

GW - 164

REPORTS

YEAR(S):

2006

January 9, 2006

VIA: Hand Delivery

Mr. Wayne Price, Chief
Oil Conservation Division – Environmental Bureau
State of New Mexico
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Discharge Permit GW-164, Waste Characterization Investigation Report and Permit Modification Request for Wood Group ESP, Inc., Hobbs Service Center, 8426 North Dal Paso, Hobbs, New Mexico

Dear Mr. Price:

This letter is submitted to the State of New Mexico, Oil Conservation Division (“OCD”), on behalf of Wood Group ESP, Inc. (“Wood Group”), by Larson and Associates, Inc. (“LA”), its consultant, to report the findings of a waste characterization investigation at its Hobbs Service Center (“Facility”) located at 8426 North Dal Paso, in Hobbs, New Mexico. The investigation was conducted to address the concentration of chromium that was recently detected in the Facility’s process water that might be considered hazardous under the Resource Conservation and Recovery Act (“RCRA”), which is administered by the federal Environmental Protection agency (“EPA”) and New Mexico Environment Department (“NMED”). The legal description for the Facility is unit D (NW/4, NW/4), Section 35, Township 17 South and Range 38 East, in Lea County, New Mexico. Figure 1 presents a location and topographic map. Figure 2 presents a Facility drawing. Contact information for the Facility is as follows:

Name:	Mr. Galen Goodman
Title:	Senior Health, Safety & Environmental Advisor
Mailing Address:	2707 So. County Road 1208 Midland, Texas 79706
Telephone (direct):	(432) 848-0157
Fax:	(432) 699-4159
Mobile:	(432) 557-5129
Email:	Galen.Goodman@woodgroup.com

Background

The Facility operates under OCD groundwater discharge permit GW-164, which allows the Facility to generate and dispose non-hazardous industrial waste that is exempt from RCRA. The Facility is a service center for electric submersible pumps used in the oil and gas industry for pumping crude oil, produced water and natural gas from wells.

The pumps are periodically transported to the Facility for cleaning, inspection and testing and returned to service. The pumps are initially flushed with fresh water to remove loose debris from the interior or cavity of the pump. Following initial flushing, the pumps are washed internally with a solution of hydrochloride acid (20%), which is circulated through the pumps to dissolve scale. The hydrochloride acid is recovered in a fiberglass tank, reused until the concentration decreases below 12% when it is considered spent and discharged to the main sump in the shop area. A pump transfers the material from the sump to a fiberglass water tank located outside and near the southeast corner of the shop building. The water tank also receives mop water from floor cleaning, precipitation and is located inside concrete containment structure. Figure 2 presents the location of the main sump and water tank.

After washing, the pumps are transferred to the test area where water from the Stage 1 Tank is flushed through the pumps to residue and acid. The water is returned to the Stage 1 Tank where caustic soda (sodium hydroxide) is added to stabilize the pH. The water passes from the Stage 1 Tank to the ionization chamber and to the Stage 2 Tank where suspended solids drop from the solution. Water from Stage 2 Tank is used to test pump performance. Cougar Cleaning Systems, Inc. ("CCSI"), located in Midland, Texas, designed and installed the process water system. Figure 3 presents a flow diagram.

An oilfield trucking company periodically removes water and solids from the Stage 1 Tank, Stage 2 Tank and Water Tank and hauls the material to Sundance Disposal Systems, Inc. ("SDSI") located east of Eunice, New Mexico. Wood Group personnel have been responsible for collecting samples of the process water and providing waste characterization data to SDSI. Cardinal Laboratories, Inc. ("Cardinal") located in Hobbs, New Mexico, has performed the waste analysis, however, the most recent sample (August 23, 2006) reported chromium above the hazardous threshold of five (5) milligrams per liter ("mg/L"). Table 1 presents a summary of the waste characterization data. Appendix A presents the laboratory report.

On November 27, 2006, Wood Group contacted Mr. Wayne Price, Chief of the Environmental Bureau for the OCD, located in Santa Fe, New Mexico, to discuss the groundwater discharge permit. Mr. Price informed Wood Group that it had received the August 23, 2006 sample analysis from SDSI and informed Wood Group that the waste might be classified as RCRA Hazardous. Wood Group committed to submitting a plan to the OCD to investigate the waste and report the findings within forty-five (45) days following receipt of the final laboratory report. The plan, which was submitted to the OCD on November 27, 2006, was approved by the OCD on November 28, 2006, with the following conditions:

1. Wood Group shall submit a permit modification to address this issue.
2. Wood Group shall commit to training its employees on the issue of waste characterization.

Current Investigation

On November 29, 2006, LA personnel collected two (2) composite samples of the process water consisting of approximate equal volumes of liquid from the three (3) tanks (Stage 1 Tank, Stage 2 Tank and Water Tank). The samples were collected using dedicated disposable polyethylene bailers, placed in laboratory prepared containers, labeled, chilled in an ice chest and hand-delivered under chain-of-custody control to Cardinal and Trace Analysis, Inc. ("Trace") located in Midland, Texas. The laboratories analyzed the samples for RCRA toxicity (volatile organics, semi-volatile organics and metals), reactivity, corrosivity and ignitability. Table 1 presents a summary of the waste characterization data. Appendix A presents the laboratory report.

Referring to Table 1, Cardinal and Trace reported constituents within permissible limits, except corrosivity (pH), chromium and lead. The laboratories reported the pH below two (2) standard units ("s.u."), concluding that the material is corrosive. Cardinal reported chromium and lead at 16.5 mg/L and 21.3 mg/L, respectively. Trace reported chromium and lead at 27.1 mg/L and 18.3 mg/L, respectively. The permissible level for chromium and lead is 5 mg/L.

On December 11, 2006, LA personnel collected individual samples from the Stage 1 Tank, Stage 2 Tank and Water Tank. These samples were collected in the manner previously described and hand-delivered under chain-of-custody control to Trace, which analyzed the samples for chromium and lead using the Toxicity Leaching Procedure ("TCLP"), pH, hexavalent and total chromium. Table 2 presents a summary of the analysis. Appendix A presents the laboratory report.

Referring to Table 2, chromium was reported at 23.9 mg/L, 22.9 mg/L and 50.4 mg/L in the Stage 1 Tank, Stage 2 Tank and Water Tank, respectively. Lead was reported at 21.4 mg/L, 11.4 mg/L and 40.8 mg/L in the Stage 1 Tank, Stage 2 Tank and Water Tank, respectively. The pH was below 2 s.u. No hexavalent chromium was detected in the samples concluding that the chromium is trivalent.

On December 11, 2006, LA personnel collected samples from the Facility's water well located south of the shop building. The well was pumped for about 30 minutes to remove approximately three (3) casing volumes of groundwater before samples were collected from a spigot near the well. The samples were collected in laboratory prepared containers, labeled, chilled in an ice chest and hand-delivered under chain-of-custody control to Trace, which analyzed the samples for volatile and semi-volatile organics using methods SW-846-8260 and 8270, respectively, dissolved (filtered) metals, anions, cations and total dissolved solids ("TDS"). Table 3 presents a summary of the water analysis. Appendix A presents the laboratory report.

Referring to Table 3, no constituents exceeded the New Mexico Water Quality Control ("WQCC") human health or domestic water quality standards, concluding that the well has not been impacted by Facility operations.

On December 12, 2006, LA personnel collected a sample ("Pump") of material following flushed from a pump upon arrival at the Facility, and a sample ("Sump") of material from a drain sump located near the southeast corner of the shop building. The samples were analyzed for TCLP chromium and lead to determine if the oilfield or sump were possible sources for the chromium and lead. The sump receives mop water from floor washing and some mineral oil from pumps and drums. Table 2 presents a summary of the laboratory analysis. Appendix A presents the laboratory report.

Referring to Table 2, no chromium or lead was reported in the samples above the test method detection limit, confirming that the oilfield where pump originated and the drain sump are not likely sources for these contaminants.

Waste Characterization Training

Wood Group has committed to using a third party consultant to characterize its waste and will not utilize in-house personnel.

Discharge Permit Modification

Based on the above-referenced investigations, Wood Group has prepared modifications for its groundwater discharge permit, including the following:

1. Wood Group shall dispose of waste material at SDSI that has been collected in 55-gallon drums from the pump and drain sump and tested below 5 mg/L for TCLP chromium and lead;
2. Wood Group shall continue to collect material from pumps in 55-gallon drums and test these materials for TCLP chromium and lead to determine if its customer(s) are contributing chromium and lead to its operations as a result of well operations and the results shall be reported to the OCD;
3. Wood Group shall dispose of material from Item 2 at SDSI if TCLP chromium and lead are below 5 mg/L;
4. Wood Group shall and has requested CCSI to provide it with metallurgical data for electrodes used in its ionization chambers to determine if the electrodes could potentially contribute chromium and lead to the process water, and the results shall be reported to the OCD;
5. Wood Group shall and has requested CCSI to conduct a thorough evaluation of the process water system, and replace defective materials and equipment and

correct pH imbalances detected in samples from the Stage 1 Tank, Stage 2 Tank and Water Tank;

6. Wood Group shall and has requested CCSI to train Wood Group personnel and prepare and deliver documents for Wood Group personnel for the operation and maintenance of the process water system, with copies of documents made available to the OCD upon request;
7. Wood Group shall remove the contents of liquids and solids from the Stage 1 Tank, Stage 2 Tank, Water Tank, process lines and main sump for disposal at a permitted RCRA hazardous waste facility that is acceptable to the OCD, with documentation of disposal provided to the OCD;
8. Wood Group shall conduct weekly characterization of its process water following completion of Item 7 and dispose of materials at a permitted RCRA hazardous waste facility acceptable to the OCD should TCLP chromium and lead exceed 5 mg/L and report results to the OCD.

In conclusion, Wood Group has arranged a meeting with the OCD on Thursday, January 11, 2006, at 1:00 pm to discuss these results and the permit modifications. We look forward to meeting with you and please do not hesitate to call Mr. Galen Goodman with Wood Group at (432) 848-0157 or email Galen.Goodman@woodgroup.com, if you have questions. I may be reached with questions at (432) 687-0901 or email mark@laenvironmental.com.

Sincerely,

Larson and Associates, Inc.



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

Enclosures

cc: Chris Williams/OCD District 1 – Hobbs
Bud Missel/Wood Group
Michael Hughes/Wood Group
Ray Floyd/Wood Group
Ronnie Plummer/Wood Group
Nancy Dickinson/Wood Group
Jeff Beighle/Wood Group
Mark Neinast/Wood Group
Mike Nieman/Wood Group
Greg Midkiff/Wood Group
Galen Goodman/Wood Group

Tables

Table 1

Summary of TCLP Laboratory Analysis of Composite Process Water Sample
 Wood Group ESP, Inc., Hobbs Service Facility (GW-164)
 Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East
 Lea County, New Mexico

Page 1 of 2

Parameter	Reporting Unit	EPA/NMED Threshold (mg/L)	Cardinal Laboratories (08/23/06)	Cardinal Laboratories (11/29/06)	Trace Analysis (11/29/06)
<u>Characteristics</u>					
Reactivity	mg/L	Nonreactive	Non-Reactive	Non-Reactive	Non-Reactive
Corrosivity	mg/L	<2 or >12	1.22	0.37	corrosive
Ignitability	mg/L	<140 Degrees	>140	>140	>150
<u>TCLP Volatile Organics</u>					
Vinyl Chloride	mg/L	0.2	<0.005	<0.005	<0.05
1,1-Dichloroethylene	mg/L	0.7	<0.005	<0.005	<0.05
Methyl Ethyl Ketone	mg/L	200	0.208	0.459	<0.5
Chloroform	mg/L	6	<0.005	<0.005	<0.05
1,2-Dichloroethane	mg/L	0.5	<0.005	<0.005	<0.05
Benzene	mg/L	0.5	0.014	0.234	0.278
Carbon Tetrachloride	mg/L	0.5	<0.005	<0.005	<0.05
Trichloroethylene	mg/L	0.5	<0.005	0.006	<0.05
Tetrachloroethylene	mg/L	0.7	<0.005	<0.005	<0.05
Chlorobenzene	mg/L	100	<0.005	<0.005	<0.05
1,4-Dichlorobenzene	mg/L	7.5	0.016	0.008	<0.05
<u>TCLP Semi-Volatile Organics</u>					
Pyridine	mg/L	5	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	mg/L	7.5	<0.05	<0.05	<0.05
o-Cresol	mg/L	200	<0.05	<0.05	<0.05
m,p-Cresol	mg/L	200	<0.05	<0.05	0.0923
Hexachloroethane	mg/L	3	<0.05	<0.05	<0.05
Nitrobenzene	mg/L	2	<0.05	<0.05	<0.05

Table 1

Summary of TCLP Laboratory Analysis of Composite Process Water Sample

Wood Group ESP, Inc., Hobbs Service Facility (GW-164)

Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East

Lea County, New Mexico

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Parameter	Reporting Unit	EPA/NMED Threshold (mg/L)	Cardinal Laboratories (08/23/06)	Cardinal Laboratories (11/29/06)	Trace Analysis (11/29/06)
Hexachloro-1,3-butadiene	mg/L	0.5	<0.05	<0.05	<0.05
2,4,6-Trichlorophenol	mg/L	2	<0.05	<0.05	<0.05
2,4,5-Trichlorophenol	mg/L	400	<0.05	<0.05	<0.05
2,4-Dinitrotoluene	mg/L	0.13	<0.05	<0.05	<0.05
2,4-Dichlorophenoxyacetic acid	mg/L	--	--	--	<0.05
Hexachlorobenzene	mg/L	0.13	<0.05	<0.05	<0.05
2,4,5-Trichlorophenoxypropionic acid	mg/L	--	--	--	<0.05
Pentachlorophenol	mg/L	100	<0.05	<0.05	<0.05
TCLP Metals					
Arsenic	mg/L	5	<1	<1	<0.1
Barium	mg/L	100	18	<5	1.58
Cadmium	mg/L	1	<0.1	<0.1	<0.05
Chromium	mg/L	5	6.31	21.3	27.1
Lead	mg/L	5	3.57	16.5	18.3
Mercury	mg/L	0.2	<0.02	<0.02	<0.0005
Selenium	mg/L	1	<0.1	<0.1	<0.5
Silver	mg/L	5	<1	<1	<0.125

Notes: Analysis performed by Cardinal Laboratories, Inc., Hobbs, New Mexico and Trace Analysis, Inc., Lubbock, Texas

1. mg/L: Milligrams per liter

2. --: No data available

3. <: Below method detection limit

Table 2

Summary of Laboratory Analysis of Process Water Samples

Wood Group ESP, Inc., Hobbs Service Facility (GW-164)

Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East

Lea County, New Mexico

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Sample Identification	Sample Date	TCLP Chromium (mg/L)	TCLP Lead (mg/L)	Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	pH (Standard Units)
EPA/NMED Regulatory Level:		5.0	5.0	--	--	2
Stage 1 Tank	12/11/2006	23.9	21.4	<0.01	23.5	<2
Stage 2 Tank	12/11/2006	22.9	11.4	<0.01	17.5	<2
Water Tank	12/11/2006	50.4	40.8	<0.01	41.6	<2
Pump	12/14/2006	<0.1	<0.1	--	--	--
Sump	12/14/2006	<0.1	<0.1	--	--	--

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

1. mg/L:

Milligrams per liter

2. --: No standard available

3. <: Below method detection limit

Table 3
Summary of Organic and Inorganic Analysis of Ground Water
Wood Group ESP, Inc. (GW-164), Hobbs Service Facility
Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East
Lea County, New Mexico

