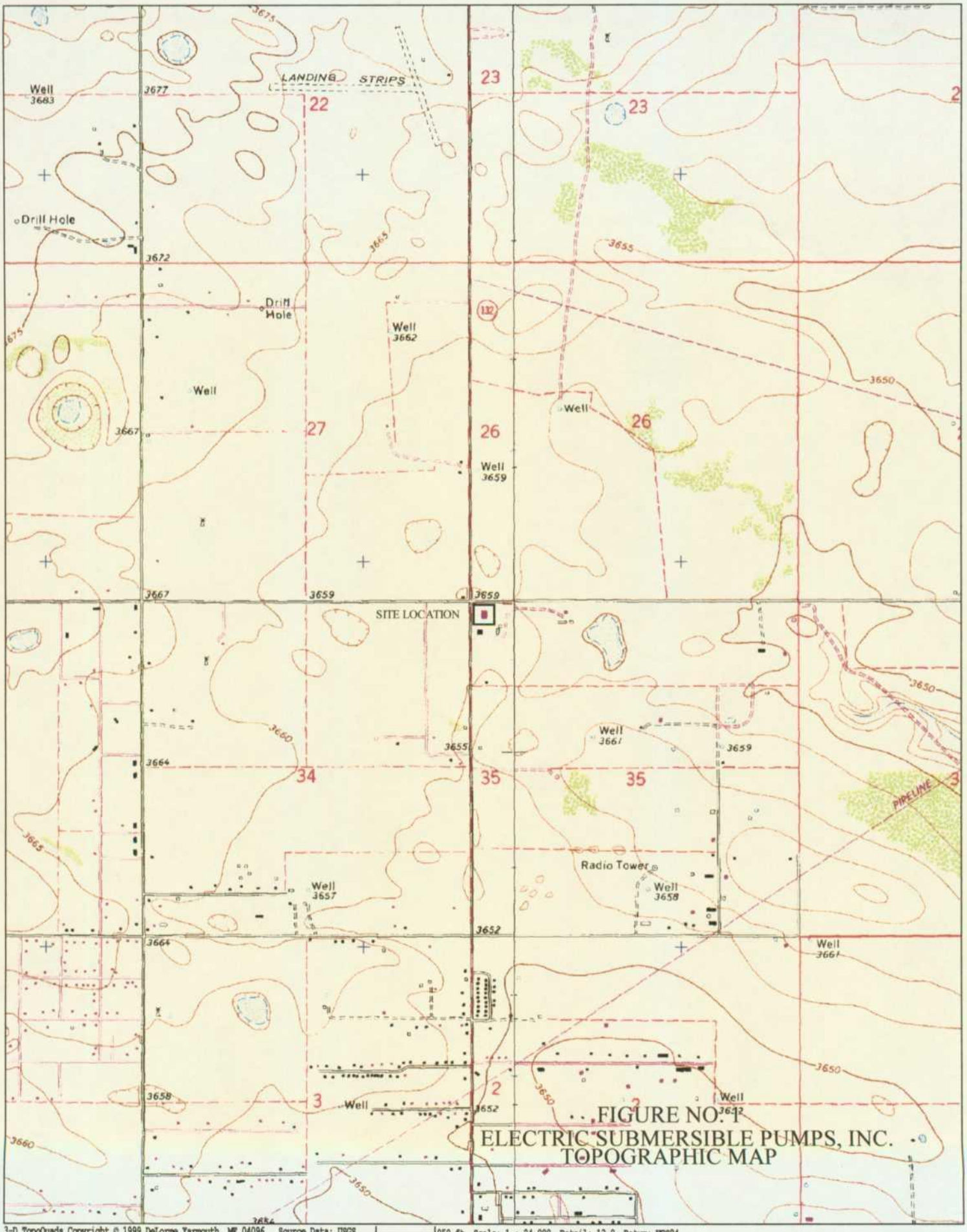


FIGURE NO. 1
ELECTRIC SUBMERSIBLE PUMPS, INC.
TOPOGRAPHIC MAP

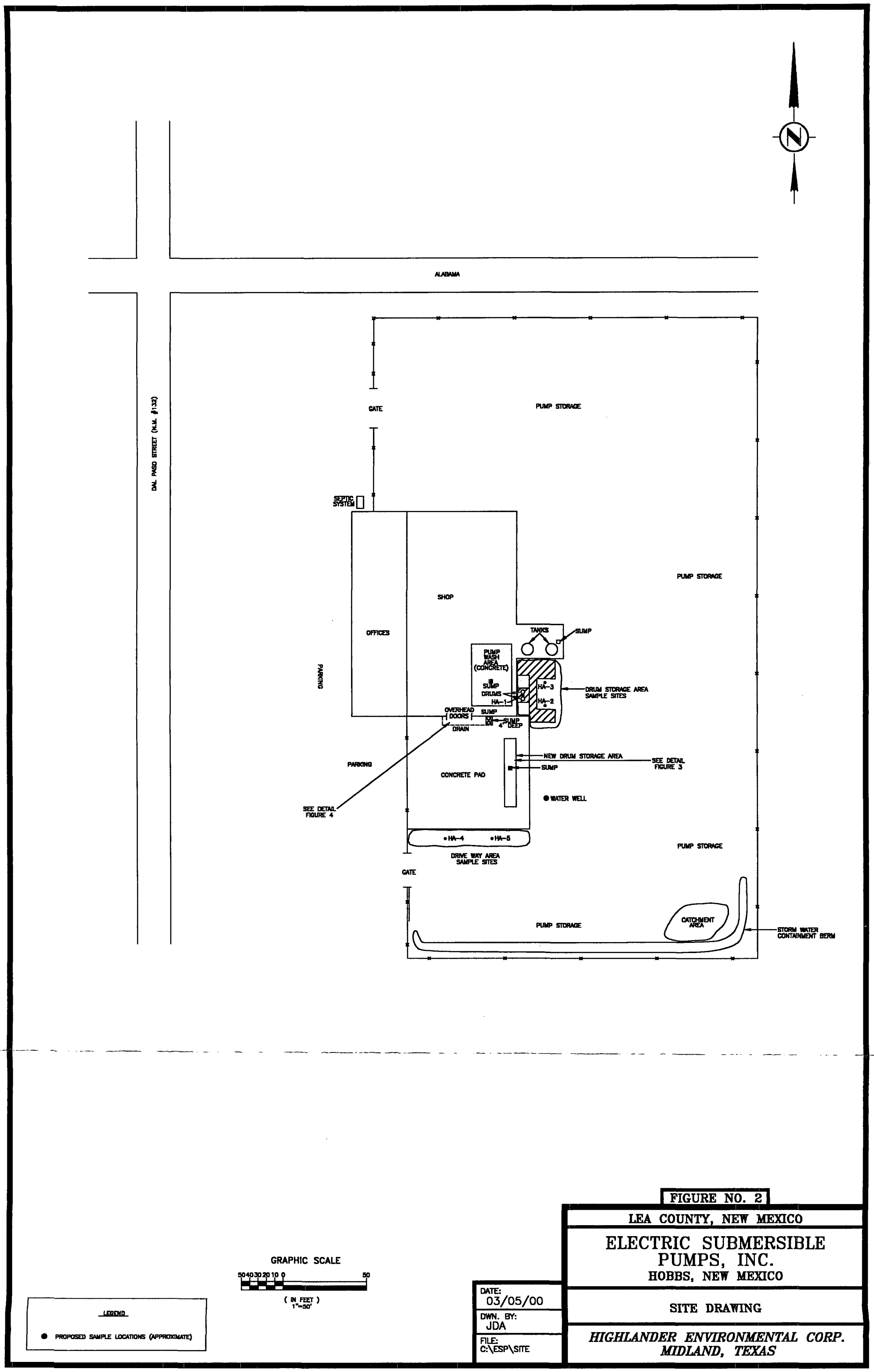


FIGURE NO. 2

LEA COUNTY, NEW MEXICO

ELECTRIC SUBMERSIBLE PUMPS, INC.