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Volatile Organic Compound	Reporting Unit	NMWQCC Standard	Concentration (12/11/2006)
Bromochloromethane	mg/L		<0.001
Dichlorodifluoromethane	mg/L		<0.001
Chloromethane (methyl chloride)	mg/L		<0.001
Vinyl Chloride	mg/L	0.001	<0.001
Bromomethane (methyl bromide)	mg/L		<0.005
Chloroethane	mg/L		<0.001
Trichlorofluoromethane	mg/L		<0.001
Acetone	mg/L		<0.001
Iodomethane (methyl iodide)	mg/L		<0.005
Carbon Disulfide	mg/L		<0.001
Acrylonitrile	mg/L		<0.001
2-Butanone (MEK)	mg/L		<0.005
4-Methyl-2-pentanone (MIBK)	mg/L		<0.005
2-Hexanone	mg/L		<0.005
trans 1,4-Dichloro-2-butene	mg/L		<0.001
1,1-Dichloroethene (DCE)	mg/L	0.005	<0.001
Methylene chloride	mg/L	0.1	<0.005
MTBE	mg/L		<0.001
trans-1,2-Dichloroethene	mg/L		<0.001
1,1-Dichloroethane	mg/L	0.025	<0.001
cis-1,2-Dichloroethene	mg/L		<0.001
2,2-Dichloropropane	mg/L		<0.001
1,2-Dichloroethane (EDC)	mg/L	0.01	<0.001
Chloroform	mg/L	0.1	<0.001
1,1,1-Trichloroethane	mg/L	0.06	<0.001
1,1-Dichloropropene	mg/L		<0.001
Benzene	mg/L	0.01	<0.001
Carbon Tetrachloride	mg/L	0.01	<0.001
1,2-Dichloropropane	mg/L		<0.001
Trichloroethene (TCE)	mg/L	0.1	<0.001
Dibromomethane (methylene dibromide)	mg/L		<0.001
Bromodichloromethane	mg/L		<0.001
2-Chloroethyl vinyl ether	mg/L		<0.005
cis-1,3-Dichloropropane	mg/L		<0.001
trans-1,3-Dichloropropene	mg/L		<0.001
Toluene	mg/L	0.75	<0.001
1,1,2-Trichloroethane	mg/L	0.01	<0.001
1,3-Dichloropropane	mg/L		<0.001
Dibromochloromethane	mg/L		<0.001
1,2-Dibromoethane (EDB)	mg/L	0.0001	<0.001
Tetrachloroethene (PCE)	mg/L	0.02	<0.001
Chlorobenzene	mg/L		<0.001
1,1,2-Tetrachloroethane	mg/L		<0.001
Ethyl benzene	mg/L	0.75	<0.001
m,p-Xylene	mg/L		<0.001
o-Xylene	mg/L		<0.001
Xylene (total)	mg/L	0.62	<0.002
Bromoform	mg/L		<0.001
Styrene	mg/L		<0.001
o-Xylene	mg/L		<0.001
1,1,2,2-Tetrachloroethane	mg/L	0.01	<0.001
2-Chlorotoluene	mg/L		<0.001
1,2,3-Trichloropropane	mg/L		<0.001
Isopropylbenzene	mg/L		<0.001
yridine	mg/L		<0.001

Table 3

Summary of Organic and Inorganic Analysis of Ground Water
 Wood Group ESP, Inc. (GW-164), Hobbs Service Facility
 Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East
 Lea County, New Mexico

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Volatile Organic Compound	Reporting Unit	NMWQCC Standard	Concentration (12/11/2006)
n-Propylbenzene	mg/L		<0.001
1,3,5-Trimethylbenzene	mg/L		<0.001
tert-Butylbenzene	mg/L		<0.001
1,2,4-Trimethylbenzene	mg/L		<0.001
1,4-Dichlorobenzene (para)	mg/L		<0.001
sec-Butylbenzene	mg/L		<0.001
1,3-Dichlorobenzene (meta)	mg/L		<0.001
p-Isopropyltoluene	mg/L		<0.001
4-Chlorotoluene	mg/L		<0.001
1,2-Dichlorobenzene (ortho)	mg/L		<0.001
n-Butylbenzene	mg/L		<0.001
1,2-Dibromo-3-chlorobenzene	mg/L		<0.005
1,2,4-Trichlorobenzene	mg/L		<0.005
Naphthalene	mg/L	0.03	<0.005
Hexachlorobutadiene	mg/L		<0.005
Semi-Volatile Organic Compound	Reporting Unit	NMWQCC Standard	Concentration (12/11/2006)
Pyridine	mg/L		<0.005
n-Nitrosodimethylamine	mg/L		<0.005
2-Picoline	mg/L		<0.005
Methyl methanesulfonate	mg/L		<0.005
Ethyl methanesulfonate	mg/L		<0.005
Phenol	mg/L		<0.005
Aniline	mg/L		<0.005
bis (2-chloroethyl) ether	mg/L		<0.005
2-Chlorophenol	mg/L		<0.005
1,3-Dichlorobenzene (meta)	mg/L		<0.005
1,4-Dichlorobenzene (para)	mg/L		<0.005
Benzyl alcohol	mg/L		<0.005
1,2-Dichlorobenzene (ortho)	mg/L		<0.005
2-Methylphenol	mg/L		<0.005
bis (2-chloroisopropyl) ether	mg/L		<0.005
4-Methylphenol / 3-Methylphenol	mg/L		<0.005
n-Nitrosodi-n-propylamine	mg/L		<0.005
Hexachloroethane	mg/L		<0.005
Acetophenone	mg/L		<0.005
Nitrobenzene	mg/L		<0.005
n-Nitrosopiperidine	mg/L		<0.005
Isophorone	mg/L		<0.005
2-Nitrophenol	mg/L		<0.005
2,4-Dimethylphenol	mg/L		<0.005
bis (2-chloroethoxy) methane	mg/L		<0.005
2,4-Dichlorophenol	mg/L		<0.005
1,2,4-Trichlorobenzene	mg/L		<0.005
Benzoic acid	mg/L		<0.005
Naphthalene	mg/L		<0.005
a,a-Dimethylphenethylamine	mg/L		<0.005
4-Chloroaniline	mg/L		<0.005
2,6-Dichlorophenol	mg/L		<0.01
Hexachlorobutadiene	mg/L		<0.005
n-Nitroso-di-n-butylamine	mg/L		<0.005
4-Chloro-3-methylphenol	mg/L		<0.005
2-Methylnaphthalene	mg/L		<0.005
1-Methylnaphthalene	mg/L		<0.005
1,2,4,5-Tetrachlorobenzene	mg/L		<0.005

Table 3
Summary of Organic and Inorganic Analysis of Ground Water
Wood Group ESP, Inc. (GW-164), Hobbs Service Facility
Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East
Lea County, New Mexico

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Semi-Volatile Organic Compound	Reporting Unit	NMWQCC Standard	Concentration (12/11/2006)
Hexachlorocyclopentadiene	mg/L		<0.005
2,4,6-Trichlorophenol	mg/L		<0.01
2,4,5-Trichlorophenol	mg/L		<0.005
2-Chloronaphthalene	mg/L		<0.005
1-Chloronaphthalene	mg/L		<0.005
2-Nitroaniline	mg/L		<0.005
Dimethylphthalate	mg/L		<0.005
Acenaphthylene	mg/L		<0.005
2,6-Dinitrotoluene	mg/L		<0.005
3-Nitroaniline	mg/L		<0.005
Acenaphthalene	mg/L		<0.005
2,4-Dinitrophenol	mg/L		<0.005
Dibenzofuran	mg/L		<0.005
Pentachlorobenzene	mg/L		<0.005
4-Nitrophenol	mg/L		<0.025
2,4-Dinitrotoluene	mg/L		<0.005
1-Naphthylamine	mg/L		<0.005
2,3,4,6-Tetrachlorophenol	mg/L		<0.01
2-Naphthylamine	mg/L		<0.005
Fluorene	mg/L		<0.005
4-Chlorophenyl-phenylether	mg/L		<0.005
Diethylphthalate	mg/L		<0.005
4-Nitroaniline	mg/L		<0.005
Diphenylhydrazine	mg/L		<0.005
4,6-Dinitro-2-methylphenol	mg/L		<0.005
Diphenylamine	mg/L		<0.005
4-Bromophenyl-phenylether	mg/L		<0.005
Phenacetin	mg/L		<0.005
Hexachlorobenzene	mg/L		<0.005
4-Aminobiphenyl	mg/L		<0.005
Pentachlorophenol	mg/L		<0.01
Anthracene	mg/L		<0.005
Pentachloronitrobenzene	mg/L		<0.005
Pronamide	mg/L		<0.005
Phenanthrene	mg/L		<0.005
Di-n-butylphthalate	mg/L		<0.005
Fluoranthene	mg/L		<0.005
Benzidine	mg/L		<0.025
Pryrene	mg/L		<0.005
p-Dimethylaminoazobenzene	mg/L		<0.005
Butylbenzylphthalate	mg/L		<0.005
Benzo (a) anthracene	mg/L		<0.005
3,3-Dichlorobenzidine	mg/L		<0.005
Chrysene	mg/L		<0.005
bis (2-ethylhexyl) phthalate	mg/L		0.0076
Di-n-octylphthalate	mg/L		<0.005
Benzo (b) fluoranthene	mg/L		<0.005
Benzo (k) fluoranthene	mg/L		<0.005
7,12-Dimethylbenz (a) anthracene	mg/L		<0.005
Benzo (a) pyrene	mg/L	0.0007	<0.005
3-Methylchloranthrene	mg/L		<0.005
Dibenzo (a,j) acridine	mg/L		<0.005
Ideno (1,2,3-cd) pyrene	mg/L		<0.005
Dibenzo (g,h,i) perylene	mg/L		<0.005

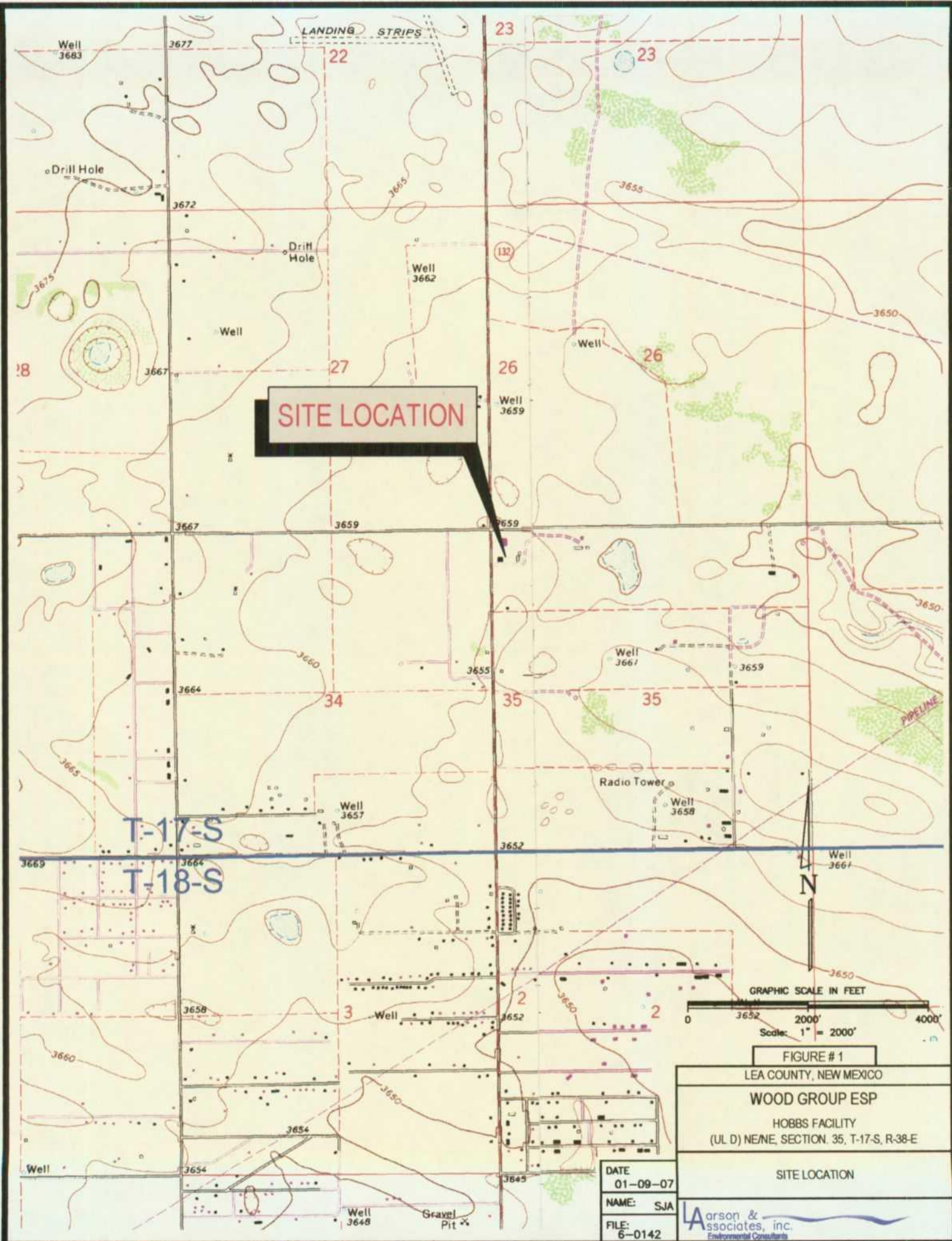
Table 3

Summary of Organic and Inorganic Analysis of Ground Water
 Wood Group ESP, Inc. (GW-164), Hobbs Service Facility
 Unit D (NW/4, NW/4), Section 35, Township 17 South, Range 38 East
 Lea County, New Mexico

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Inorganic Compounds	Reporting Unit	NMWQCC Standard	Concentration (12/11/2006)
Alkalinity (hydroxide)	mg/L		0.00
Alkalinity (carbonate)	mg/L		0.00
Alkalinity (bicarbonate)	mg/L		228
Alkalinity (total)	mg/L		228
Calcium	mg/L		97.2
Potassium	mg/L		2.99
Magnesium	mg/L		25.0
Sodium	mg/L		56.3
Silver	mg/L	0.05	<0.002
Arsenic	mg/L	0.1	<0.005
Barium	mg/L	1.0	0.044
Cadmium	mg/L	0.01	<0.001
Chromium	mg/L	0.05	<0.005
Lead	mg/L	0.05	<0.005
Selenium	mg/L	0.05	<0.001
Mercury	mg/L	0.002	<0.0002
Chloride	mg/L	250	57.8
Fluoride	mg/L	1.6	2.09
Sulfate	mg/L	600	105
Nitrate - N	mg/L	10	4.78
pH	mg/L	6 - 9	7.08
Total Dissolved Solids	mg/L	1,000	506

Figures



SITE LOCATION

T-17-S

T-18-S

GRAPHIC SCALE IN FEET

Scale: 1" = 2000'