HOBBS, NEW MEXICO

SITE DRAWING

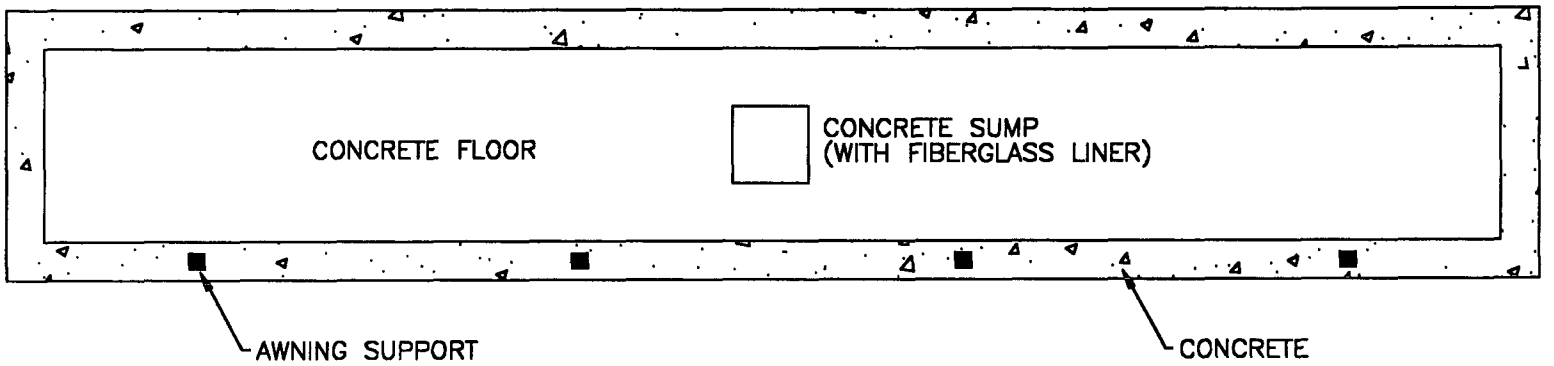
DATE: 03/05/00

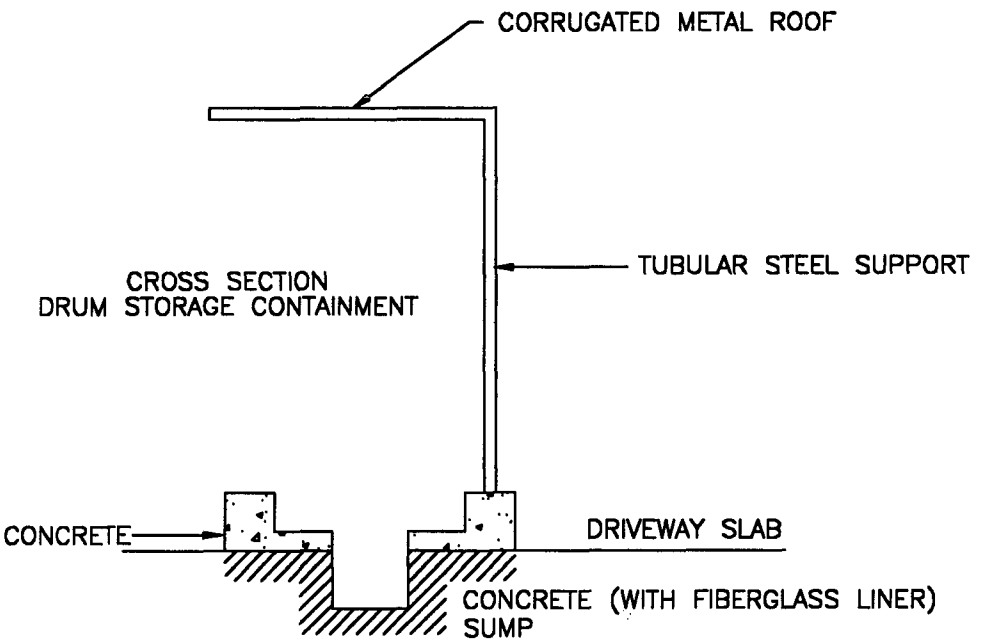
DWN. BY: JDA

FILE: C:\ESP\SITE

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

PLAN VIEW
DRUM STORAGE CONTAINMENT





SCALE: 1"=5'

3 2 1 0 5

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

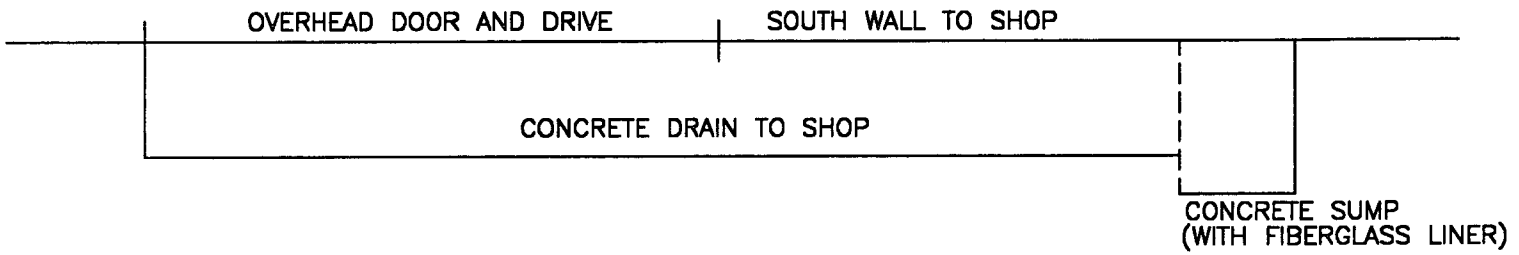
WOOD GROUP ESP, INC.

DRUM CONTAINMENT STRUCTURE

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

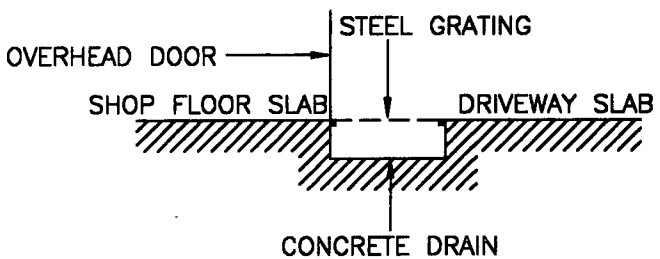
DATE: 5/18/00
DWG. BY: JDA
FILE: C:\ESP\DRUM

PLAN VIEW
DRIVEWAY RUNOFF CONTAINMENT

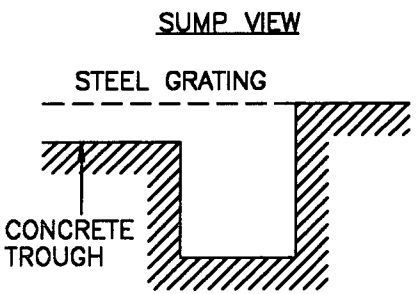


CROSS SECTION
DRIVEWAY RUNOFF CONTAINMENT

TROUGH VIEW



SUMP VIEW



CONCRETE SUMP
(WITH FIBERGLASS LINER)

SCALE: 1"=5'

FIGURE NO. 4

LEA COUNTY, NEW MEXICO

WOOD GROUP ESP, INC.

DRIVEWAY RUNOFF CONTAINMENT

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 5/18/00
DWG. BY: JDA
FILE: C:\ESP\DRIVE

Appendix A

NMOCD Communications

Mark Larson

From: Price, Wayne [WPrice@state.nm.us]
Sent: Tuesday, April 04, 2000 12:50 PM
To: 'Mark Larson'
Subject: RE: Approval foe Scope of Work, Wood Group ESP, Inc., Hobbs, NM, 3/6/00

The work plan is hereby approved.

Please be advised that NMOCD approval of this site does not relieve Wood Group ESP of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Wood Group ESP of responsibility for compliance with any other federal, state, or local laws and/or regulations.