FIGURE #1

LEA COUNTY, NEW MEXICO

WOOD GROUP ESP

HOBBS FACILITY

(UL D) NE/NE, SECTION. 35, T-17-S, R-38-E

SITE LOCATION

DATE
01-09-07

NAME: SJA

FILE:
6-0142

Larson &
Associates, inc.
Environmental Consultants

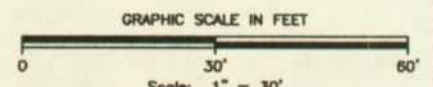
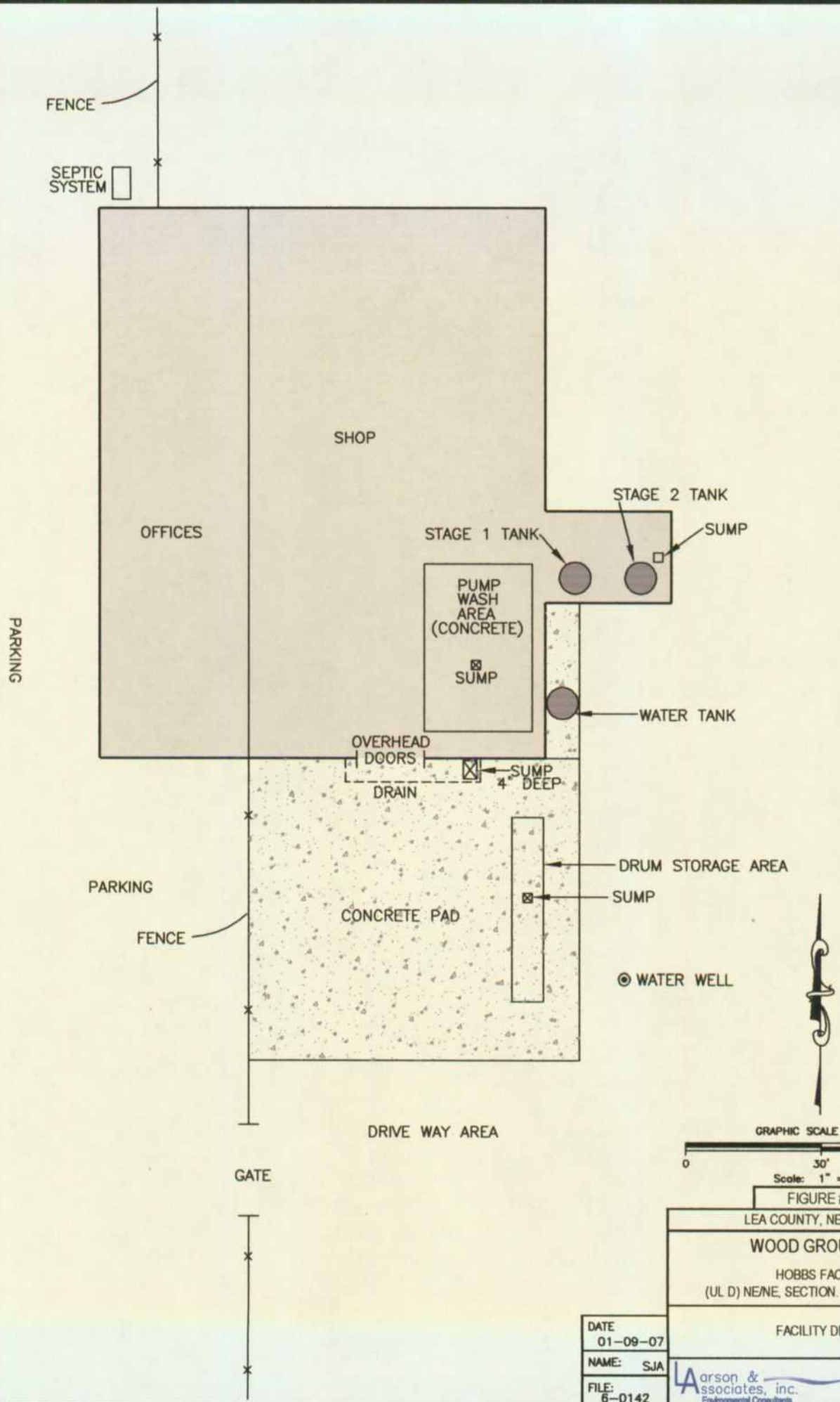


FIGURE # 2	
LEA COUNTY, NEW MEXICO	
WOOD GROUP ESP	
HOBBS FACILITY	
(UL D) NE/NE, SECTION: 35, T-17-S, R-38-E	
FACILITY DETAIL	
DATE	01-09-07
NAME:	SJA
FILE:	6-0142

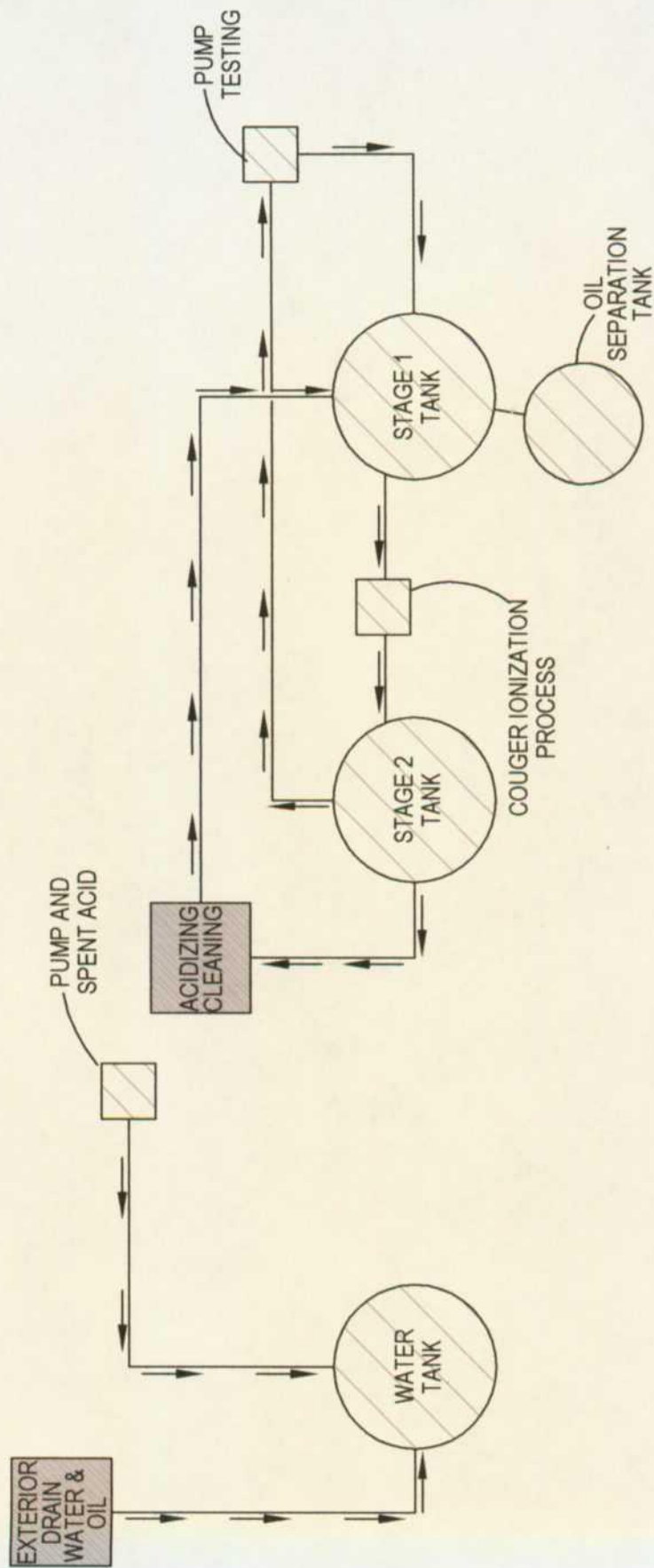


FIGURE # 3

LEA COUNTY, NEW MEXICO

WOOD GROUP ESP

HOBBS FACILITY

(UL D) NENE, SECTION. 35, T-17-S, R-38-E

PROCESS FLOW PLAN

DATE
01-09-07

NAME: SJA

FILE: 6-0142

arson &
associates, inc.
Environmental Consultants

Appendix A
Laboratory Reports



ARDINAL LABORATORIES

PHONE (325) 673-7000 • 2111 BEECHWOOD • ARLING, TX 79802

PHONE (562) 290-2326 • 101 E. MARIANA • 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

LAB NO	SAMPLE ID	REACTIVITY		CORROSIVITY (pH)	IGNITABILITY (°F)
		Sulfide (ppm)	Cyanide (ppm)		
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

Buyers J. A. Cooke
Chemist

9/05/06
Date

DISCLAIMER: Liability and Damages: Cardinal's liability and that of its employees, for a certain period, shall be limited to the amount paid by client for analysis. All other damages, including consequential damages, shall be limited to the amount paid by client for analysis. Cardinal shall not be liable for any damages, including consequential damages, 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.



PHONE (505) 393-2445 • 101 E. MAGLIND • BOONVILLE, NM 86201

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: 08/24/06
Project Number: NOT GIVEN
Project Name: WATER SAMPLE
Project Location: NOT GIVEN
Lab Number: H11462-1
Sample ID: WATER SAMPLE

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

TCLF VOLATILES (ppm)	EPA LIMIT	Sample Result H11462-1	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	0.062	82	0.100
Methyl Ethyl Ketone	200	0.208	<0.050	0.097	97	0.100
Chloroform	6.0	<0.005	<0.005	3.107	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

Dibromofluoromethane	109
Toluene-d8	115
Bromofluorobenzene	106

METHODS: EPA SW 846-8260, 1311

Burgess J. A. Cooke Ph.D.

FR2406
Date

6. **FASS (No. 11), Liability and Damages.** Cardinal's acts and omissions and any actions taken by Cardinal, its directors, officers, employees, independent contractors, agents, and third parties, in connection with the performance of its obligations under the License, shall be deemed to be negligent and shall constitute negligence and any other legal cause of action that has been or would be deemed, a wrong and is hereby accepted by Cardinal. Cardinal hereby agrees to defend, indemnify, and hold FASS harmless from and against all claims, damages, losses, and expenses, including reasonable attorneys' fees, incurred by FASS as a result of or arising from the performance of services performed by Cardinal, independent of whether such claim or action is the result of the alleged negligent conduct or otherwise.



ARDINAL LABORATORIES

PHONE: 371-075-1001 • 2141 BEECHWOOD • ABILENE, TX 79603

FACSIMILE: 371-075-1001 • 1011 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 LIMITS		5	5	100	1	5	5	0.2	1
H11462-1	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, 800/4-91/0 206.2 272.1 206.1 213.1 218.1 239.1 245.1 270.2

Chemist

Date

H11462

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ARDINAL LABORATORIES

PHONE (505) 673-1061 • 3111 BULLCHWOOD • ARLEN, TX 79503

PHONE (505) 393-2126 • 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: 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

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.


Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and that of its employees is hereby limited to any and all claims, including those for negligence and all other claims whatsoever, shall be deemed waived in any case involving and received by Cardinal within thirty (30) days after completion of the analysis and service rendered by Cardinal. Cardinal shall not be liable for consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, as a result of any delays in the performance of services rendered by Cardinal, regardless of whether such claims are based upon any of the above-stated reasons or otherwise.

ARDINAL 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

ANALYSIS REQUEST

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



ARDINAL LABORATORIES

PHONE (325) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: HOBBS
Project Location: NOT GIVEN

Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
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:		12/04/06	12/01/06	12/05/06	12/01/06	12/01/06	12/01/06	12/01/06	12/04/06
EPA LIMITS:		5	5	100	1	5	5	0.2	1
H11857-1	WASTEWATER	< 1	< 1	< 5	< 0.1	21.3	16.5	< 0.02	< 0.1
Quality Control		0.051	3.12	49.4	1.00	3.21	2.90	0.0101	0.150
True Value QC		0.050	3.00	50.0	1.00	3.00	3.00	0.0100	0.150
% Recovery		102	104	99	100	107	97	101	100
Relative Standard Deviation		1.3	0.2	1.4	0.2	0.2	0.3	1	0.4
METHODS: EPA 1311, 600/4-91/0									
		206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2

Step S. Manno
Chemist

12-06-06
Date

H11857

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ARDINAL LABORATORIES

PHONE (325) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN

Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: HM/BC

REACTIVITY

LAB NO.	SAMPLE ID	Sulfide (ppm)	Cyanide (ppm)	CORROSIVITY (pH)	IGNITABILITY (°F)
---------	-----------	------------------	------------------	---------------------	----------------------

ANALYSIS DATE:	12/06/06	12/06/06	12/06/06	12/06/06
H11857-1 WASTEWATER	Not reactive	Not reactive	0.37	>140
Quality Control	NR	NR	6.99	NR
True Value QC	NR	NR	7.00	NR
% Recovery	NR	NR	100	NR
Relative Percent Difference	NR	NR	0.4	NR

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

Bryan J. Cook
Chemist

12/6/06
Date

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ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN
Lab Number: H11857-1
Sample ID: WASTEWATER

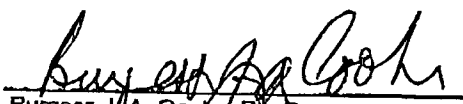
Analysis Date: 12/05/06
Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: BC

TCLP SEMIVOLATILES (ppm)	EPA LIMIT	Sample Result H11857-1	Method Blank	QC	% Recov.	True Value QC
Pyridine	5.00	<0.050	<0.005	0.018	36	0.050
1,4-Dichlorobenzene	7.50	<0.050	<0.005	0.035	70	0.050
o-Cresol	200	<0.050	<0.005	0.032	64	0.050
m, p-Cresol	200	<0.050	<0.005	0.032	64	0.050
Hexachloroethane	3.00	<0.050	<0.005	0.033	66	0.050
Nitrobenzene	2.00	<0.050	<0.005	0.038	76	0.050
Hexachloro-1,3-butadiene	0.500	<0.050	<0.005	0.042	84	0.050
2,4,6-Trichlorophenol	2.00	<0.050	<0.005	0.053	106	0.050
2,4,5-Trichlorophenol	400	<0.050	<0.005	0.050	100	0.050
2,4-Dinitrotoluene	0.130	<0.050	<0.005	0.049	98	0.050
Hexachlorobenzene	0.130	<0.050	<0.005	0.046	92	0.050
Pentachlorophenol	100	<0.050	<0.005	0.045	90	0.050

% RECOVERY

Fluorophenol	38
Phenol-d5	25
Nitrobenzene-d5	77
2-Fluorobiphenyl	78
2,4,6-Tribromophenol	92
Terphenyl-d14	93

METHODS: EPA SW-846 1311, 8270, 3510


Burgess J. A. Cooke, Ph. D.


Date

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ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/04/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN
Lab Number: H11857-1
Sample ID: WASTEWATER

Analysis Date: 12/01/06
Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: BC

TCLP VOLATILES (ppm)	EPA LIMIT	Sample Result H11857-1	Method Blank	QC	%Recov.	True Value QC
Vinyl Chloride	0.20	<0.005	<0.005	0.105	105	0.100
1,1-Dichloroethylene	0.7	<0.005	<0.005	0.104	104	0.100
Methyl Ethyl Ketone	200	0.459	<0.050	0.105	105	0.100
Chloroform	6.0	<0.005	<0.005	0.108	108	0.100
1,2-Dichloroethane	0.5	<0.005	<0.005	0.107	107	0.100
Benzene	0.5	0.234	<0.005	0.106	106	0.100
Carbon Tetrachloride	0.5	<0.005	<0.005	0.116	116	0.100
Trichloroethylene	0.5	0.006	<0.005	0.116	116	0.100
Tetrachloroethylene	0.7	<0.005	<0.005	0.106	106	0.100
Chlorobenzene	100	<0.005	<0.005	0.111	111	0.100
1,4-Dichlorobenzene*	7.5	0.008	0.012	0.113	113	0.100

*Analyte detected at comparable levels in sample and method blank.