> ----------
> From: Mark Larson[SMTP:mjlarson@hec-enviro.com]
> Sent: Tuesday, April 04, 2000 11:26 AM
> To: Price, Wayne
> Cc: Larry Merworth
> Subject: Re: Approval foe Scope of Work, Wood Group ESP, Inc.,
> Hobbs, NM, 3/6/00
>
> Wayne:
> Wood Group ESP, Inc. requested Highlander Environmental Corp. (Highlander)
> to prepare a Scope of Work to address soil and groundwater issues
> identified
> by the NMOCD in conjunction with the renewal of its discharge plan. Wood
> Group ESP, Inc. has temporarily suspended operations at its Hobbs, NM
> facility in order to implement the scope of work and comply with the NMOCD
> requirements. The concrete pad of the drum storage area has been removed
> to
> facilitate soil sample collection, and remediation, if required.
> Therefore,
> a request is made to allow Wood Group ESP, Inc. to implement the scope of
> work submitted to the NMOCD on March 3, 2000. The scope of work includes
> collection of composite soil samples from the drum storage and driveway
> areas, as well as groundwater samples from an onsite water well. Your
> prompt
> consideration of this request is appreciated. Please call if you have
> questions,
> Mark Larson
>
>

Appendix B

PID Calibration Record

"Rite in the Rain"®

All-Weather HORIZONTAL LINE NOTEBOOK

No. 391

HIGHLANDER ENVIRONMENTAL
1910 N. Big Spring
Midland, Texas 79705
(915) 682-4559

CALIBRATION LOG
Thermal Environmental Instruments
Model 580B Organic Vapor Meter
S/N 580U39693-261

Date:

October 18, 1999 16:20 hrs.
Span Gas: Isobutylene (75ppm)
Reading: 75.6 ppm
By: Mark Rasor

January 6, 2000 09:30 hrs.
Span Gas: Isobutylene (75ppm)
Reading: 76.9 ppm
By: Mark Rasor

January 7, 2000 9:00 hrs.
Span Gas: Isobutylene (75ppm)
Reading: 75.6 ppm
By: Mark Rasor

January 31, 2000 15:40 hrs
Span Gas: Isobutylene (75ppm)
Reading: 76.3 ppm
By: Mark Rasor

2-14-00 4:15 pm.
Span Gas - Isobutylene (75 ppm)
Reading - 74 ppm
by - Ike Twarz

4-10-00 09:28
Span Gas: Isobutylene (75 ppm)
Reading: 75.4 ppm
By: Mark Rasor

4-13-00 17:03
Span Gas: Isobutylene (75 ppm)
Reading 76.2 ppm
By: Mark Rasor

5/3/00 11:32
Span Gas: Isobutylene (75 ppm)
Reading: 76.1 ppm
By: Mark Rasor + Mike Jacobs

Appendix C

Trace Analysis, Inc. Laboratory Reports

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Mark Larson
Highlander Environmental Services
1910 N. Big Spring St.
Midland, TX 79705

Report Date: 4/18/00

Project Number: 1459
Project Name: Wood Group ESP, Inc.
Project Location: N/A

Order ID Number: A00041205

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
144325	HA-1 0-1'	Soil	4/10/00	9:35	4/12/00
144327	HA-2 0-1'	Soil	4/10/00	10:12	4/12/00
144329	HA-3 0-1'	Soil	4/10/00	10:38	4/12/00
144331	HA-4 0-1'	Soil	4/10/00	11:01	4/12/00
144333	HA-5 0-1'	Soil	4/10/00	11:22	4/12/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 3 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 144325
Description: HA-1 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH GRO (mg/Kg)									
GRO	<5	1	8015B	4/13/00	4/13/00	RC	PB01775	QC02120	0.1

Sample Number: 144327
Description: HA-2 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH GRO (mg/Kg)									
GRO	<5	1	8015B	4/13/00	4/13/00	RC	PB01775	QC02119	0.1

Sample Number: 144329
Description: HA-3 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH GRO (mg/Kg)									
GRO	<5	1	8015B	4/13/00	4/13/00	RC	PB01775	QC02120	0.1

Sample Number: 144331
Description: HA-4 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH GRO (mg/Kg)									
GRO	<5	1	8015B	4/13/00	4/13/00	RC	PB01775	QC02120	0.1

Sample Number: 144333
Description: HA-5 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH GRO (mg/Kg)									
GRO	<5	1	8015B	4/13/00	4/13/00	RC	PB01775	QC02120	0.1

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
GRO (mg/Kg)		<5	0.1	4/13/00	PB01775	QC02119
GRO (mg/Kg)		<5	0.1	4/13/00	PB01775	QC02120

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	GRO (mg/Kg)	<5	1	1	1.09	109		80 - 120	-	QC02119
LCSD	GRO (mg/Kg)	<5	1	1	0.996	100	9	-	0 - 20	QC02119

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	GRO (mg/Kg)	<5	1	1	0.996	100		80 - 120	-	QC02120
LCSD	GRO (mg/Kg)	<5	1	1	1.09	109	9	-	0 - 20	QC02120

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	GRO (mg/Kg)		1	1.01	101	80 - 120	4/13/00	QC02119
CCV 1	GRO (mg/Kg)		1	0.979	98	80 - 120	4/13/00	QC02119

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	GRO (mg/Kg)		1	1.01	101	80 - 120	4/13/00	QC02120
CCV 1	GRO (mg/Kg)		1	0.979	98	80 - 120	4/13/00	QC02120

TRACEANALYSIS, INC.

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4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Mark Larson
Highlander Environmental Services
1910 N. Big Spring St.
Midland, TX 79705

Report Date: 4/19/00

Project Number: 1459
Project Name: Wood Group ESP, Inc.
Project Location: N/A

Order ID Number: A00041205

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
144325	HA-1 0-1'	Soil	4/10/00	9:35	4/12/00
144327	HA-2 0-1'	Soil	4/10/00	10:12	4/12/00
144329	HA-3 0-1'	Soil	4/10/00	10:38	4/12/00
144331	HA-4 0-1'	Soil	4/10/00	11:01	4/12/00
144333	HA-5 0-1'	Soil	4/10/00	11:22	4/12/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 3 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 144325
Description: HA-1 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH DRO (mg/Kg)									
DRO	<50	1	Mod. 8015B	4/12/00	4/17/00	BP	PB01740	QC02156	50

Sample Number: 144327
Description: HA-2 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH DRO (mg/Kg)									
DRO	<50	1	Mod. 8015B	4/12/00	4/17/00	BP	PB01740	QC02156	50

Sample Number: 144329
Description: HA-3 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH DRO (mg/Kg)									
DRO	<50	1	Mod. 8015B	4/12/00	4/17/00	BP	PB01740	QC02156	50

Sample Number: 144331
Description: HA-4 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH DRO (mg/Kg)									
DRO	<50	1	Mod. 8015B	4/12/00	4/17/00	BP	PB01740	QC02156	50

Sample Number: 144333
Description: HA-5 0-1'

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH DRO (mg/Kg)									
DRO	<50	1	Mod. 8015B	4/12/00	4/17/00	BP	PB01740	QC02156	50

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
DRO (mg/Kg)		<50	50	4/17/00	PB01740	QC02156

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	DRO (mg/Kg)	<50	1	250	201	80		70 - 130	-	QC02156
LCSD	DRO (mg/Kg)	<50	1	250	197	79	2	-	0 - 20	QC02156

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	DRO (mg/Kg)		250	252	101	70 - 130	4/17/00	QC02156
CCV 1	DRO (mg/Kg)		250	248	99	70 - 130	4/17/00	QC02156

A00041205

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(915) 682-4559 Fax (915) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Wood Group ESP, Inc.

SITE MANAGER: Mark Larson

PROJECT NO.: 1459

PROJECT NAME:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 (8015 MOD) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
144325	4/10/00	09:35	S	X		HA-1, 0-1'	1				✓				✓														
26	4/10/00	09:54	S		X	HA-1, 3'	1				✓																		
27	4/10/00	10:12	S	X		HA-2, 0-1'	1				✓				✓														
28	4/10/00	10:22	S		X	HA-2, 3'	1				✓																		
29	4/10/00	10:38	S	X		HA-3, 0-1'	1				✓				✓														
30	4/10/00	10:48	S		X	HA-3, 3'	1				✓																		
31	4/10/00	11:01	S	X		HA-4, 0-1'	1				✓				✓														
32	4/10/00	11:09	S		X	HA-4, 3'	1				✓																		
33	4/10/00	11:22	S	X		HA-5, 0-1'	1				✓				✓														
34	4/10/00	11:35	S		X	HA-5, 3'	1				✓																		

RELINQUISHED BY: (Signature) Date: 4/11/00 Time: 15:00
RECEIVED BY: (Signature) Helen Shelton Date: 4/11/00 Time: 15:00

RELINQUISHED BY: (Signature) Helen Shelton Date: 4/11/00 Time: 6:30PM
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) M J. Larson Date: 4/10/00 Time: 11:35

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #
HAND DELIVERED UPS OTHER:

RECEIVING LABORATORY: Trace Analysis, Inc.
ADDRESS: 6701 Aberdeen
CITY: Lubbock STATE: Tx ZIP:
CONTACT: Nell PHONE: (800) 378-1296
RECEIVED BY: (Signature) Vicki Hensley
DATE: 4-12-00 TIME: 10:00am

Results by: 4/14/00 FRI

HIGHLANDER CONTACT PERSON: Mark Larson

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water A-Air SD-Solid (S)-Soil SL-Sludge O-Other

REMARKS: Hold 3' Samples until Called

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

4/19/00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Mark Larson
Highlander Environmental Services
1910 N. Big Spring St.
Midland, TX 79705

Report Date: 4/25/00

Project Number: 1459
Project Name: Wood Group ESP, Inc.
Project Location: N/A

Order ID Number: A00041206

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
144335	Water Well	Water	4/10/00	12:25	4/12/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 144335
Description: Water Well

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
8260 (µg/L)									
Bromochloromethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Dichlorodifluoromethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Chloromethane (methyl chloride)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Vinyl Chloride	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Bromomethane (methyl bromide)	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5
Chloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Trichlorofluoromethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Acetone	<10.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	10
Iodomethane (methyl iodide)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Carbon Disulfide	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Acrylonitrile	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
2-Butanone (MEK)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
4-methyl-2-pentanone (MIBK)	<10.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	10
2-hexanone	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
trans 1,4-Dichloro-2-butene	<10.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	10
1,1-Dichloroethene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Methylene chloride	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5
MTBE	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
trans-1,2-Dichloroethene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,1-Dichloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
cis-1,2-dichloroethene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
2,2-Dichloropropane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2-Dichloroethane (EDC)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Chloroform	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,1,1-Trichloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,1-Dichloropropene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Benzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Carbon Tetrachloride	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2-Dichloropropane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Trichloroethene (TCE)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Dibromomethane (methylene bromide)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Bromodichloromethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
2-Chloroethyl vinyl ether	<10.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	10
cis-1,3-Dichloropropene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
trans-1,3-Dichloropropene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Toluene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,1,2-Trichloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,3-Dichloropropane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Dibromochloromethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2-Dibromoethane (EDB)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Tetrachloroethene (PCE)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Chlorobenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,1,1,2-Tetrachloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Ethylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
m,p-Xylene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Bromoform	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Styrene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
o-Xylene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2

1,1,2,2-Tetrachloroethane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
2-Chlorotoluene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2,3-Trichloropropane	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Isopropylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Bromobenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
n-Propylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,3,5-Trimethylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
tert-Butylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2,4-Trimethylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,4-Dichlorobenzene (para)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
sec-Butylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,3-Dichlorobenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
p-Isopropyltoluene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
4-Chlorotoluene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2-Dichlorobenzene (ortho)	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
n-Butylbenzene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
1,2-Dibromo-3-chloropropane	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5
1,2,3-Trichlorobenzene	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5
1,2,4-Trichlorobenzene	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5
Naphthalene	<2.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	2
Hexachlorobutadiene	<5.00	1	S 8260B	4/16/00	4/16/00	JG	PB01761	QC02108	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	50.40	1	50	101	72 - 128	JG	PB01761	QC02108
Toluene-d8	53.51	1	50	107	91 - 107	JG	PB01761	QC02108
4-Bromofluorobenzene	45.09	1	50	90	74 - 106	JG	PB01761	QC02108

8270 (mg/L)									
Pyridine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
n-Nitrosodimethylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Picoline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Methyl methanesulfonate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Ethyl methanesulfonate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Phenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Aniline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
bis (2-chloroethyl) ether	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Chlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1,3-Dichlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1,4-Dichlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzyl alcohol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1,2-Dichlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Methylphenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
bis (2-chloroisopropyl) ether	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Methylphenol/3-Methylphenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Acetophenone	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
n-Nitrosodi-n-propylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Hexachloroethane	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Nitrobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
n-Nitrosopiperidine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Isophorone	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Nitrophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4-Dimethylphenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
bis (2-chloroethoxy) methane	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzoic acid	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4-Dichlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1,2,4-Trichlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005

a,a-Dimethylphenethylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Naphthalene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Chloroaniline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,6-Dichlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Hexachlorobutadiene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
n-Nitroso-di-n-butylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Chloro-3-methylphenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1-Methylnaphthalene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Methylnaphthalene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1,2,4,5-Tetrachlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Hexachlorocyclopentadiene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4,6-Trichlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4,5-Trichlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Chloronaphthalene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1-Chloronaphthalene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Nitroaniline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Dimethylphthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Acenaphthylene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,6-Dinitrotoluene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
3-Nitroaniline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Acenaphthene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4-Dinitrophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Dibenzofuran	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Pentachlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Nitrophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
1-Napthylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,4-Dinitrotoluene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2-Napthylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
2,3,4,6-Tetrachlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Fluorene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Diethylphthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Chlorophenyl-phenylether	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Nitroaniline	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4,6-Dinitro-2-methylphenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Diphenylamine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Diphenylhydrazine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Bromophenyl-phenylether	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Phenacetin	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Hexachlorobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
4-Aminobiphenyl	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Pentachlorophenol	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Pentachloronitrobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Pronamide	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Phenanthrene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Anthracene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Di-n-butylphthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Fluoranthene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzidine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Pyrene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
p-Dimethylaminoazobenzene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Butylbenzylphthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzo(a)anthracene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
3,3-Dichlorobenzidine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Chrysene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Bis (2-ethylhexyl) phthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Di-n-octylphthalate	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005

Benzo(b)fluoranthene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
7,12-Dimethylbenz(a)anthracene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzo(k)fluoranthene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzo(a)pyrene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
3-Methylcholanthrene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Dibenzo(a,j)acridine	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Indeno(1,2,3-cd)pyrene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Dibenzo(a,h)anthracene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005
Benzo(g,h,i)perylene	<0.005	1	S 8270C	4/12/00	4/17/00	MA	PB01736	QC02150	0.005

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
2-Fluorophenol	25.14	1	80	31	8 - 73	MA	PB01736	QC02150	
Phenol-d5	17.34	1	80	22	8 - 62	MA	PB01736	QC02150	
Nitrobenzene-d5	51.84	1	80	65	44 - 109	MA	PB01736	QC02150	
2-Fluorobiphenyl	53.85	1	80	67	45 - 109	MA	PB01736	QC02150	
2,4,6-Tribromophenol	44.95	1	80	56	39 - 132	MA	PB01736	QC02150	
Terphenyl-d14	48.16	1	80	60	46 - 121	MA	PB01736	QC02150	
Alkalinity (mg/L as CaCo3)									
Hydroxide Alkalinity	<1.0	1	E 310.1	4/17/00	4/17/00	LD	PB01788	QC02142	1
Carbonate Alkalinity	<1.0	1	E 310.1	4/17/00	4/17/00	LD	PB01788	QC02142	1
Bicarbonate Alkalinity	193	1	E 310.1	4/17/00	4/17/00	LD	PB01788	QC02142	1
Total Alkalinity	193	1	E 310.1	4/17/00	4/17/00	LD	PB01788	QC02142	1
Dissolved Metals (mg/L)									
Dissolved Calcium	73	1	S 6010B	4/17/00	4/17/00	RR	PB01762	QC02109	0.5
Dissolved Magnesium	19	1	S 6010B	4/17/00	4/17/00	RR	PB01762	QC02109	0.5
Dissolved Potassium	3.5	1	S 6010B	4/17/00	4/17/00	RR	PB01762	QC02109	0.5
Dissolved Sodium	44	1	S 6010B	4/17/00	4/17/00	RR	PB01762	QC02109	0.5
Hardness (mg/L as CaCo3)									
Hardness	260	1	SM 2340B	4/17/00	4/17/00	RR	PB01808	QC02173	1
Hg, Total (mg/L)									
Total Mercury	<0.0002	1	S 7470A	4/17/00	4/19/00	JM	PB01820	QC02187	0.0002
Ion Chromatography (IC) (mg/L)									
CL	* 44	1	E 300.0	4/12/00	4/12/00	JS	PB01752	QC02099	0.5
Fluoride	* 1.8	1	E 300.0	4/12/00	4/12/00	JS	PB01752	QC02099	0.2
Nitrate-N	* 5.0	1	E 300.0	4/12/00	4/12/00	JS	PB01752	QC02099	0.2
Sulfate	* 100	1	E 300.0	4/12/00	4/12/00	JS	PB01752	QC02099	0.5

* CL - Chloride re-ran on IC041300.sch. ICV %IA = 90; CCV %IA = 92; LRB spikes %RPD = 1; LRB spikes %EA = 90. LRB spikes used because I am re-running the sample that I spiked.

* Fluoride - Fluoride re-ran on IC041300.sch. ICV %IA = 99; CCV %IA = 99; LRB spikes %RPD = 0; LRB spikes %EA = 98. LRB spikes used because I am re-running the sample that I spiked.

* Nitrate-N - Sample out of holding time for NO3.