% RECOVERY

Dibromofluoromethane	82
Toluene-d8	81
Bromofluorobenzene	84

METHODS: EPA SW 846-8260, 1311


Burgess J. A. Cooke, Ph. D.

12/4/06
Date

[illegible]



ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN

Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: HM/BC

LAB NO.	SAMPLE ID	REACTIVITY			
		Sulfide (ppm)	Cyanide (ppm)	CORROSIVITY (pH)	IGNITABILITY (°F)
ANALYSIS DATE:		12/06/06	12/06/06	12/06/06	12/06/06
H11857-1	WASTEWATER	Not reactive	Not reactive	0.37	>140
Quality Control		NR	NR	6.99	NR
True Value QC		NR	NR	7.00	NR
% Recovery		NR	NR	100	NR
Relative Percent Difference		NR	NR	0.4	NR

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

Chemist

Date

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ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: HOBBS
Project Location: NOT GIVEN

Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
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:		12/04/06	12/01/06	12/05/06	12/01/06	12/01/06	12/01/06	12/01/06	12/04/06
EPA LIMITS:		5	5	100	1	5	5	0.2	1
H11857-1	WASTEWATER	< 1	< 1	< 5	< 0.1	21.3	16.5	< 0.02	< 0.1
Quality Control		0.051	3.12	49.4	1.00	3.21	2.90	0.0101	0.150
True Value QC		0.050	3.00	50.0	1.00	3.00	3.00	0.0100	0.150
% Recovery		102	104	99	100	107	97	101	100
Relative Standard Deviation		1.3	0.2	1.4	0.2	0.2	0.3	1	0.4
METHODS: EPA 1311, 600/4-91/0									
		206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2

Hope S. Mayo
Chemist

12-06-06
Date

H11857

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/04/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN
Lab Number: H11857-1
Sample ID: WASTEWATER

Analysis Date: 12/01/06
Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: BC

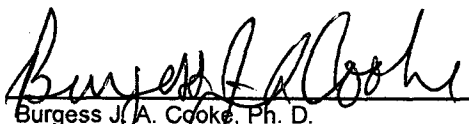
TCLP VOLATILES (ppm)	EPA LIMIT	Sample Result H11857-1	Method - Blank	QC	%Recov.	True Value QC
Vinyl Chloride	0.20	<0.005	<0.005	0.105	105	0.100
1,1-Dichloroethylene	0.7	<0.005	<0.005	0.104	104	0.100
Methyl Ethyl Ketone	200	0.459	<0.050	0.105	105	0.100
Chloroform	6.0	<0.005	<0.005	0.108	108	0.100
1,2-Dichloroethane	0.5	<0.005	<0.005	0.107	107	0.100
Benzene	0.5	0.234	<0.005	0.106	106	0.100
Carbon Tetrachloride	0.5	<0.005	<0.005	0.116	116	0.100
Trichloroethylene	0.5	0.006	<0.005	0.116	116	0.100
Tetrachloroethylene	0.7	<0.005	<0.005	0.106	106	0.100
Chlorobenzene	100	<0.005	<0.005	0.111	111	0.100
1,4-Dichlorobenzene*	7.5	0.008	0.012	0.113	113	0.100

*Analyte detected at comparable levels in sample and method blank.

% RECOVERY

Dibromofluoromethane	82
Toluene-d8	81
Bromofluorobenzene	84

METHODS: EPA SW 846-8260, 1311


Burgess J. A. Cooke, Ph. D.

12/4/06
Date

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

ANALYTICAL RESULTS FOR
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TX 79701
FAX TO: (432) 687-0456

Receiving Date: 11/29/06
Reporting Date: 12/06/06
Project Number: 6-0142
Project Name: WASTEWATER
Project Location: NOT GIVEN
Lab Number: H11857-1
Sample ID: WASTEWATER

Analysis Date: 12/05/06
Sampling Date: 11/29/06
Sample Type: WASTEWATER
Sample Condition: COOL & INTACT
Sample Received By: LB
Analyzed By: BC

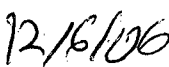
TCLP SEMIVOLATILES (ppm)	EPA LIMIT	Sample Result H11857-1	Method Blank	QC	% Recov.	True Value QC
Pyridine	5.00	<0.050	<0.005	0.018	36	0.050
1,4-Dichlorobenzene	7.50	<0.050	<0.005	0.035	70	0.050
o-Cresol	200	<0.050	<0.005	0.032	64	0.050
m, p-Cresol	200	<0.050	<0.005	0.032	64	0.050
Hexachloroethane	3.00	<0.050	<0.005	0.033	66	0.050
Nitrobenzene	2.00	<0.050	<0.005	0.038	76	0.050
Hexachloro-1,3-butadiene	0.500	<0.050	<0.005	0.042	84	0.050
2,4,6-Trichlorophenol	2.00	<0.050	<0.005	0.053	106	0.050
2,4,5-Trichlorophenol	400	<0.050	<0.005	0.050	100	0.050
2,4-Dinitrotoluene	0.130	<0.050	<0.005	0.049	98	0.050
Hexachlorobenzene	0.130	<0.050	<0.005	0.046	92	0.050
Pentachlorophenol	100	<0.050	<0.005	0.045	90	0.050

% RECOVERY

Fluorophenol	38
Phenol-d5	25
Nitrobenzene-d5	77
2-Fluorobiphenyl	78
2,4,6-Tribromophenol	92
Terphenyl-d14	93

METHODS: EPA SW-846 1311, 8270, 3510


Burgess J/A. Cooke, Ph. D.


Date

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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	RL Result	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	RL Result	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-Trichlorophenoxypropionic 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

¹Corrosive by pH •

Sample: 110219 - Wastewater

Analysis: TCLP Total 8 Metals
QC Batch: 32539
Prep Batch: 28309

Analytical Method: S 6010B
Date Analyzed: 2006-12-06
Sample Preparation: 2006-12-06
TCLP Extraction: 2006-12-05
Analytical Method: S 7470A
Date Analyzed: 2006-12-07
Sample Preparation: 2006-12-06
TCLP Extraction: 2006-12-06

Prep Method: TCLP 1311
Analyzed By: RR
Prepared By: TS
Prepared By: TS
Prep Method: TCLP 1311
Analyzed By: TS
Prepared By: TS
Prepared By: TS

Parameter	Flag	RL Result	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
QC Batch: 32765
Prep Batch: 28501

Analytical Method: S 8260B
Date Analyzed: 2006-12-12
Sample Preparation: 2006-12-12
TCLP Extraction: 2006-12-12

Prep Method: TCLP 1311
Analyzed By: JG
Prepared By: JG
Prepared By: JG

Parameter	Flag	RL Result	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
Prep Batch: 28309

Date Analyzed: 2006-12-06
QC Preparation: 2006-12-06

Analyzed By: RR
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
Prep Batch: 28351

Date Analyzed: 2006-12-05
QC Preparation: 2006-12-05

Analyzed By: DS
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-Trichlorophenoxypropionic 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
Prep Batch: 28354

Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07

Analyzed By: TS
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
Prep Batch: 28501

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-12

Analyzed By: JG
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
Prep Batch: 28436

Date Analyzed: 2006-12-11
QC Preparation: 2006-12-07

Analyzed By: SM
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
Prep Batch: 28309

Date Analyzed: 2006-12-06
QC Preparation: 2006-12-06

Analyzed By: RR
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
Prep Batch: 28351

Date Analyzed: 2006-12-05
QC Preparation: 2006-12-05

Analyzed By: DS
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-Trichlorophenoxypropionic 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...

²Pentachlorophenol out of control 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-Trichlorophenoxypropionic acid	0.453	mg/L	1	0.400	<0.0100	113	22.1 - 144.74	6	20
Pentachlorophenol	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
Prep Batch: 28354

Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07

Analyzed By: TS
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
Prep Batch: 28501

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-12

Analyzed By: JG
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 control 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	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
Prep Batch: 28309

Date Analyzed: 2006-12-06
QC Preparation: 2006-12-06

Analyzed By: RR
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.

⁴LCSD analyte out of range. LCS/LCSD has a RPD within limits. Therefore, LCS shows extraction occurred 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
Prep Batch: 28351

Date Analyzed: 2006-12-05
QC Preparation: 2006-12-05

Analyzed By: DS
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-Trichlorophenoxypropionic 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-Trichlorophenoxypropionic 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
Prep Batch: 28354

Date Analyzed: 2006-12-07
QC Preparation: 2006-12-07

Analyzed By: TS
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
Prep Batch: 28501

Date Analyzed: 2006-12-12
QC Preparation: 2006-12-12

Analyzed By: JG
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-Trichlorophenoxypropionic 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

⁵Pyridine outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.

⁶o-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.

⁷m,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.

⁸Hexachlorobutadiene outside of control limits on CCV(ICV). CCV(ICV) component average is 100% which is within acceptable range. This is acceptable by Method 8000.

⁹2,4-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.

¹⁰Phenol-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.

¹¹2,4,6-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

all test - feedback

Summary Report

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

Report Date: December 20, 2006

Work Order: 6121218



Project Location: Midland
Project Name: Midland Facility
Project Number: 6-0130

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
111460	Stage 1 Tank	water	2006-12-12	09:05	2006-12-12
111461	Stage 2 Tank	water	2006-12-12	09:15	2006-12-12
111462	Stage 3 Tank	water	2006-12-12	09:25	2006-12-12
111463	Test Tank	water	2006-12-12	09:35	2006-12-12

Sample: 111460 - Stage 1 Tank

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	0.00
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	4.00
Dissolved Calcium		288	mg/L	0.500
Dissolved Potassium		169	mg/L	0.500
Dissolved Magnesium		42.8	mg/L	0.500
Dissolved Sodium		576	mg/L	0.500
Chloride		2540	mg/L	0.500
Fluoride		8.47	mg/L	0.200
Sulfate		505	mg/L	0.500
Nitrate-N		10.8	mg/L	0.200
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/L	10.0
Hydrogen Cyanide		<2.50	mg/L	2.50
Corrosivity	1	corrosive	mm/yr	0.00
pH		< 2.5	s.u.	0.00
Flashpoint		> 150	°F	0.00
Pyridine		<0.0500	mg/L	0.0500
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.0500
o-Cresol		<0.0500	mg/L	0.0500
m,p-Cresol		<0.0500	mg/L	0.0500
Hexachloroethane		<0.0500	mg/L	0.0500

continued ...

¹corrosive by pH •

sample 111460 continued ...

Param	Flag	Result	Units	RL
Nitrobenzene		<0.0500	mg/L	0.0500
Hexachlorobutadiene		<0.0500	mg/L	0.0500
2,4,6-Trichlorophenol		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenol		<0.0500	mg/L	0.0500
2,4-Dinitrotoluene		<0.0500	mg/L	0.0500
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.0500
Hexachlorobenzene		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.0500
Pentachlorophenol		<0.0500	mg/L	0.0500
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		2.21	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		12.1	mg/L	0.100
TCLP Mercury		<0.000500	mg/L	0.000500
TCLP Lead		5.23	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		0.329	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		0.0610	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100
Total Dissolved Solids		9600	mg/L	10.00

Sample: 111461 - Stage 2 Tank

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	0.00
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	4.00
Dissolved Calcium		458	mg/L	0.500
Dissolved Potassium		855	mg/L	0.500
Dissolved Magnesium		50.2	mg/L	0.500
Dissolved Sodium		910	mg/L	0.500
Chloride		394	mg/L	0.500
Fluoride		13.2	mg/L	0.200
Sulfate		608	mg/L	0.500
Nitrate-N		7.96	mg/L	0.200
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/L	10.0
Hydrogen Cyanide		<2.50	mg/L	2.50
Corrosivity	2	corrosive	mm/yr	0.00
pH		< 2.5	s.u.	0.00

continued ...

²corrosive by pH •

sample 111461 continued ...

Param	Flag	Result	Units	RL
Flashpoint		0.00	°F	0.00
Pyridine		<0.0500	mg/L	0.0500
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.0500
o-Cresol		<0.0500	mg/L	0.0500
m,p-Cresol		<0.0500	mg/L	0.0500
Hexachloroethane		<0.0500	mg/L	0.0500
Nitrobenzene		<0.0500	mg/L	0.0500
Hexachlorobutadiene		<0.0500	mg/L	0.0500
2,4,6-Trichlorophenol		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenol		<0.0500	mg/L	0.0500
2,4-Dinitrotoluene		<0.0500	mg/L	0.0500
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.0500
Hexachlorobenzene		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.0500
Pentachlorophenol		<0.0500	mg/L	0.0500
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		3.23	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		19.4	mg/L	0.100
TCLP Mercury		<0.000500	mg/L	0.000500
TCLP Lead		5.97	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100
Total Dissolved Solids		18000	mg/L	10.00

Sample: 111462 - Stage 3 Tank

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	0.00
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	4.00
Dissolved Calcium		780	mg/L	0.500
Dissolved Potassium		1030	mg/L	0.500
Dissolved Magnesium		913	mg/L	0.500
Dissolved Sodium		1550	mg/L	0.500
Chloride		1970	mg/L	0.500
Fluoride		16.3	mg/L	0.200
Sulfate		668	mg/L	0.500
Nitrate-N		11.8	mg/L	0.200
Reactivity		non-reactive		0.00

continued ...

sample 111462 continued ...

Param	Flag	Result	Units	RL
Hydrogen Sulfide		<10.0	mg/L	10.0
Hydrogen Cyanide		<2.50	mg/L	2.50
Corrosivity	3	corrosive	mm/yr	0.00
pH		< 2.5	s.u.	0.00
Flashpoint		> 150	°F	0.00
Pyridine		<0.0500	mg/L	0.0500
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.0500
o-Cresol		<0.0500	mg/L	0.0500
m,p-Cresol		<0.0500	mg/L	0.0500
Hexachloroethane		<0.0500	mg/L	0.0500
Nitrobenzene		<0.0500	mg/L	0.0500
Hexachlorobutadiene		<0.0500	mg/L	0.0500
2,4,6-Trichlorophenol		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenol		<0.0500	mg/L	0.0500
2,4-Dinitrotoluene		<0.0500	mg/L	0.0500
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.0500
Hexachlorobenzene		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.0500
Pentachlorophenol		<0.0500	mg/L	0.0500
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		3.38	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		15.2	mg/L	0.100
TCLP Mercury		<0.000500	mg/L	0.000500
TCLP Lead		3.88	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		0.154	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		0.712	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100
Total Dissolved Solids		14950	mg/L	10.00

Sample: 111463 - Test Tank

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	0.00
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	4.00
Dissolved Calcium		422	mg/L	0.500
Dissolved Potassium		557	mg/L	0.500
Dissolved Magnesium		49.3	mg/L	0.500

continued ...

³corrosive by pH •

sample 111463 continued ...