* Sulfate - Sulfate re-ran on IC041300.sch. ICV %IA = 91; CCV %IA = 94; LRB spikes %RPD = 0; LRB spikes %EA = 91. LRB spikes use because I am re-running the sample that I spiked.

pH (s.u.)									
pH	* 7.4	1	E 150.1	4/12/00	4/12/00	RS	PB01771	QC02112	1

* pH - Out of holding time.

TDS (mg/L)									
Total Dissolved Solids	500	1	E 160.1	4/14/00	4/14/00	JS	PB01760	QC02126	10
Total Metals (mg/L)									
Total Arsenic	<0.01	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.01
Total Barium	0.04	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.01

Total Cadmium	<0.005	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.005
Total Chromium	<0.01	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.01
Total Lead	0.03	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.005
Total Selenium	<0.01	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.01
Total Silver	<0.002	1	S 6010B	4/17/00	4/18/00	RR	PB01763	QC02147	0.002

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Dichlorodifluoromethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Chloromethane (methyl chloride) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Vinyl Chloride (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Bromomethane (methyl bromide) (µg/L)		<5.00	5	4/16/00	PB01761	QC02108
Chloroethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Trichlorofluoromethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Acetone (µg/L)		<10.00	10	4/16/00	PB01761	QC02108
Iodomethane (methyl iodide) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Carbon Disulfide (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Acrylonitrile (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
2-Butanone (MEK) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	4/16/00	PB01761	QC02108
2-hexanone (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	4/16/00	PB01761	QC02108
1,1-Dichloroethene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Methylene chloride (µg/L)		<5.00	5	4/16/00	PB01761	QC02108
MTBE (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
trans-1,2-Dichloroethene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,1-Dichloroethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
cis-1,2-dichloroethene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
2,2-Dichloropropane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Chloroform (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,1,1-Trichloroethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,1-Dichloropropene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Benzene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Carbon Tetrachloride (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,2-Dichloropropane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Trichloroethene (TCE) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Dibromomethane (methylene bromide) (µg		<2.00	2	4/16/00	PB01761	QC02108
Bromodichloromethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	4/16/00	PB01761	QC02108
cis-1,3-Dichloropropene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
trans-1,3-Dichloropropene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Toluene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,1,2-Trichloroethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,3-Dichloropropane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Dibromochloromethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Tetrachloroethene (PCE) (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Chlorobenzene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
Ethylbenzene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108
m,p-Xylene (µg/L)		<2.00	2	4/16/00	PB01761	QC02108

Bromoform (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
Styrene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
o-Xylene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
2-Chlorotoluene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,2,3-Trichloropropane (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
Isopropylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
Bromobenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
n-Propylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
tert-Butylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
sec-Butylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,3-Dichlorobenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
p-Isopropyltoluene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
4-Chlorotoluene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
n-Butylbenzene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	4/16/00	PB01761	QC02108
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	4/16/00	PB01761	QC02108
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	4/16/00	PB01761	QC02108
Naphthalene (µg/L)	<2.00	2	4/16/00	PB01761	QC02108
Hexachlorobutadiene (µg/L)	<5.00	5	4/16/00	PB01761	QC02108

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	48.16	50	96	72 - 128	QC02108
Toluene-d8 (µg/L)	53.05	50	106	91 - 107	QC02108
4-Bromofluorobenzene (µg/L)	44.04	50	88	74 - 106	QC02108

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Pyridine (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
n-Nitrosodimethylamine (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
2-Picoline (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Methyl methanesulfonate (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Ethyl methanesulfonate (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Phenol (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Aniline (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
bis (2-chloroethyl) ether (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
2-Chlorophenol (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
1,3-Dichlorobenzene (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
1,4-Dichlorobenzene (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Benzyl alcohol (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
1,2-Dichlorobenzene (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
2-Methylphenol (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
bis (2-chloroisopropyl) ether (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
4-Methylphenol/3-Methylphenol (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Acetophenone (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
n-Nitrosodi-n-propylamine (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150
Hexachloroethane (mg/L)		<0.005	0.005	4/17/00	PB01736	QC02150

Nitrobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
n-Nitrosopiperidine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Isophorone (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2-Nitrophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4-Dimethylphenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
bis (2-chloroethoxy) methane (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzoic acid (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4-Dichlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
1,2,4-Trichlorobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
a,a-Dimethylphenethylamine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Naphthalene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Chloroaniline (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,6-Dichlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Hexachlorobutadiene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
n-Nitroso-di-n-butylamine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Chloro-3-methylphenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
1-Methylnaphthalene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2-Methylnaphthalene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
1,2,4,5-Tetrachlorobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Hexachlorocyclopentadiene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4,6-Trichlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4,5-Trichlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2-Chloronaphthalene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
1-Chloronaphthalene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2-Nitroaniline (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Dimethylphthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Acenaphthylene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,6-Dinitrotoluene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
3-Nitroaniline (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Acenaphthene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4-Dinitrophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Dibenzofuran (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Pentachlorobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Nitrophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
1-Napthylamine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,4-Dinitrotoluene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2-Napthylamine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
2,3,4,6-Tetrachlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Fluorene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Diethylphthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Chlorophenyl-phenylether (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Nitroaniline (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4,6-Dinitro-2-methylphenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Diphenylamine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Diphenylhydrazine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Bromophenyl-phenylether (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Phenacetin (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Hexachlorobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
4-Aminobiphenyl (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Pentachlorophenol (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Pentachloronitrobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150

Pronamide (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Phenanthrene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Anthracene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Di-n-butylphthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Fluoranthene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzidine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Pyrene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
p-Dimethylaminoazobenzene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Butylbenzylphthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzo(a)anthracene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
3,3-Dichlorobenzidine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Chrysene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Bis (2-ethylhexyl) phthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Di-n-octylphthalate (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzo(b)fluoranthene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
7,12-Dimethylbenz(a)anthracene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzo(k)fluoranthene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzo(a)pyrene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
3-Methylcholanthrene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Dibenzo(a,j)acridine (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Indeno(1,2,3-cd)pyrene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Dibenzo(a,h)anthracene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150
Benzo(g,h,i)perylene (mg/L)	<0.005	0.005	4/17/00	PB01736	QC02150

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
2-Fluorophenol (mg/L)	27.53	80	34	8 - 73	QC02150
Phenol-d5 (mg/L)	19.79	80	25	8 - 62	QC02150
Nitrobenzene-d5 (mg/L)	48.55	80	61	44 - 109	QC02150
2-Fluorobiphenyl (mg/L)	50.11	80	63	45 - 109	QC02150
2,4,6-Tribromophenol (mg/L)	43.51	80	54	39 - 132	QC02150
Terphenyl-d14 (mg/L)	46.62	80	58	46 - 121	QC02150

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Hydroxide Alkalinity (mg/L as CaCo3)		<1.0	1	4/17/00	PB01788	QC02142
Carbonate Alkalinity (mg/L as CaCo3)		<1.0	1	4/17/00	PB01788	QC02142
Bicarbonate Alkalinity (mg/L as CaCo3)		<1.0	1	4/17/00	PB01788	QC02142
Total Alkalinity (mg/L as CaCo3)		<1.0	1	4/17/00	PB01788	QC02142

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Dissolved Calcium (mg/L)		<.50	0.5	4/17/00	PB01762	QC02109
Dissolved Magnesium (mg/L)		<.50	0.5	4/17/00	PB01762	QC02109
Dissolved Potassium (mg/L)		<.50	0.5	4/17/00	PB01762	QC02109
Dissolved Sodium (mg/L)		<.50	0.5	4/17/00	PB01762	QC02109

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Mercury (mg/L)		<0.0002	0.0002	4/19/00	PB01820	QC02187

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	4/12/00	PB01752	QC02099
Fluoride (mg/L)		<0.2	0.2	4/12/00	PB01752	QC02099
Nitrate-N (mg/L)		<0.2	0.2	4/12/00	PB01752	QC02099
Sulfate (mg/L)		<0.5	0.5	4/12/00	PB01752	QC02099

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Dissolved Solids (mg/L)		<10	10	4/14/00	PB01760	QC02126

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Arsenic (mg/L)		<0.01	0.01	4/18/00	PB01763	QC02147
Total Barium (mg/L)		<0.01	0.01	4/18/00	PB01763	QC02147
Total Cadmium (mg/L)		<0.005	0.005	4/18/00	PB01763	QC02147
Total Chromium (mg/L)		<0.01	0.01	4/18/00	PB01763	QC02147
Total Lead (mg/L)		<0.005	0.005	4/18/00	PB01763	QC02147
Total Selenium (mg/L)		<0.01	0.01	4/18/00	PB01763	QC02147
Total Silver (mg/L)		<0.002	0.002	4/18/00	PB01763	QC02147

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Nitrate-N (mg/L)	4.1	1	25	26.73	91		80 - 120	-	QC02099
MSD	Nitrate-N (mg/L)	4.1	1	25	26.49	90	1	-	0 - 20	QC02099

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	1,1-Dichloroethene (ug/L)	<2.00	1	100	84	84		80 - 120	-	QC02108
MS	1,1-Dichloroethene (ug/L)	<2.00	1	100	84	84		79 - 129	-	QC02108
MS	Benzene (ug/L)		1	100	89	89		77 - 130	-	QC02108
MS	Trichloroethene (TCE) (ug/L)	<2.00	1	100	90	90		83 - 108	-	QC02108
MS	Toluene (ug/L)	<2.00	1	100	86	86		85 - 114	-	QC02108
MS	Chlorobenzene (ug/L)	<2.00	1	100	92	92		87 - 114	-	QC02108

Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.	% Rec. Limit	Prep Batch #	QC Batch #
MS	Dibromofluoromethane (µg/L)	48.46	1	50	JG	97	72 - 128	PB01761	QC02108
MS	Toluene-d8 (µg/L)	50.55	1	50	JG	101	91 - 107	PB01761	QC02108
MS	4-Bromofluorobenzene (µg/L)	45.04	1	50	JG	90	74 - 106	PB01761	QC02108

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	84	84	0	-	0 - 20	QC02108
MSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	84	84	0	-	0 - 20	QC02108
MSD	Benzene (ug/L)		1	100	89	89	0	-	0 - 20	QC02108
MSD	Trichloroethene (TCE) (ug/L)	<2.00	1	100	90	90	0	-	0 - 20	QC02108
MSD	Toluene (ug/L)	<2.00	1	100	87	87	1	-	0 - 20	QC02108
MSD	Chlorobenzene (ug/L)	<2.00	1	100	92	92	0	-	0 - 20	QC02108

Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.	% Rec. Limit	Prep Batch #	QC Batch #
MSD	Dibromofluoromethane (µg/L)	48.88	1	50	JG	98	72 - 128	PB01761	QC02108
MSD	Toluene-d8 (µg/L)	50.48	1	50	JG	101	91 - 107	PB01761	QC02108
MSD	4-Bromofluorobenzene (µg/L)	45.39	1	50	JG	91	74 - 106	PB01761	QC02108

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Dissolved Calcium (mg/L)	561	1	1000	1573	101		75 - 125	-	QC02109
MS	Dissolved Magnesium (mg/L)	210	1	1000	1160	95		75 - 125	-	QC02109
MS	Dissolved Potassium (mg/L)	5.9	1	1000	1110	110		75 - 125	-	QC02109
MS	Dissolved Sodium (mg/L)	870	1	1000	1673	80		75 - 125	-	QC02109
MSD	Dissolved Calcium (mg/L)	561	1	1000	1520	96	5	-	0 - 20	QC02109
MSD	Dissolved Magnesium (mg/L)	210	1	1000	1102	89	6	-	0 - 20	QC02109
MSD	Dissolved Potassium (mg/L)	5.9	1	1000	1068	106	4	-	0 - 20	QC02109
MSD	Dissolved Sodium (mg/L)	870	1	1000	1653	78	3	-	0 - 20	QC02109

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Total Arsenic (mg/L)	<0.01	1	2	1.94	97		75 - 125	-	QC02147
MS	Total Barium (mg/L)	0.03	1	2	1.88	93		75 - 125	-	QC02147
MS	Total Cadmium (mg/L)	<0.005	1	2	1.83	92		75 - 125	-	QC02147
MS	Total Chromium (mg/L)	<0.01	1	2	1.88	94		75 - 125	-	QC02147
MS	Total Lead (mg/L)	<0.005	1	2	1.77	89		75 - 125	-	QC02147
MS	Total Selenium (mg/L)	<0.01	1	2	1.72	86		75 - 125	-	QC02147
MS	Total Silver (mg/L)	<0.002	1	0.01	.008	80		75 - 125	-	QC02147
MSD	Total Arsenic (mg/L)	<0.01	1	2	1.91	96	2	-	0 - 20	QC02147
MSD	Total Barium (mg/L)	0.03	1	2	1.84	91	2	-	0 - 20	QC02147
MSD	Total Cadmium (mg/L)	<0.005	1	2	1.80	90	2	-	0 - 20	QC02147
MSD	Total Chromium (mg/L)	<0.01	1	2	1.84	92	2	-	0 - 20	QC02147
MSD	Total Lead (mg/L)	<0.005	1	2	1.74	87	2	-	0 - 20	QC02147
MSD	Total Selenium (mg/L)	<0.01	1	2	1.69	85	2	-	0 - 20	QC02147
MSD	Total Silver (mg/L)	<0.002	1	0.01	.009	90	12	-	0 - 20	QC02147

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Total Mercury (mg/L)	<0.0002	1	0.001	0.00120	120		80 - 120	-	QC02187
MSD	Total Mercury (mg/L)	<0.0002	1	0.001	0.001150	115	4	-	0 - 20	QC02187

Quality Control Report
Duplicates

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Hydroxide Alkalinity (mg/L as CaCo		<1.0	<1.0	1	0	0 - 20	QC02142
Duplicate	Carbonate Alkalinity (mg/L as CaCo		<1.0	<1.0	1	0	0 - 20	QC02142
Duplicate	Bicarbonate Alkalinity (mg/L as CaC		37	39	1	5	0 - 20	QC02142
Duplicate	Total Alkalinity (mg/L as CaCo3)		37	39	1	5	0 - 20	QC02142

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	pH (s.u.)		7.1	7.1	1	0	0 - 20	QC02112

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Total Dissolved Solids (mg/L)		103,000	100,000	1	3	0 - 20	QC02126

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	1,1-Dichloroethene (ug/L)	<2.00	1	100	87	87		80 - 120	-	QC02108
LCS	Benzene (ug/L)	<2.00	1	100	93	93		77 - 130	-	QC02108
LCS	Trichloroethene (TCE) (ug/L)	<2.00	1	100	93	93		83 - 108	-	QC02108
LCS	Toluene (ug/L)	<2.00	1	100	90	90		85 - 114	-	QC02108
LCS	Chlorobenzene (ug/L)	<2.00	1	100	95	95		87 - 114	-	QC02108

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	Dibromofluoromethane (µg/L)	1	50	49.70	99	72 - 128	QC02108
LCS	Toluene-d8 (µg/L)	1	50	50.68	101	91 - 107	QC02108
LCS	4-Bromofluorobenzene (µg/L)	1	50	45.90	92	74 - 106	QC02108

LCSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	87	87	0	-	0 - 20	QC02108
LCSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	87	87	0	-	0 - 20	QC02108
LCSD	Benzene (ug/L)	<2.00	1	100	92	92	1	-	0 - 20	QC02108
LCSD	Trichloroethene (TCE) (ug/L)	<2.00	1	100	91	91	2	-	0 - 20	QC02108
LCSD	Toluene (ug/L)	<2.00	1	100	90	90	0	-	0 - 20	QC02108
LCSD	Chlorobenzene (ug/L)	<2.00	1	100	95	95	0	-	0 - 20	QC02108

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	Dibromofluoromethane (µg/L)	1	50	49.87	100	72 - 128	QC02108
LCSD	Toluene-d8 (µg/L)	1	50	50.94	102	91 - 107	QC02108
LCSD	4-Bromofluorobenzene (µg/L)	1	50	45.25	91	74 - 106	QC02108

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	Phenol (mg/L)	<0.005	1	80	42.574	53		5 - 57	-	QC02150
LCS	2-Chlorophenol (mg/L)	<0.005	1	80	61.649	77		29 - 110	-	QC02150
LCS	1,4-Dichlorobenzene (mg/L)	<0.005	1	80	45.078	56		25 - 94	-	QC02150
LCS	n-Nitrosodi-n-propylamine (mg/L)	<0.005	1	80	68.014	85		36 - 119	-	QC02150
LCS	1,2,4-Trichlorobenzene (mg/L)	<0.005	1	80	53.469	67		28 - 110	-	QC02150
LCS	4-Chloro-3-methylphenol (mg/L)	<0.005	1	80	72.666	91		40 - 126	-	QC02150
LCS	Acenaphthene (mg/L)	<0.005	1	80	71.889	90		47 - 118	-	QC02150
LCS	4-Nitrophenol (mg/L)	<0.005	1	80	28.938	36		0 - 69	-	QC02150
LCS	2,4-Dinitrotoluene (mg/L)	<0.005	1	80	59.722	75		46 - 133	-	QC02150
LCS	Pentachlorophenol (mg/L)	<0.005	1	80	59.026	74		21 - 131	-	QC02150
LCS	Pyrene (mg/L)	<0.005	1	80	56.803	71		44 - 125	-	QC02150