Param	Flag	Result	Units	RL
Dissolved Sodium		843	mg/L	0.500
Chloride		8140	mg/L	0.500
Fluoride		15.3	mg/L	0.200
Sulfate		640	mg/L	0.500
Nitrate-N		12.0	mg/L	0.200
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/L	10.0
Hydrogen Cyanide		<2.50	mg/L	2.50
Corrosivity	4	corrosive	mm/yr	0.00
pH		< 2.5	s.u.	0.00
Flashpoint		> 150	°F	0.00
Pyridine		<0.0500	mg/L	0.0500
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.0500
o-Cresol		<0.0500	mg/L	0.0500
m,p-Cresol		<0.0500	mg/L	0.0500
Hexachloroethane		<0.0500	mg/L	0.0500
Nitrobenzene		<0.0500	mg/L	0.0500
Hexachlorobutadiene		<0.0500	mg/L	0.0500
2,4,6-Trichlorophenol		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenol		<0.0500	mg/L	0.0500
2,4-Dinitrotoluene		<0.0500	mg/L	0.0500
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.0500
Hexachlorobenzene		<0.0500	mg/L	0.0500
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.0500
Pentachlorophenol		<0.0500	mg/L	0.0500
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		3.95	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		15.1	mg/L	0.100
TCLP Mercury		<0.000500	mg/L	0.000500
TCLP Lead		3.87	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		0.0570	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		0.365	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100
Total Dissolved Solids		15600	mg/L	10.00

⁴corrosive by pH •

Summary Report

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

Report Date: December 18, 2006

Work Order: 6121220



Project Location: Hobbs
Project Name: Hobbs Facility
Project Number: 6-0143

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
111465	Stage 1 Tank	water	2006-12-11	11:55	2006-12-12
111466	Stage 2 Tank	water	2006-12-11	12:10	2006-12-12
111467	Water Tank	product	2006-12-11	14:00	2006-12-12

Sample: 111465 - Stage 1 Tank

Param	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.0100
Total Chromium		23.5	mg/L	0.00500
pH		< 2.00	s.u.	0.00
TCLP Chromium		23.9	mg/L	0.100
TCLP Lead		21.4	mg/L	0.100

Sample: 111466 - Stage 2 Tank

Param	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.0100
Total Chromium		17.5	mg/L	0.00500
pH		< 2.00	s.u.	0.00
TCLP Chromium		22.9	mg/L	0.100
TCLP Lead		11.4	mg/L	0.100

Sample: 111467 - Water Tank

Param	Flag	Result	Units	RL
Hexavalent Chromium		<0.0100	mg/L	0.0100
Total Chromium		41.6	mg/L	0.00500
pH		< 2.00	s.u.	0.00
TCLP Chromium		50.4	mg/L	0.100

continued ...

Report Date: December 18, 2006
6-0143

Work Order: 6121220
Hobbs Facility

Page Number: 2 of 2
Hobbs

sample 111467 continued ...

Param	Flag	Result	Units	RL
TCLP Lead		40.8	mg/L	0.100



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Analytical and Quality Control Report

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

Report Date: December 18, 2006

Work Order: 6121220



Project Location: Hobbs
Project Name: Hobbs Facility
Project Number: 6-0143

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
111465	Stage 1 Tank	water	2006-12-11	11:55	2006-12-12
111466	Stage 2 Tank	water	2006-12-11	12:10	2006-12-12
111467	Water Tank	product	2006-12-11	14:00	2006-12-12

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 15 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: 111465 - Stage 1 Tank

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	32792	Date Analyzed:	2006-12-13	Analyzed By:	SM
Prep Batch:	28526	Sample Preparation:	2006-12-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 111465 - Stage 1 Tank

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32811	Date Analyzed:	2006-12-14	Analyzed By:	RR
Prep Batch:	28535	Sample Preparation:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Chromium		23.5	mg/L	1	0.00500

Sample: 111465 - Stage 1 Tank

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	32867 ^a	Date Analyzed:	2006-12-15	Analyzed By:	JS
Prep Batch:	28582	Sample Preparation:	2006-12-15	Prepared By:	JS

^asamples were ran in the lab

Parameter	Flag	RL Result	Units	Dilution	RL
pH		< 2.00	s.u.	1	0.00

Sample: 111465 - Stage 1 Tank

Analysis:	TCLP Cr	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32843	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		23.9	mg/L	1	0.100

Sample: 111465 - Stage 1 Tank

Analysis:	TCLP Pb	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32843	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Lead		21.4	mg/L	1	0.100

Sample: 111466 - Stage 2 Tank

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	32792	Date Analyzed:	2006-12-13	Analyzed By:	SM
Prep Batch:	28526	Sample Preparation:	2006-12-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 111466 - Stage 2 Tank

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32811	Date Analyzed:	2006-12-14	Analyzed By:	RR
Prep Batch:	28535	Sample Preparation:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Chromium		17.5	mg/L	1	0.00500

Sample: 111466 - Stage 2 Tank

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	32867 ^a	Date Analyzed:	2006-12-15	Analyzed By:	JS
Prep Batch:	28582	Sample Preparation:	2006-12-15	Prepared By:	JS

^asamples were ran in the lab

Parameter	Flag	RL Result	Units	Dilution	RL
pH		< 2.00	s.u.	1	0.00

Sample: 111466 - Stage 2 Tank

Analysis:	TCLP Cr	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32843	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		22.9	mg/L	1	0.100

Sample: 111466 - Stage 2 Tank

Analysis:	TCLP Pb	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32843	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Lead		11.4	mg/L	1	0.100

Sample: 111467 - Water Tank

Analysis:	Chromium, Hexavalent	Analytical Method:	SM 3500-Cr B	Prep Method:	N/A
QC Batch:	32792	Date Analyzed:	2006-12-13	Analyzed By:	SM
Prep Batch:	28526	Sample Preparation:	2006-12-13	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Hexavalent Chromium		<0.0100	mg/L	1	0.0100

Sample: 111467 - Water Tank

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	32892	Date Analyzed:	2006-12-18	Analyzed By:	RR
Prep Batch:	28538	Sample Preparation:		Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Chromium		41.6	mg/L	1	0.00500

Sample: 111467 - Water Tank

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	32867 ^a	Date Analyzed:	2006-12-15	Analyzed By:	JS
Prep Batch:	28582	Sample Preparation:	2006-12-15	Prepared By:	JS

^asamples were ran in the lab

Parameter	Flag	RL Result	Units	Dilution	RL
pH		< 2.00	s.u.	1	0.00

Report Date: December 18, 2006
6-0143

Work Order: 6121220
Hobbs Facility

Page Number: 5 of 15
Hobbs

Sample: 111467 - Water Tank

Analysis:	TCLP Cr	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32847	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		50.4	mg/L	1	0.100

Sample: 111467 - Water Tank

Analysis:	TCLP Pb	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	32847	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	Sample Preparation:	2006-12-14	Prepared By:	TS
		TCLP Extraction:	2006-12-13	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Lead		40.8	mg/L	1	0.100

Method Blank (1) QC Batch: 32792

QC Batch:	32792	Date Analyzed:	2006-12-13	Analyzed By:	SM
Prep Batch:	28526	QC Preparation:	2006-12-13	Prepared By:	WB

Parameter	Flag	MDL Result	Units	RL
Hexavalent Chromium		<0.00719	mg/L	0.01

Method Blank (1) QC Batch: 32811

QC Batch:	32811	Date Analyzed:	2006-12-14	Analyzed By:	RR
Prep Batch:	28535	QC Preparation:	2006-12-13	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Total Chromium		<0.00357	mg/L	0.005

Method Blank (1) QC Batch: 32843

QC Batch:	32843	Date Analyzed:	2006-12-15	Analyzed By:	RR
Prep Batch:	28546	QC Preparation:	2006-12-14	Prepared By:	TS

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Parameter	Flag	MDL Result	Units	RL
TCLP Lead		<0.0370	mg/L	0.1

Method Blank (1) QC Batch: 32843

QC Batch: 32843
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Chromium		<0.00600	mg/L	0.1

Method Blank (1) QC Batch: 32847

QC Batch: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Lead		<0.0370	mg/L	0.1

Method Blank (1) QC Batch: 32847

QC Batch: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Chromium		<0.00600	mg/L	0.1

Method Blank (1) QC Batch: 32892

QC Batch: 32892
Prep Batch: 28538

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Total Chromium		<0.00357	mg/L	0.005

Duplicates (1)

QC Batch: 32867
Prep Batch: 28582

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: JS
Prepared By: JS

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Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	< 2.00	< 2.00	s.u.	1	0	1.5

Laboratory Control Spike (LCS-1)

QC Batch: 32792
Prep Batch: 28526

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: SM
Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Hexavalent Chromium	0.493	mg/L	1	0.500	<0.00719	99	86.4 - 114

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
Hexavalent Chromium	0.499	mg/L	1	0.500	<0.00719	100	86.4 - 114	1	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: 32811
Prep Batch: 28535

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.106	mg/L	1	0.100	<0.00357	106	86.5 - 115

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
Total Chromium	0.106	mg/L	1	0.100	<0.00357	106	86.5 - 115	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: 32843
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	4.70	mg/L	1	5.00	<0.0370	94	84.8 - 109

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 Lead	5.04	mg/L	1	5.00	<0.0370	101	84.8 - 109	7	20

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

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Laboratory Control Spike (LCS-1)

QC Batch: 32843
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	1.05	mg/L	1	1.00	<0.00600	105	84.9 - 118

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 Chromium	1.08	mg/L	1	1.00	<0.00600	108	84.9 - 118	3	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: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	4.70	mg/L	1	5.00	<0.0370	94	84.8 - 109

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 Lead	5.04	mg/L	1	5.00	<0.0370	101	84.8 - 109	7	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: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	1.05	mg/L	1	1.00	<0.00600	105	84.9 - 118

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 Chromium	1.08	mg/L	1	1.00	<0.00600	108	84.9 - 118	3	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: 32892
Prep Batch: 28538

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0990	mg/L	1	0.100	<0.00357	99	86.5 - 115

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
Total Chromium	0.101	mg/L	1	0.100	<0.00357	101	86.5 - 115	2	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: 111465

QC Batch: 32792
Prep Batch: 28526

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: SM
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Hexavalent Chromium	<0.00719	mg/L	1	0.500	<0.00719	0	0 - 197

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
Hexavalent Chromium	<0.00719	mg/L	1	0.500	<0.00719	0	0 - 197	0	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: 111455

QC Batch: 32811
Prep Batch: 28535

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0980	mg/L	1	0.100	0.008	90	69.2 - 129

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
Total Chromium	0.103	mg/L	1	0.100	0.008	95	69.2 - 129	5	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: 111510

QC Batch: 32843
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	4.90	mg/L	1	5.00	<0.0370	98	79.8 - 110

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

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Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Lead	4.79	mg/L	1	5.00	<0.0370	96	79.8 - 110	2	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: 111510

QC Batch: 32843
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	1.17	mg/L	1	1.00	0.09	108	75 - 125

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 Chromium	1.17	mg/L	1	1.00	0.09	108	75 - 125	0	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: 111467

QC Batch: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	45.3	mg/L	1	5.00	40.8	90	79.8 - 110

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 Lead	45.2	mg/L	1	5.00	40.8	88	79.8 - 110	0	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: 111467

QC Batch: 32847
Prep Batch: 28546

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	51.7	mg/L	1	1.00	50.4	130	75 - 125

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

continued...

¹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TCLP Chromium	² 52.2	mg/L	1	1.00	50.4	180	75 - 125	1	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: 111467

QC Batch: 32892
Prep Batch: 28538

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-14

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	50.5	mg/L	1	10.0	41.6	89	69.2 - 129

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
Total Chromium	50.8	mg/L	1	10.0	41.6	92	69.2 - 129	1	20

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

Standard (ICV-1)

QC Batch: 32792

Date Analyzed: 2006-12-13

Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.487	97	80 - 120	2006-12-13

Standard (CCV-1)

QC Batch: 32792

Date Analyzed: 2006-12-13

Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.500	0.503	101	80 - 120	2006-12-13

Standard (ICV-1)

QC Batch: 32811

Date Analyzed: 2006-12-14

Analyzed By: RR

²Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.995	100	90 - 110	2006-12-14

Standard (CCV-1)

QC Batch: 32811

Date Analyzed: 2006-12-14

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.924	92	90 - 110	2006-12-14

Standard (ICV-1)

QC Batch: 32843

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	0.994	99	90 - 110	2006-12-15

Standard (ICV-1)

QC Batch: 32843

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	0.978	98	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 32843

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	1.03	103	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 32843

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	1.03	103	90 - 110	2006-12-15

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Standard (ICV-1)

QC Batch: 32847

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	0.994	99	90 - 110	2006-12-15

Standard (ICV-1)

QC Batch: 32847

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	0.978	98	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 32847

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	1.06	106	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 32847

Date Analyzed: 2006-12-15

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	1.07	107	90 - 110	2006-12-15

Standard (ICV-1)

QC Batch: 32867

Date Analyzed: 2006-12-15

Analyzed By: JS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.84	98	98 - 102	2006-12-15

Standard (CCV-1)

QC Batch: 32867

Date Analyzed: 2006-12-15

Analyzed By: JS

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.86	98	98 - 102	2006-12-15

Standard (ICV-1)

QC Batch: 32892

Date Analyzed: 2006-12-18

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	1.00	100	90 - 110	2006-12-18

Standard (CCV-1)

QC Batch: 32892

Date Analyzed: 2006-12-18

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	1.03	103	90 - 110	2006-12-18

0121220

CLIENT NAME:		SITE MANAGER:		PROJECT NAME:		LAB. PO #		PARAMETERS/METHOD NUMBER		CHAIN-OF-CUSTODY RECORD	
Wood Sheng		M. Laron		Hobbs Facility						Carson & Associates, Inc. Environmental Consultants 507 N. Marlenfeld, Ste. 202 • Midland, TX 79701 Fax: 432-687-0456 432-687-0901	
PROJECT NO.: 6-0143										REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)	
PAGE 1 OF 1											
DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS					
12/11/06	1145	✓			Stage 1 Tank	2					
"	1210	✓			Stage 2 Tank	2					
"	1400	✓			Wash Tank	2					
Lab I.D. NUMBER (LAB USE ONLY) 111405 406 407											
COMMENTS: Mateo Sample is unfilled and unpreserved.											
RECEIVING LABORATORY: Carson & Associates, Inc. ADDRESS: 507 N. Marlenfeld, Ste. 202 CITY: Midland STATE: TX ZIP: 79701 CONTACT: A. Laron PHONE: 432-687-0901											
SAMPLE CONDITION WHEN RECEIVED: 4°											
LA CONTACT PERSON: A. Laron											
SAMPLE TYPE: Wash											

Cr6 test ?
not entered yet

Summary Report

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

Report Date: December 20, 2006

Work Order: 6121219



Project Location: Hobbs
Project Name: Hobbs Facility
Project Number: 6-0143

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
111464	Well	water	2006-12-11	11:25	2006-12-12

Sample: 111464 - Well

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	0.00
Bicarbonate Alkalinity		228	mg/L as CaCo3	4.00
Total Alkalinity		228	mg/L as CaCo3	4.00
Dissolved Calcium		97.2	mg/L	0.500
Dissolved Potassium		2.99	mg/L	0.500
Dissolved Magnesium		25.0	mg/L	0.500
Dissolved Sodium		56.3	mg/L	0.500
Dissolved Silver		<0.00200	mg/L	0.00200
Dissolved Arsenic		<0.00500	mg/L	0.00500
Dissolved Barium		0.0440	mg/L	0.0100
Dissolved Cadmium		<0.00100	mg/L	0.00100
Dissolved Chromium		<0.00500	mg/L	0.00500
Dissolved Lead		<0.00500	mg/L	0.00500
Dissolved Selenium		<0.0100	mg/L	0.0100
Dissolved Mercury		<0.000200	mg/L	0.000200
Chloride		57.8	mg/L	0.500
Fluoride		2.09	mg/L	0.200
Sulfate		105	mg/L	0.500
Nitrate-N		4.78	mg/L	0.200
pH		7.08	s.u.	0.00
Pyridine		<0.00500	mg/L	0.00500
n-Nitrosodimethylamine		<0.00500	mg/L	0.00500
2-Picoline		<0.00500	mg/L	0.00500
Methyl methanesulfonate		<0.00500	mg/L	0.00500
Ethyl methanesulfonate		<0.00500	mg/L	0.00500
Phenol		<0.00500	mg/L	0.00500

continued ...

sample 111464 continued ...

Param	Flag	Result	Units	RL
Aniline		<0.00500	mg/L	0.00500
bis(2-chloroethyl)ether		<0.00500	mg/L	0.00500
2-Chlorophenol		<0.00500	mg/L	0.00500
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.00500
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.00500
Benzyl alcohol		<0.00500	mg/L	0.00500
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.00500
2-Methylphenol		<0.00500	mg/L	0.00500
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.00500
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.00500
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.00500
Hexachloroethane		<0.00500	mg/L	0.00500
Acetophenone		<0.00500	mg/L	0.00500
Nitrobenzene		<0.00500	mg/L	0.00500
n-Nitrosopiperidine		<0.00500	mg/L	0.00500
Isophorone		<0.00500	mg/L	0.00500
2-Nitrophenol		<0.00500	mg/L	0.00500
2,4-Dimethylphenol		<0.00500	mg/L	0.00500
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.00500
2,4-Dichlorophenol		<0.00500	mg/L	0.00500
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.00500
Benzoic acid		<0.00500	mg/L	0.00500
Naphthalene		<0.00500	mg/L	0.00500
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.00500
4-Chloroaniline		<0.00500	mg/L	0.00500
2,6-Dichlorophenol		<0.0100	mg/L	0.0100
Hexachlorobutadiene		<0.00500	mg/L	0.00500
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.00500
4-Chloro-3-methylphenol		<0.00500	mg/L	0.00500
2-Methylnaphthalene		<0.00500	mg/L	0.00500
1-Methylnaphthalene		<0.00500	mg/L	0.00500
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.00500
Hexachlorocyclopentadiene		<0.00500	mg/L	0.00500
2,4,6-Trichlorophenol		<0.0100	mg/L	0.0100
2,4,5-Trichlorophenol		<0.00500	mg/L	0.00500
2-Chloronaphthalene		<0.00500	mg/L	0.00500
1-Chloronaphthalene		<0.00500	mg/L	0.00500
2-Nitroaniline		<0.00500	mg/L	0.00500
Dimethylphthalate		<0.00500	mg/L	0.00500
Acenaphthylene		<0.00500	mg/L	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	0.00500
3-Nitroaniline		<0.00500	mg/L	0.00500
Acenaphthene		<0.00500	mg/L	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	0.00500
Dibenzofuran		<0.00500	mg/L	0.00500
Pentachlorobenzene		<0.00500	mg/L	0.00500
4-Nitrophenol		<0.0250	mg/L	0.0250
2,4-Dinitrotoluene		<0.00500	mg/L	0.00500
1-Naphthylamine		<0.00500	mg/L	0.00500
2,3,4,6-Tetrachlorophenol		<0.0100	mg/L	0.0100
2-Naphthylamine		<0.00500	mg/L	0.00500
Fluorene		<0.00500	mg/L	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.00500

continued ...

sample 111464 continued ...

Param	Flag	Result	Units	RL
Diethylphthalate		<0.00500	mg/L	0.00500
4-Nitroaniline		<0.00500	mg/L	0.00500
Diphenylhydrazine		<0.00500	mg/L	0.00500
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.00500
Diphenylamine		<0.00500	mg/L	0.00500
4-Bromophenyl-phenylether		<0.00500	mg/L	0.00500
Phenacetin		<0.00500	mg/L	0.00500
Hexachlorobenzene		<0.00500	mg/L	0.00500
4-Aminobiphenyl		<0.00500	mg/L	0.00500
Pentachlorophenol		<0.0100	mg/L	0.0100
Anthracene		<0.00500	mg/L	0.00500
Pentachloronitrobenzene		<0.00500	mg/L	0.00500
Pronamide		<0.00500	mg/L	0.00500
Phenanthrene		<0.00500	mg/L	0.00500
Di-n-butylphthalate		<0.00500	mg/L	0.00500
Fluoranthene		<0.00500	mg/L	0.00500
Benzidine		<0.0250	mg/L	0.0250
Pyrene		<0.00500	mg/L	0.00500
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.00500
Butylbenzylphthalate		<0.00500	mg/L	0.00500
Benzo(a)anthracene		<0.00500	mg/L	0.00500
3,3-Dichlorobenzidine		<0.00500	mg/L	0.00500
Chrysene		<0.00500	mg/L	0.00500
bis(2-ethylhexyl)phthalate		0.00760	mg/L	0.00500
Di-n-octylphthalate		<0.00500	mg/L	0.00500
Benzo(b)fluoranthene		<0.00500	mg/L	0.00500
Benzo(k)fluoranthene		<0.00500	mg/L	0.00500
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.00500
Benzo(a)pyrene		<0.00500	mg/L	0.00500
3-Methylcholanthrene		<0.00500	mg/L	0.00500
Dibenzo(a,j)acridine		<0.00500	mg/L	0.00500
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.00500
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.00500
Benzo(g,h,i)perylene		<0.00500	mg/L	0.00500
Total Dissolved Solids		506.0	mg/L	10.00
Bromochloromethane		<1.00	µg/L	1.00
Dichlorodifluoromethane		<1.00	µg/L	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1.00
Vinyl Chloride		<1.00	µg/L	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	5.00
Chloroethane		<1.00	µg/L	1.00
Trichlorofluoromethane		<1.00	µg/L	1.00
Acetone		<10.0	µg/L	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	5.00
Carbon Disulfide		<1.00	µg/L	1.00
Acrylonitrile		<1.00	µg/L	1.00
2-Butanone (MEK)		<5.00	µg/L	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	5.00
2-Hexanone		<5.00	µg/L	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10.0
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride		<5.00	µg/L	5.00
MTBE		<1.00	µg/L	1.00

continued ...

sample 111464 continued ...

Param	Flag	Result	Units	RL
trans-1,2-Dichloroethene		<1.00	µg/L	1.00
1,1-Dichloroethane		<1.00	µg/L	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1.00
2,2-Dichloropropane		<1.00	µg/L	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1.00
Chloroform		<1.00	µg/L	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1.00
1,1-Dichloropropene		<1.00	µg/L	1.00
Benzene		<1.00	µg/L	1.00
Carbon Tetrachloride		<1.00	µg/L	1.00
1,2-Dichloropropane		<1.00	µg/L	1.00
Trichloroethene (TCE)		<1.00	µg/L	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1.00
Bromodichloromethane		<1.00	µg/L	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1.00
Toluene		<1.00	µg/L	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1.00
1,3-Dichloropropane		<1.00	µg/L	1.00
Dibromochloromethane		<1.00	µg/L	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1.00
Chlorobenzene		<1.00	µg/L	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1.00
Ethylbenzene		<1.00	µg/L	1.00
m,p-Xylene		<1.00	µg/L	1.00
Bromoform		<1.00	µg/L	1.00
Styrene		<1.00	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00
2-Chlorotoluene		<1.00	µg/L	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1.00
Isopropylbenzene		<1.00	µg/L	1.00
Bromobenzene		<1.00	µg/L	1.00
n-Propylbenzene		<1.00	µg/L	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1.00
tert-Butylbenzene		<1.00	µg/L	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1.00
sec-Butylbenzene		<1.00	µg/L	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1.00
p-Isopropyltoluene		<1.00	µg/L	1.00
4-Chlorotoluene		<1.00	µg/L	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1.00
n-Butylbenzene		<1.00	µg/L	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	5.00
Naphthalene		<5.00	µg/L	5.00
Hexachlorobutadiene		<5.00	µg/L	5.00



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Analytical and Quality Control Report

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

Report Date: December 20, 2006

Work Order: 6121219



Project Location: Hobbs
Project Name: Hobbs Facility
Project Number: 6-0143

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
111464	Well	water	2006-12-11	11:25	2006-12-12

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 24 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: 111464 - Well

Analysis: Alkalinity
QC Batch: 32780
Prep Batch: 28513

Analytical Method: SM 2320B
Date Analyzed: 2006-12-13
Sample Preparation: 2006-12-13

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	1	0.00
Carbonate Alkalinity		0.00	mg/L as CaCo3	1	0.00
Bicarbonate Alkalinity		228	mg/L as CaCo3	1	4.00
Total Alkalinity		228	mg/L as CaCo3	1	4.00

Sample: 111464 - Well

Analysis: Cations
QC Batch: 32942
Prep Batch: 28533

Analytical Method: S 6010B
Date Analyzed: 2006-12-19
Sample Preparation: 2006-12-13

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		97.2	mg/L	1	0.500
Dissolved Potassium		2.99	mg/L	1	0.500
Dissolved Magnesium		25.0	mg/L	1	0.500
Dissolved Sodium		56.3	mg/L	1	0.500

Sample: 111464 - Well

Analysis: Dissolved Metals
QC Batch: 32921
Prep Batch: 28533

Analytical Method: S 6010B
Date Analyzed: 2006-12-18
Sample Preparation: 2006-12-13

Prep Method: S 3005A
Analyzed By: RR
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00200	mg/L	1	0.00200
Dissolved Arsenic		<0.00500	mg/L	1	0.00500
Dissolved Barium		0.0440	mg/L	1	0.0100
Dissolved Cadmium		<0.00100	mg/L	1	0.00100
Dissolved Chromium		<0.00500	mg/L	1	0.00500
Dissolved Lead		<0.00500	mg/L	1	0.00500
Dissolved Selenium		<0.0100	mg/L	1	0.0100

Sample: 111464 - Well

Analysis: Hg, Dissolved
QC Batch: 32864
Prep Batch: 28580

Analytical Method: S 7470A
Date Analyzed: 2006-12-15
Sample Preparation: 2006-12-14

Prep Method: N/A
Analyzed By: TS
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Mercury		<0.000200	mg/L	1	0.000200

Sample: 111464 - Well

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 32808 Date Analyzed: 2006-12-14 Analyzed By: AR
Prep Batch: 28541 Sample Preparation: 2006-12-14 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		57.8	mg/L	5	0.500
Fluoride		2.09	mg/L	5	0.200
Sulfate		105	mg/L	5	0.500

Sample: 111464 - Well

Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 32808 Date Analyzed: 2006-12-14 Analyzed By: AR
Prep Batch: 28541 Sample Preparation: 2006-12-14 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		4.78	mg/L	5	0.200

Sample: 111464 - Well

Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A
QC Batch: 32731 ^a Date Analyzed: 2006-12-12 Analyzed By: AR
Prep Batch: 28476 Sample Preparation: 2006-12-12 Prepared By: AR

^aDuplicate not reported but RPD is 1.

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.08	s.u.	1	0.00

Sample: 111464 - Well

Analysis: Semivolatiles Analytical Method: S 8270C Prep Method: S 3510C
QC Batch: 32956 Date Analyzed: 2006-12-14 Analyzed By: DS
Prep Batch: 28649 Sample Preparation: 2006-12-12 Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.00500	mg/L	1	0.00500
n-Nitrosodimethylamine		<0.00500	mg/L	1	0.00500
2-Picoline		<0.00500	mg/L	1	0.00500

continued ...

sample 111464 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Methyl methanesulfonate		<0.00500	mg/L	1	0.00500
Ethyl methanesulfonate		<0.00500	mg/L	1	0.00500
Phenol		<0.00500	mg/L	1	0.00500
Aniline		<0.00500	mg/L	1	0.00500
bis(2-chloroethyl)ether		<0.00500	mg/L	1	0.00500
2-Chlorophenol		<0.00500	mg/L	1	0.00500
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	1	0.00500
1,4-Dichlorobenzene (para)		<0.00500	mg/L	1	0.00500
Benzyl alcohol		<0.00500	mg/L	1	0.00500
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	1	0.00500
2-Methylphenol		<0.00500	mg/L	1	0.00500
bis(2-chloroisopropyl)ether		<0.00500	mg/L	1	0.00500
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	1	0.00500
n-Nitrosodi-n-propylamine		<0.00500	mg/L	1	0.00500
Hexachloroethane		<0.00500	mg/L	1	0.00500
Acetophenone		<0.00500	mg/L	1	0.00500
Nitrobenzene		<0.00500	mg/L	1	0.00500
n-Nitrosopiperidine		<0.00500	mg/L	1	0.00500
Isophorone		<0.00500	mg/L	1	0.00500
2-Nitrophenol		<0.00500	mg/L	1	0.00500
2,4-Dimethylphenol		<0.00500	mg/L	1	0.00500
bis(2-chloroethoxy)methane		<0.00500	mg/L	1	0.00500
2,4-Dichlorophenol		<0.00500	mg/L	1	0.00500
1,2,4-Trichlorobenzene		<0.00500	mg/L	1	0.00500
Benzoic acid		<0.00500	mg/L	1	0.00500
Naphthalene		<0.00500	mg/L	1	0.00500
a,a-Dimethylphenethylamine		<0.00500	mg/L	1	0.00500
4-Chloroaniline		<0.00500	mg/L	1	0.00500
2,6-Dichlorophenol		<0.0100	mg/L	1	0.0100
Hexachlorobutadiene		<0.00500	mg/L	1	0.00500
n-Nitroso-di-n-butylamine		<0.00500	mg/L	1	0.00500
4-Chloro-3-methylphenol		<0.00500	mg/L	1	0.00500
2-Methylnaphthalene		<0.00500	mg/L	1	0.00500
1-Methylnaphthalene		<0.00500	mg/L	1	0.00500
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	1	0.00500
Hexachlorocyclopentadiene		<0.00500	mg/L	1	0.00500
2,4,6-Trichlorophenol		<0.0100	mg/L	1	0.0100
2,4,5-Trichlorophenol		<0.00500	mg/L	1	0.00500
2-Chloronaphthalene		<0.00500	mg/L	1	0.00500
1-Chloronaphthalene		<0.00500	mg/L	1	0.00500
2-Nitroaniline		<0.00500	mg/L	1	0.00500
Dimethylphthalate		<0.00500	mg/L	1	0.00500
Acenaphthylene		<0.00500	mg/L	1	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	1	0.00500
3-Nitroaniline		<0.00500	mg/L	1	0.00500
Acenaphthene		<0.00500	mg/L	1	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	1	0.00500
Dibenzofuran		<0.00500	mg/L	1	0.00500
Pentachlorobenzene		<0.00500	mg/L	1	0.00500

continued ...