Standard	Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS	2-Fluorophenol (mg/L)		1	80	41.43	52		8 - 73		QC02150
LCS	Phenol-d5 (mg/L)		1	80	31.23	39		8 - 62		QC02150
LCS	Nitrobenzene-d5 (mg/L)		1	80	61.27	77		44 - 109		QC02150
LCS	2-Fluorobiphenyl (mg/L)		1	80	62.41	78		45 - 109		QC02150
LCS	2,4,6-Tribromophenol (mg/L)		1	80	50.91	64		39 - 132		QC02150
LCS	Terphenyl-d14 (mg/L)		1	80	53.35	67		46 - 121		QC02150
LCSD	Phenol (mg/L)	<0.005	1	80	48.336	60	13	-	0 - 20	QC02150
LCSD	2-Chlorophenol (mg/L)	<0.005	1	80	60.657	76	2	-	0 - 20	QC02150
LCSD	1,4-Dichlorobenzene (mg/L)	<0.005	1	80	48.954	61	8	-	0 - 20	QC02150
LCSD	n-Nitrosodi-n-propylamine (mg/L)	<0.005	1	80	68.858	86	1	-	0 - 20	QC02150
LCSD	1,2,4-Trichlorobenzene (mg/L)	<0.005	1	80	62.606	78	16	-	0 - 20	QC02150
LCSD	4-Chloro-3-methylphenol (mg/L)	<0.005	1	80	74.540	93	3	-	0 - 20	QC02150
LCSD	Acenaphthene (mg/L)	<0.005	1	80	72.203	90	0	-	0 - 20	QC02150
LCSD	4-Nitrophenol (mg/L)	<0.005	1	80	32.636	41	12	-	0 - 20	QC02150
LCSD	2,4-Dinitrotoluene (mg/L)	<0.005	1	80	60.618	76	1	-	0 - 20	QC02150
LCSD	Pentachlorophenol (mg/L)	<0.005	1	80	62.094	78	5	-	0 - 20	QC02150
LCSD	Pyrene (mg/L)	<0.005	1	80	55.216	69	3	-	0 - 20	QC02150

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	2-Fluorophenol (mg/L)	1	80	45.06	56	8 - 73	QC02150
LCSD	Phenol-d5 (mg/L)	1	80	41.37	52	8 - 62	QC02150
LCSD	Nitrobenzene-d5 (mg/L)	1	80	60.53	76	44 - 109	QC02150
LCSD	2-Fluorobiphenyl (mg/L)	1	80	61.30	77	45 - 109	QC02150
LCSD	2,4,6-Tribromophenol (mg/L)	1	80	52.50	66	39 - 132	QC02150
LCSD	Terphenyl-d14 (mg/L)	1	80	51.22	64	46 - 121	QC02150

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	Dissolved Calcium (mg/L)	<.50	1	1000	974	97		75 - 125	-	QC02109
LCS	Dissolved Magnesium (mg/L)	<.50	1	1000	908	91		75 - 125	-	QC02109
LCS	Dissolved Potassium (mg/L)	<.50	1	1000	959	96		75 - 125	-	QC02109
LCS	Dissolved Sodium (mg/L)	<.50	1	1000	941	94		75 - 125	-	QC02109
LCSD	Dissolved Calcium (mg/L)	<.50	1	1000	966	97	1	-	0 - 20	QC02109
LCSD	Dissolved Magnesium (mg/L)	<.50	1	1000	914	91	1	-	0 - 20	QC02109
LCSD	Dissolved Potassium (mg/L)	<.50	1	1000	958	96	0	-	0 - 20	QC02109
LCSD	Dissolved Sodium (mg/L)	<.50	1	1000	941	94	0	-	0 - 20	QC02109

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	Total Mercury (mg/L)	<0.0002	1	0.001	0.00117	117		80 - 120	-	QC02187
LCSD	Total Mercury (mg/L)	<0.0002	1	0.001	0.00120	120	3	-	0 - 20	QC02187

	Param		Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	CL (mg/L)	*	<0.5	1	12.5	11.25	90		80 - 120	-	QC02099
LCS	Fluoride (mg/L)	*	<0.2	1	2.5	2.44	98		80 - 120	-	QC02099
LCS	Sulfate (mg/L)	*	<0.5	1	12.5	11.36	91		80 - 120	-	QC02099
LCSD	CL (mg/L)	*	<0.5	1	12.5	11.48	92	2	-	0 - 20	QC02099
LCSD	Fluoride (mg/L)	*	<0.2	1	2.5	2.45	98	0	-	0 - 20	QC02099
LCSD	Sulfate (mg/L)	*	<0.5	1	12.5	11.35	91	0	-	0 - 20	QC02099

* CL - Blank spikes used.
* Fluoride - Blank spikes used.
* Sulfate - Blank spikes used.

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	Total Copper (mg/L)	<0.01	1	2	1.94	97		75 - 125	-	QC02147
LCS	Total Lead (mg/L)	<0.005	1	2	1.95	98		75 - 125	-	QC02147
LCS	Total Zinc (mg/L)	<0.005	1	2	1.87	94		75 - 125	-	QC02147
LCSD	Total Copper (mg/L)	<0.01	1	2	1.95	98	1	-	0 - 20	QC02147
LCSD	Total Lead (mg/L)	<0.005	1	2	1.98	99	2	-	0 - 20	QC02147
LCSD	Total Zinc (mg/L)	<0.005	1	2	1.90	95	2	-	0 - 20	QC02147

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	103	103	80 - 120	4/16/00	QC02108
CCV 1	1,1-Dichloroethene (µg/L)		100	99	99	80 - 120	4/16/00	QC02108
CCV 1	Chloroform (µg/L)		100	95	95	80 - 120	4/16/00	QC02108
CCV 1	1,2-Dichloropropane (µg/L)		100	98	98	80 - 120	4/16/00	QC02108
CCV 1	Toluene (µg/L)		100	98	98	80 - 120	4/16/00	QC02108
CCV 1	Chlorobenzene (µg/L)		100	99	99	80 - 120	4/16/00	QC02108
CCV 1	Ethylbenzene (µg/L)		100	99	99	80 - 120	4/16/00	QC02108
CCV 1	Dibromofluoromethane (µg/L)		50	48.53	97	80 - 120	4/16/00	QC02108
CCV 1	Toluene-d8 (µg/L)		50	48.62	97	80 - 120	4/16/00	QC02108
CCV 1	4-Bromofluorobenzene (µg/L)		50	51.27	103	80 - 120	4/16/00	QC02108

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Phenol (mg/L)		60	59.73	100	5 - 57	4/17/00	QC02150
CCV 1	1,4-Dichlorobenzene (mg/L)		60	59.21	99	25 - 94	4/17/00	QC02150
CCV 1	2-Nitrophenol (mg/L)		60	59.38	99	80 - 120	4/17/00	QC02150
CCV 1	2,4-Dichlorophenol (mg/L)		60	56.84	95	80 - 120	4/17/00	QC02150
CCV 1	Hexachlorobutadiene (mg/L)		60	58.79	98	80 - 120	4/17/00	QC02150
CCV 1	4-Chloro-3-methylphenol (mg/L)		60	55.06	92	40 - 126	4/17/00	QC02150
CCV 1	2,4,6-Trichlorophenol (mg/L)		60	59.12	99	80 - 120	4/17/00	QC02150
CCV 1	Acenaphthene (mg/L)		60	56.74	95	47 - 118	4/17/00	QC02150
CCV 1	Diphenylamine (mg/L)		60	58.00	97	80 - 120	4/17/00	QC02150
CCV 1	Pentachlorophenol (mg/L)		60	59.80	100	21 - 131	4/17/00	QC02150
CCV 1	Fluoranthene (mg/L)		60	60.62	101	80 - 120	4/17/00	QC02150
CCV 1	Di-n-octylphthalate (mg/L)		60	55.47	92	80 - 120	4/17/00	QC02150
CCV 1	Benzo(a)pyrene (mg/L)		60	58.50	98	80 - 120	4/17/00	QC02150
CCV 1	2-Fluorophenol (mg/L)		60	58.29	97	8 - 73	4/17/00	QC02150
CCV 1	Phenol-d5 (mg/L)		60	56.97	95	8 - 62	4/17/00	QC02150
CCV 1	Nitrobenzene-d5 (mg/L)		60	57.36	96	44 - 109	4/17/00	QC02150
CCV 1	2-Fluorobiphenyl (mg/L)		60	59.08	98	45 - 109	4/17/00	QC02150
CCV 1	2,4,6-Tribromophenol (mg/L)		60	49.62	83	39 - 132	4/17/00	QC02150
CCV 1	Terphenyl-d14 (mg/L)		60	60.13	100	46 - 121	4/17/00	QC02150