sample 111464 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
4-Nitrophenol		<0.0250	mg/L	1	0.0250
2,4-Dinitrotoluene		<0.00500	mg/L	1	0.00500
1-Naphthylamine		<0.00500	mg/L	1	0.00500
2,3,4,6-Tetrachlorophenol		<0.0100	mg/L	1	0.0100
2-Naphthylamine		<0.00500	mg/L	1	0.00500
Fluorene		<0.00500	mg/L	1	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	1	0.00500
Diethylphthalate		<0.00500	mg/L	1	0.00500
4-Nitroaniline		<0.00500	mg/L	1	0.00500
Diphenylhydrazine		<0.00500	mg/L	1	0.00500
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	1	0.00500
Diphenylamine		<0.00500	mg/L	1	0.00500
4-Bromophenyl-phenylether		<0.00500	mg/L	1	0.00500
Phenacetin		<0.00500	mg/L	1	0.00500
Hexachlorobenzene		<0.00500	mg/L	1	0.00500
4-Aminobiphenyl		<0.00500	mg/L	1	0.00500
Pentachlorophenol		<0.0100	mg/L	1	0.0100
Anthracene		<0.00500	mg/L	1	0.00500
Pentachloronitrobenzene		<0.00500	mg/L	1	0.00500
Pronamide		<0.00500	mg/L	1	0.00500
Phenanthrene		<0.00500	mg/L	1	0.00500
Di-n-butylphthalate		<0.00500	mg/L	1	0.00500
Fluoranthene		<0.00500	mg/L	1	0.00500
Benzidine		<0.0250	mg/L	1	0.0250
Pyrene		<0.00500	mg/L	1	0.00500
p-Dimethylaminoazobenzene		<0.00500	mg/L	1	0.00500
Butylbenzylphthalate		<0.00500	mg/L	1	0.00500
Benzo(a)anthracene		<0.00500	mg/L	1	0.00500
3,3-Dichlorobenzidine		<0.00500	mg/L	1	0.00500
Chrysene		<0.00500	mg/L	1	0.00500
bis(2-ethylhexyl)phthalate	B	0.00760	mg/L	1	0.00500
Di-n-octylphthalate		<0.00500	mg/L	1	0.00500
Benzo(b)fluoranthene		<0.00500	mg/L	1	0.00500
Benzo(k)fluoranthene		<0.00500	mg/L	1	0.00500
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	1	0.00500
Benzo(a)pyrene		<0.00500	mg/L	1	0.00500
3-Methylcholanthrene		<0.00500	mg/L	1	0.00500
Dibenzo(a,j)acridine		<0.00500	mg/L	1	0.00500
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	1	0.00500
Dibenzo(a,h)anthracene		<0.00500	mg/L	1	0.00500
Benzo(g,h,i)perylene		<0.00500	mg/L	1	0.00500

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0242	mg/L	1	0.0800	30	10 - 84.7
Phenol-d5		0.0170	mg/L	1	0.0800	21	10 - 54.9
Nitrobenzene-d5		0.0561	mg/L	1	0.0800	70	10 - 202
2-Fluorobiphenyl		0.0609	mg/L	1	0.0800	76	10 - 199
2,4,6-Tribromophenol		0.0490	mg/L	1	0.0800	61	10 - 141

continued...

sample continued...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Terphenyl-d14		0.0843	mg/L	1	0.0800	105	10 - 160

Sample: 111464 - Well

Analysis: TDS	Analytical Method: SM 2540C	Prep Method: N/A
QC Batch: 32844	Date Analyzed: 2006-12-15	Analyzed By: AR
Prep Batch: 28566	Sample Preparation: 2006-12-15	Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		506.0	mg/L	1	10.00

Sample: 111464 - Well

Analysis: Volatiles	Analytical Method: S 8260B	Prep Method: S 5030B
QC Batch: 32809	Date Analyzed: 2006-12-13	Analyzed By: JG
Prep Batch: 28542	Sample Preparation: 2006-12-13	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride	B	<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		<1.00	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00
Benzene		<1.00	µg/L	1	1.00
Carbon Tetrachloride		<1.00	µg/L	1	1.00

continued...

sample 111464 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
1,2-Dichloropropane		<1.00	µg/L	1	1.00
Trichloroethene (TCE)		<1.00	µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1.00
Bromodichloromethane		<1.00	µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1	1.00
Toluene	B	<1.00	µg/L	1	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1	1.00
1,3-Dichloropropane		<1.00	µg/L	1	1.00
Dibromochloromethane		<1.00	µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1	1.00
Chlorobenzene		<1.00	µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1.00
Ethylbenzene		<1.00	µg/L	1	1.00
m,p-Xylene		<1.00	µg/L	1	1.00
Bromoform		<1.00	µg/L	1	1.00
Styrene		<1.00	µg/L	1	1.00
o-Xylene		<1.00	µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1.00
2-Chlorotoluene		<1.00	µg/L	1	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1	1.00
Isopropylbenzene		<1.00	µg/L	1	1.00
Bromobenzene		<1.00	µg/L	1	1.00
n-Propylbenzene		<1.00	µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1.00
tert-Butylbenzene		<1.00	µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1.00
sec-Butylbenzene		<1.00	µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1.00
p-Isopropyltoluene		<1.00	µg/L	1	1.00
4-Chlorotoluene		<1.00	µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1.00
n-Butylbenzene		<1.00	µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene	B	<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.6	µg/L	1	50.0	103	82.4 - 115
Toluene-d8		51.9	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		46.5	µg/L	1	50.0	93	84.6 - 114

Method Blank (1) QC Batch: 32780

QC Batch: 32780
Prep Batch: 28513

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		0.00	mg/L as CaCo3	0
Carbonate Alkalinity		0.00	mg/L as CaCo3	0
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 32808

QC Batch: 32808
Prep Batch: 28541

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		<0.0106	mg/L	0.2

Method Blank (1) QC Batch: 32808

QC Batch: 32808
Prep Batch: 28541

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		1.71	mg/L	0.5
Fluoride		<0.0119	mg/L	0.2
Sulfate		<0.0485	mg/L	0.5

Method Blank (1) QC Batch: 32809

QC Batch: 32809
Prep Batch: 28542

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: JG
Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Bromochloromethane		<0.351	µg/L	1
Dichlorodifluoromethane		<0.306	µg/L	1
Chloromethane (methyl chloride)		<0.240	µg/L	1
Vinyl Chloride		<0.224	µg/L	1
Bromomethane (methyl bromide)		<0.325	µg/L	5
Chloroethane		<0.303	µg/L	1
Trichlorofluoromethane		<0.255	µg/L	1
Acetone		<1.86	µg/L	10
Iodomethane (methyl iodide)		<0.397	µg/L	5
Carbon Disulfide		<0.354	µg/L	1
Acrylonitrile		<0.306	µg/L	1

continued ...

method blank continued...

Parameter	Flag	MDL Result	Units	RL
2-Butanone (MEK)		<0.670	µg/L	5
4-Methyl-2-pentanone (MIBK)		<0.463	µg/L	5
2-Hexanone		<0.303	µg/L	5
trans 1,4-Dichloro-2-butene		<0.406	µg/L	10
1,1-Dichloroethene		<0.326	µg/L	1
Methylene chloride		0.690	µg/L	5
MTBE		<0.352	µg/L	1
trans-1,2-Dichloroethene		<0.322	µg/L	1
1,1-Dichloroethane		<0.324	µg/L	1
cis-1,2-Dichloroethene		<0.331	µg/L	1
2,2-Dichloropropane		<0.440	µg/L	1
1,2-Dichloroethane (EDC)		<0.327	µg/L	1
Chloroform		<0.345	µg/L	1
1,1,1-Trichloroethane		<0.303	µg/L	1
1,1-Dichloropropene		<0.356	µg/L	1
Benzene		<0.356	µg/L	1
Carbon Tetrachloride		<0.342	µg/L	1
1,2-Dichloropropane		<0.366	µg/L	1
Trichloroethene (TCE)		<0.434	µg/L	1
Dibromomethane (methylene bromide)		<0.406	µg/L	1
Bromodichloromethane		<0.325	µg/L	1
2-Chloroethyl vinyl ether		<0.366	µg/L	5
cis-1,3-Dichloropropene		<0.387	µg/L	1
trans-1,3-Dichloropropene		<0.367	µg/L	1
Toluene		0.520	µg/L	1
1,1,2-Trichloroethane		<0.397	µg/L	1
1,3-Dichloropropane		<0.355	µg/L	1
Dibromochloromethane		<0.315	µg/L	1
1,2-Dibromoethane (EDB)		<0.340	µg/L	1
Tetrachloroethene (PCE)		<0.355	µg/L	1
Chlorobenzene		<0.363	µg/L	1
1,1,1,2-Tetrachloroethane		<0.338	µg/L	1
Ethylbenzene		<0.350	µg/L	1
m,p-Xylene		<0.752	µg/L	1
Bromoform		<0.275	µg/L	1
Styrene		<0.395	µg/L	1
o-Xylene		<0.375	µg/L	1
1,1,2,2-Tetrachloroethane		<0.283	µg/L	1
2-Chlorotoluene		<0.445	µg/L	1
1,2,3-Trichloropropane		<0.430	µg/L	1
Isopropylbenzene		<0.521	µg/L	1
Bromobenzene		<0.494	µg/L	1
n-Propylbenzene		<0.483	µg/L	1
1,3,5-Trimethylbenzene		<0.487	µg/L	1
tert-Butylbenzene		<0.496	µg/L	1
1,2,4-Trimethylbenzene		<0.532	µg/L	1
1,4-Dichlorobenzene (para)		<0.413	µg/L	1
sec-Butylbenzene		<0.449	µg/L	1
1,3-Dichlorobenzene (meta)		<0.451	µg/L	1
p-Isopropyltoluene		<0.450	µg/L	1

continued...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
4-Chlorotoluene		<0.489	µg/L	1
1,2-Dichlorobenzene (ortho)		<0.438	µg/L	1
n-Butylbenzene		<0.461	µg/L	1
1,2-Dibromo-3-chloropropane		<0.532	µg/L	5
1,2,3-Trichlorobenzene		<0.288	µg/L	5
1,2,4-Trichlorobenzene		<0.273	µg/L	5
Naphthalene		0.500	µg/L	5
Hexachlorobutadiene		<0.483	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.2	µg/L	1	50.0	102	82.4 - 115
Toluene-d8		52.1	µg/L	1	50.0	104	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.0	µg/L	1	50.0	94	84.6 - 114

Method Blank (1) QC Batch: 32844

QC Batch: 32844
Prep Batch: 28566

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: AR
Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.000	mg/L	10

Method Blank (1) QC Batch: 32864

QC Batch: 32864
Prep Batch: 28580

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: TS
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Mercury		<0.0000329	mg/L	0.0002

Method Blank (1) QC Batch: 32921

QC Batch: 32921
Prep Batch: 28533

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Silver		<0.000199	mg/L	0.002
Dissolved Arsenic		<0.00360	mg/L	0.005
Dissolved Barium		<0.000450	mg/L	0.01
Dissolved Cadmium		<0.000577	mg/L	0.001
Dissolved Chromium		<0.00357	mg/L	0.005
Dissolved Lead		<0.00398	mg/L	0.005

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Dissolved Selenium		<0.00556	mg/L	0.01

Method Blank (1) QC Batch: 32942

QC Batch: 32942
Prep Batch: 28533

Date Analyzed: 2006-12-19
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		<0.00971	mg/L	0.5
Dissolved Potassium		<0.0297	mg/L	0.5
Dissolved Magnesium		<0.0138	mg/L	0.5
Dissolved Sodium		<0.0309	mg/L	0.5

Method Blank (1) QC Batch: 32956

QC Batch: 32956
Prep Batch: 28649

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-12

Analyzed By: DS
Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
Pyridine		<0.000890	mg/L	0.005
n-Nitrosodimethylamine		<0.00146	mg/L	0.005
2-Picoline		<0.00121	mg/L	0.005
Methyl methanesulfonate		<0.000445	mg/L	0.005
Ethyl methanesulfonate		<0.000552	mg/L	0.005
Phenol		<0.000495	mg/L	0.005
Aniline		<0.00287	mg/L	0.005
bis(2-chloroethyl)ether		<0.000535	mg/L	0.005
2-Chlorophenol		<0.000923	mg/L	0.005
1,3-Dichlorobenzene (meta)		<0.000457	mg/L	0.005
1,4-Dichlorobenzene (para)		<0.000516	mg/L	0.005
Benzyl alcohol		<0.00147	mg/L	0.005
1,2-Dichlorobenzene (ortho)		<0.000498	mg/L	0.005
2-Methylphenol		<0.000662	mg/L	0.005
bis(2-chloroisopropyl)ether		<0.000612	mg/L	0.005
4-Methylphenol / 3-Methylphenol		<0.000488	mg/L	0.005
n-Nitrosodi-n-propylamine		<0.000662	mg/L	0.005
Hexachloroethane		<0.000529	mg/L	0.005
Acetophenone		<0.000684	mg/L	0.005
Nitrobenzene		<0.000651	mg/L	0.005
n-Nitrosopiperidine		<0.000609	mg/L	0.005
Isophorone		<0.000743	mg/L	0.005
2-Nitrophenol		<0.00430	mg/L	0.005
2,4-Dimethylphenol		<0.000945	mg/L	0.005
bis(2-chloroethoxy)methane		<0.000580	mg/L	0.005
2,4-Dichlorophenol		<0.000902	mg/L	0.005
1,2,4-Trichlorobenzene		<0.000484	mg/L	0.005

continued ...

method blank continued...

Parameter	Flag	MDL Result	Units	RL
Benzoic acid		<0.000719	mg/L	0.005
Naphthalene		<0.000480	mg/L	0.005
a,a-Dimethylphenethylamine		<0.00199	mg/L	0.005
4-Chloroaniline		<0.000978	mg/L	0.005
2,6-Dichlorophenol		<0.00132	mg/L	0.01
Hexachlorobutadiene		<0.000476	mg/L	0.005
n-Nitroso-di-n-butylamine		<0.000704	mg/L	0.005
4-Chloro-3-methylphenol		<0.000662	mg/L	0.005
2-Methylnaphthalene		<0.000416	mg/L	0.005
1-Methylnaphthalene		<0.000529	mg/L	0.005
1,2,4,5-Tetrachlorobenzene		<0.000445	mg/L	0.005
Hexachlorocyclopentadiene		<0.000387	mg/L	0.005
2,4,6-Trichlorophenol		<0.00143	mg/L	0.01
2,4,5-Trichlorophenol		<0.00143	mg/L	0.005
2-Chloronaphthalene		<0.000327	mg/L	0.005
1-Chloronaphthalene		<0.000450	mg/L	0.005
2-Nitroaniline		<0.00102	mg/L	0.005
Dimethylphthalate		<0.000752	mg/L	0.005
Acenaphthylene		<0.000556	mg/L	0.005
2,6-Dinitrotoluene		<0.000738	mg/L	0.005
3-Nitroaniline		<0.000694	mg/L	0.005
Acenaphthene		<0.000601	mg/L	0.005
2,4-Dinitrophenol		<0.000476	mg/L	0.005
Dibenzofuran		<0.000556	mg/L	0.005
Pentachlorobenzene		<0.000523	mg/L	0.005
4-Nitrophenol		<0.000924	mg/L	0.025
2,4-Dinitrotoluene		<0.000803	mg/L	0.005
1-Naphthylamine		<0.00122	mg/L	0.005
2,3,4,6-Tetrachlorophenol		<0.00225	mg/L	0.01
2-Naphthylamine		<0.00147	mg/L	0.005
Fluorene		<0.000675	mg/L	0.005
4-Chlorophenyl-phenylether		<0.000679	mg/L	0.005
Diethylphthalate		<0.000843	mg/L	0.005
4-Nitroaniline		<0.000740	mg/L	0.005
Diphenylhydrazine		<0.000897	mg/L	0.005
4,6-Dinitro-2-methylphenol		<0.000630	mg/L	0.005
Diphenylamine		<0.000598	mg/L	0.005
4-Bromophenyl-phenylether		<0.000741	mg/L	0.005
Phenacetin		<0.000494	mg/L	0.005
Hexachlorobenzene		<0.000571	mg/L	0.005
4-Aminobiphenyl		<0.00157	mg/L	0.005
Pentachlorophenol		<0.00140	mg/L	0.01
Anthracene		<0.000641	mg/L	0.005
Pentachloronitrobenzene		<0.000609	mg/L	0.005
Pronamide		<0.000441	mg/L	0.005
Phenanthrene		<0.000523	mg/L	0.005
Di-n-butylphthalate		<0.000564	mg/L	0.005
Fluoranthene		<0.000399	mg/L	0.005
Benzidine		<0.00133	mg/L	0.025
Pyrene		<0.00146	mg/L	0.005

continued...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
p-Dimethylaminoazobenzene		<0.00247	mg/L	0.005
Butylbenzylphthalate		<0.000997	mg/L	0.005
Benzo(a)anthracene		<0.000734	mg/L	0.005
3,3-Dichlorobenzidine		<0.00153	mg/L	0.005
Chrysene		<0.000814	mg/L	0.005
bis(2-ethylhexyl)phthalate		0.00790	mg/L	0.005
Di-n-octylphthalate		<0.000529	mg/L	0.005
Benzo(b)fluoranthene		<0.000501	mg/L	0.005
Benzo(k)fluoranthene		<0.000501	mg/L	0.005
7,12-Dimethylbenz(a)anthracene		<0.000320	mg/L	0.005
Benzo(a)pyrene		<0.000515	mg/L	0.005
3-Methylcholanthrene		<0.000457	mg/L	0.005
Dibenzo(a,j)acridine		<0.000846	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.000548	mg/L	0.005
Dibenzo(a,h)anthracene		<0.000498	mg/L	0.005
Benzo(g,h,i)perylene		<0.000462	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0238	mg/L	1	0.0800	30	10 - 66.9
Phenol-d5		0.0171	mg/L	1	0.0800	21	10 - 50.7
Nitrobenzene-d5		0.0551	mg/L	1	0.0800	69	10 - 124
2-Fluorobiphenyl		0.0591	mg/L	1	0.0800	74	10 - 127
2,4,6-Tribromophenol		0.0440	mg/L	1	0.0800	55	10 - 138
Terphenyl-d14		0.0718	mg/L	1	0.0800	90	10 - 143