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	4/17/00	QC02142
ICV	Carbonate Alkalinity (mg/L as CaCo3)		0	222	0	80 - 120	4/17/00	QC02142
ICV	Bicarbonate Alkalinity (mg/L as CaCo3)		0	6	0	80 - 120	4/17/00	QC02142
ICV	Total Alkalinity (mg/L as CaCo3)		236	228	97	80 - 120	4/17/00	QC02142

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	4/17/00	QC02142
CCV 1	Carbonate Alkalinity (mg/L as CaCo3)		0	202	0	80 - 120	4/17/00	QC02142
CCV 1	Bicarbonate Alkalinity (mg/L as CaCo3)		0	27	0	80 - 120	4/17/00	QC02142
CCV 1	Total Alkalinity (mg/L as CaCo3)		236	229	97	80 - 120	4/17/00	QC02142

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Dissolved Calcium (mg/L)		20	19.6	98	75 - 125	4/17/00	QC02109
ICV	Dissolved Magnesium (mg/L)		20	19.6	98	75 - 125	4/17/00	QC02109
ICV	Dissolved Potassium (mg/L)		20	19.6	98	75 - 125	4/17/00	QC02109
ICV	Dissolved Sodium (mg/L)		20	19.9	99	75 - 125	4/17/00	QC02109
CCV 1	Dissolved Calcium (mg/L)		20	19.1	96	75 - 125	4/17/00	QC02109
CCV 1	Dissolved Magnesium (mg/L)		20	19.1	96	75 - 125	4/17/00	QC02109
CCV 1	Dissolved Potassium (mg/L)		20	19.0	95	75 - 125	4/17/00	QC02109
CCV 1	Dissolved Sodium (mg/L)		20	19.5	98	75 - 125	4/17/00	QC02109

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Mercury (mg/L)		0.001	0.00110	110	80 - 120	4/19/00	QC02187
CCV 1	Total Mercury (mg/L)		0.001	0.00091	91	80 - 120	4/19/00	QC02187

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.04	88	80 - 120	4/12/00	QC02099
ICV	Fluoride (mg/L)		2.5	2.42	97	80 - 120	4/12/00	QC02099
ICV	Nitrate-N (mg/L)		5	4.59	92	80 - 120	4/12/00	QC02099
ICV	Sulfate (mg/L)		12.5	11.20	90	80 - 120	4/12/00	QC02099
CCV 1	CL (mg/L)		12.5	10.78	86	80 - 120	4/12/00	QC02099
CCV 1	Fluoride (mg/L)		2.5	2.30	92	80 - 120	4/12/00	QC02099
CCV 1	Nitrate-N (mg/L)		5	4.51	90	80 - 120	4/12/00	QC02099
CCV 1	Sulfate (mg/L)		12.5	11.06	88	80 - 120	4/12/00	QC02099

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	pH (s.u.)		7	7.0	100	80 - 120	4/12/00	QC02112
CCV 1	pH (s.u.)		7	7.0	100	80 - 120	4/12/00	QC02112

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Dissolved Solids (mg/L)		1000	988	99	80 - 120	4/14/00	QC02126
CCV 1	Total Dissolved Solids (mg/L)		1000	992	99	80 - 120	4/14/00	QC02126

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Arsenic (mg/L)		1	1.01	101	75 - 125	4/18/00	QC02147
ICV	Total Barium (mg/L)		1	1.02	102	75 - 125	4/18/00	QC02147
ICV	Total Cadmium (mg/L)		1	1.02	102	75 - 125	4/18/00	QC02147
ICV	Total Chromium (mg/L)		1	1.02	102	75 - 125	4/18/00	QC02147
ICV	Total Lead (mg/L)		1	1.01	101	75 - 125	4/18/00	QC02147
ICV	Total Selenium (mg/L)		1	0.96	96	75 - 125	4/18/00	QC02147
ICV	Total Silver (mg/L)		0.2	0.199	100	75 - 125	4/18/00	QC02147
CCV 1	Total Arsenic (mg/L)		1	0.99	99	75 - 125	4/18/00	QC02147
CCV 1	Total Barium (mg/L)		1	1.02	102	75 - 125	4/18/00	QC02147
CCV 1	Total Cadmium (mg/L)		1	1.01	101	75 - 125	4/18/00	QC02147
CCV 1	Total Chromium (mg/L)		1	1.02	102	75 - 125	4/18/00	QC02147
CCV 1	Total Lead (mg/L)		1	1.00	100	75 - 125	4/18/00	QC02147
CCV 1	Total Selenium (mg/L)		1	0.96	96	75 - 125	4/18/00	QC02147
CCV 1	Total Silver (mg/L)		0.2	.200	100	75 - 125	4/18/00	QC02147

Cation-Anion Balance Sheet

Sample # 144335 TS Date: 4/25/00

Cations

	ppm	meq/L
Calcium	73	3.6427
Magnesium	19	1.56351
Sodium	44	1.914
Potassium	3.5	0.08953

Total Cations
7.20974 in meq/L

Anions

	ppm	meq/L
Alkalinity	193	3.86
Sulfate	100	2.082
Chloride	44	1.24124
Nitrate as N	5	0.35695
Fluoride	1.8	0.094752

Total Anions
7.63494 in meq/L

Percentage Error
5.72868 %
(needs to be <10%)

OTHER INFORMATION

TDS	0
EC	0

Measure EC and Cation Sums	720.974	Range should be:	0	to	0
Measure EC and Anion Sums	763.4942	Range should be:	0	to	0
Calculated TDS/Conductivity	#DIV/0!	Range should be:	0.55	to	0.77
Measure TDS and Cation Sums	0	Range should be:	0.55	to	0.77
Measure TDS and Anion Sums	0	Range should be:	0.55	to	0.77

144335

A00041206

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(915) 682-4559 Fax (915) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: Wood Group ESP Inc. SITE MANAGER: Mark Larson

PROJECT NO.: 1459 PROJECT NAME: Hobbs Facility

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
144335	4/10/00	12:25	W		X	Water Well	2	N	X		X	
						" "	2	N			X	
						" "	2	N		X	X	
						" "	2	N			X	
	↓	↓	↓		↓	" "	2	Y				Hcl

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8020/602 | MTBE 8021/602 (8260) | TPH 418.1 8015 MOD. TX1005 | (PAH) 8270 (8270 only) | RCRA Metals Ag As Ba Cd Cr Pb Hg Se | TCLP Metals Ag As Ba Cd Cr Pd Hg Se | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC.MS Vol. 8240/8260/624 | GC.MS Semi. Vol. 8270/625 | PCB's 8080/608 | Pest. 608/608 | BOD, TSS, pH, (TDS) Chloride | Gamma Spec. | Alpha Beta (Air) | PLM (Asbestos) | Cations Anions

RELINQUISHED BY: (Signature)	Date: 4/11/00 Time: 13:00	RECEIVED BY: (Signature) Helen Shelton	Date: 4/11/00 Time: 15:00	SAMPLED BY: (Print & Sign) M.J. Larson	Date: 4/10/00 Time: 12:25
RELINQUISHED BY: (Signature) Helen Shelton	Date: 4/11/00 Time: 16:30 PM	RECEIVED BY: (Signature)	Date: Time:	SAMPLE SHIPPED BY: (Circle) FEDEX BUS UPS	AIRBILL #: OTHER:
RELINQUISHED BY: (Signature)	Date: Time:	RECEIVED BY: (Signature)	Date: Time:	HAND DELIVERED	
RECEIVING LABORATORY: Trace Analysis, Inc		RECEIVED BY: (Signature) Vicki Hensley		HIGHLANDER CONTACT PERSON: Mark Larson	Results by: In a reasonable time
ADDRESS: 6701 Aberdeen					RUSH Charges Authorized: Yes No
CITY: Lubbock STATE: TX ZIP: 797		DATE: 4-12-00 TIME: 10:00a			
CONTACT: Nell PHONE: (800) 378-1296					

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: (W)-Water A-Air SD-Solid S-Soil SL-Sludge O-Other

REMARKS: Report Unfiltered Metals as total

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Enviromental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.