Duplicates (1)

QC Batch: 32780
Prep Batch: 28513

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: AR
Prepared By: AR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	0.00	0.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	0.00	0.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	200	228	mg/L as CaCo3	1	13	20
Total Alkalinity	200	228	mg/L as CaCo3	1	13	20

Duplicates (1)

QC Batch: 32844
Prep Batch: 28566

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: AR
Prepared By: AR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	528.0	506.0	mg/L	1	4	20

Laboratory Control Spike (LCS-1)

QC Batch: 32808
Prep Batch: 28541

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	2.46	mg/L	1	2.50	<0.0106	98	90 - 110

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
Nitrate-N	2.48	mg/L	1	2.50	<0.0106	99	90 - 110	1	

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: 32808
Prep Batch: 28541

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.6	mg/L	1	12.5	<0.0181	101	90 - 110
Fluoride	2.46	mg/L	1	2.50	<0.0119	98	90 - 110
Sulfate	12.5	mg/L	1	12.5	<0.0485	100	90 - 110

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
Chloride	12.4	mg/L	1	12.5	<0.0181	99	90 - 110	2	
Fluoride	2.48	mg/L	1	2.50	<0.0119	99	90 - 110	1	
Sulfate	12.5	mg/L	1	12.5	<0.0485	100	90 - 110	0	

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: 32809
Prep Batch: 28542

Date Analyzed: 2006-12-13
QC Preparation: 2006-12-13

Analyzed By: JG
Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	51.0	µg/L	1	50.0	<0.326	102	83.4 - 114
Benzene	53.4	µg/L	1	50.0	<0.356	107	83.5 - 115
Trichloroethene (TCE)	53.9	µg/L	1	50.0	<0.434	108	91.3 - 111
Toluene	49.2	µg/L	1	50.0	<0.366	98	82 - 110
Chlorobenzene	50.9	µg/L	1	50.0	<0.363	102	87.9 - 109

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
1,1-Dichloroethene	52.5	µg/L	1	50.0	<0.326	105	83.4 - 114	3	20
Benzene	54.6	µg/L	1	50.0	<0.356	109	83.5 - 115	2	20
Trichloroethene (TCE)	55.1	µg/L	1	50.0	<0.434	110	91.3 - 111	2	20
Toluene	50.0	µg/L	1	50.0	<0.366	100	82 - 110	2	20
Chlorobenzene	52.3	µg/L	1	50.0	<0.363	105	87.9 - 109	3	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	50.1	49.9	µg/L	1	50.0	100	100	82.4 - 115
Toluene-d8	50.1	50.3	µg/L	1	50.0	100	101	89.7 - 108
4-Bromofluorobenzene (4-BFB)	50.3	50.2	µg/L	1	50.0	101	100	84.6 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 32864
Prep Batch: 28580

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: TS
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Mercury	0.000970	mg/L	1	0.00100	<0.0000329	97	85 - 114

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
Dissolved Mercury	0.000970	mg/L	1	0.00100	<0.0000329	97	85 - 114	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: 32921
Prep Batch: 28533

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.133	mg/L	1	0.125	<0.000199	106	86.2 - 116
Dissolved Arsenic	0.505	mg/L	1	0.500	<0.00360	101	78.7 - 116
Dissolved Barium	0.947	mg/L	1	1.00	<0.000450	95	85 - 114
Dissolved Cadmium	0.237	mg/L	1	0.250	<0.000577	95	83.3 - 113
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112
Dissolved Lead	0.512	mg/L	1	0.500	<0.00398	102	81.1 - 111
Dissolved Selenium	0.419	mg/L	1	0.500	<0.00556	84	69.6 - 111

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
Dissolved Silver	0.129	mg/L	1	0.125	<0.000199	103	86.2 - 116	3	20
Dissolved Arsenic	0.535	mg/L	1	0.500	<0.00360	107	78.7 - 116	6	20

continued...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Barium	0.979	mg/L	1	1.00	<0.000450	98	85 - 114	3	20
Dissolved Cadmium	0.244	mg/L	1	0.250	<0.000577	98	83.3 - 113	3	20
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112	0	20
Dissolved Lead	0.518	mg/L	1	0.500	<0.00398	104	81.1 - 111	1	20
Dissolved Selenium	0.461	mg/L	1	0.500	<0.00556	92	69.6 - 111	10	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: 32942
Prep Batch: 28533

Date Analyzed: 2006-12-19
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	44.2	mg/L	1	50.0	<0.00971	88	85 - 115
Dissolved Potassium	45.7	mg/L	1	50.0	<0.0297	91	85 - 115
Dissolved Magnesium	44.8	mg/L	1	50.0	<0.0138	90	85 - 115
Dissolved Sodium	45.1	mg/L	1	50.0	<0.0309	90	85 - 115

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
Dissolved Calcium	48.5	mg/L	1	50.0	<0.00971	97	85 - 115	9	20
Dissolved Potassium	47.5	mg/L	1	50.0	<0.0297	95	85 - 115	4	20
Dissolved Magnesium	48.2	mg/L	1	50.0	<0.0138	96	85 - 115	7	20
Dissolved Sodium	49.0	mg/L	1	50.0	<0.0309	98	85 - 115	8	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: 32956
Prep Batch: 28649

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-12

Analyzed By: DS
Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Phenol	0.0234	mg/L	1	0.0800	<0.000495	29	10 - 46.1
2-Chlorophenol	0.0632	mg/L	1	0.0800	<0.000923	79	10 - 123
1,4-Dichlorobenzene (para)	0.0635	mg/L	1	0.0800	<0.000516	79	10 - 118
n-Nitrosodi-n-propylamine	0.0878	mg/L	1	0.0800	<0.000662	110	10 - 132
1,2,4-Trichlorobenzene	0.0751	mg/L	1	0.0800	<0.000484	94	10 - 130
4-Chloro-3-methylphenol	0.0659	mg/L	1	0.0800	<0.000662	82	10 - 140
Acenaphthene	0.0707	mg/L	1	0.0800	<0.000601	88	18.8 - 134
4-Nitrophenol	0.0164	mg/L	1	0.0800	<0.000924	20	10 - 135
2,4-Dinitrotoluene	0.0704	mg/L	1	0.0800	<0.000803	88	13.6 - 152
Pentachlorophenol	0.0690	mg/L	1	0.0800	<0.00140	86	10 - 144
Pyrene	0.0804	mg/L	1	0.0800	<0.00146	100	26.8 - 155

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
Phenol	0.0232	mg/L	1	0.0800	<0.000495	29	10 - 46.1	1	20
2-Chlorophenol	0.0626	mg/L	1	0.0800	<0.000923	78	10 - 123	1	20
1,4-Dichlorobenzene (para)	0.0623	mg/L	1	0.0800	<0.000516	78	10 - 118	2	20
n-Nitrosodi-n-propylamine	0.0840	mg/L	1	0.0800	<0.000662	105	10 - 132	4	20
1,2,4-Trichlorobenzene	0.0756	mg/L	1	0.0800	<0.000484	94	10 - 130	1	20
4-Chloro-3-methylphenol	0.0676	mg/L	1	0.0800	<0.000662	84	10 - 140	2	20
Acenaphthene	0.0704	mg/L	1	0.0800	<0.000601	88	18.8 - 134	0	20
4-Nitrophenol	0.0167	mg/L	1	0.0800	<0.000924	21	10 - 135	2	20
2,4-Dinitrotoluene	0.0720	mg/L	1	0.0800	<0.000803	90	13.6 - 152	2	20
Pentachlorophenol	0.0703	mg/L	1	0.0800	<0.00140	88	10 - 144	2	20
Pyrene	0.0806	mg/L	1	0.0800	<0.00146	101	26.8 - 155	0	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	0.0345	0.0342	mg/L	1	0.0800	43	43	10 - 109
Phenol-d5	0.0245	0.0242	mg/L	1	0.0800	31	30	10 - 61.5
Nitrobenzene-d5	0.0861	0.0868	mg/L	1	0.0800	108	108	10 - 139
2-Fluorobiphenyl	0.0792	0.0785	mg/L	1	0.0800	99	98	10 - 139
2,4,6-Tribromophenol	0.0958	0.0930	mg/L	1	0.0800	120	116	10 - 161
Terphenyl-d14	0.0909	0.0902	mg/L	1	0.0800	114	113	10 - 144

Matrix Spike (MS-1) Spiked Sample: 111463

QC Batch: 32808
Prep Batch: 28541

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N	265	mg/L	100	250	<1.06	106	90 - 110

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
Nitrate-N	265	mg/L	100	250	<1.06	106	90 - 110	0	

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

Matrix Spike (MS-1) Spiked Sample: 111463

QC Batch: 32808
Prep Batch: 28541.

Date Analyzed: 2006-12-14
QC Preparation: 2006-12-14

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9830	mg/L	100	1250	9041	63	90 - 110
Fluoride	258	mg/L	100	250	<1.19	103	90 - 110
Sulfate	1930	mg/L	100	1250	639	103	90 - 110

¹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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
Chloride	9880	mg/L	100	0.00	9041	67	90 - 110	0	
Fluoride	256	mg/L	100	0.00	<1.19	102	90 - 110	1	
Sulfate	1890	mg/L	100	0.00	639	100	90 - 110	2	

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

Matrix Spike (MS-1) Spiked Sample: 111245

QC Batch: 32864
Prep Batch: 28580

Date Analyzed: 2006-12-15
QC Preparation: 2006-12-15

Analyzed By: TS
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Mercury	0.00104	mg/L	1	0.00100	<0.0000329	104	75 - 125

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
Dissolved Mercury	0.000980	mg/L	1	0.00100	<0.0000329	98	75 - 125	6	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: 111243

QC Batch: 32921
Prep Batch: 28533

Date Analyzed: 2006-12-18
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.119	mg/L	1	0.125	<0.000199	95	90.1 - 120
Dissolved Arsenic	0.472	mg/L	1	0.500	<0.00360	94	75 - 114
Dissolved Barium	0.897	mg/L	1	1.00	<0.000450	90	75 - 125
Dissolved Cadmium	0.226	mg/L	1	0.250	<0.000577	90	75 - 112
Dissolved Chromium	0.0870	mg/L	1	0.100	<0.00357	87	75 - 121
Dissolved Lead	0.473	mg/L	1	0.500	<0.00398	95	75 - 111
Dissolved Selenium	0.407	mg/L	1	0.500	<0.00556	81	75 - 118

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
Dissolved Silver	0.118	mg/L	1	0.00	<0.000199	94	90.1 - 120	1	20
Dissolved Arsenic	0.426	mg/L	1	0.00	<0.00360	85	75 - 114	10	20
Dissolved Barium	0.881	mg/L	1	0.00	<0.000450	88	75 - 125	2	20
Dissolved Cadmium	0.232	mg/L	1	0.00	<0.000577	93	75 - 112	3	20
Dissolved Chromium	0.0860	mg/L	1	0.00	<0.00357	86	75 - 121	1	20
Dissolved Lead	0.446	mg/L	1	0.00	<0.00398	89	75 - 111	6	20
Dissolved Selenium	0.426	mg/L	1	0.00	<0.00556	85	75 - 118	5	20

²Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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

Matrix Spike (MS-1) Spiked Sample: 111243

QC Batch: 32942
Prep Batch: 28533

Date Analyzed: 2006-12-19
QC Preparation: 2006-12-13

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	642	mg/L	1	50.0	590	104	75 - 125
Dissolved Potassium	224	mg/L	1	50.0	180	88	75 - 125
Dissolved Magnesium	2630	mg/L	1	50.0	2582	96	75 - 125
Dissolved Sodium	10900	mg/L	1	50.0	10870	60	75 - 125

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
Dissolved Calcium	643	mg/L	1	0.00	590	106	75 - 125	0	20
Dissolved Potassium	223	mg/L	1	0.00	180	86	75 - 125	0	20
Dissolved Magnesium	2620	mg/L	1	0.00	2582	76	75 - 125	0	20
Dissolved Sodium	10900	mg/L	1	0.00	10870	60	75 - 125	0	20

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

Standard (ICV-1)

QC Batch: 32731

Date Analyzed: 2006-12-12

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.07	101	98 - 102	2006-12-12

Standard (CCV-1)

QC Batch: 32731

Date Analyzed: 2006-12-12

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.85	98	98 - 102	2006-12-12

Standard (ICV-1)

QC Batch: 32780

Date Analyzed: 2006-12-13

Analyzed By: AR

³Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁴Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	0.00		0 - 200	2006-12-13
Carbonate Alkalinity		mg/L as CaCo3	0.00	240		0 - 200	2006-12-13
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	16.0		0 - 200	2006-12-13
Total Alkalinity		mg/L as CaCo3	250	256	102	90 - 110	2006-12-13

Standard (CCV-1)

QC Batch: 32780

Date Analyzed: 2006-12-13

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	0.00		0 - 200	2006-12-13
Carbonate Alkalinity		mg/L as CaCo3	0.00	228		0 - 200	2006-12-13
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	26.0		0 - 200	2006-12-13
Total Alkalinity		mg/L as CaCo3	250	254	102	90 - 110	2006-12-13

Standard (ICV-1)

QC Batch: 32808

Date Analyzed: 2006-12-14

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.53	101	90 - 110	2006-12-14

Standard (ICV-1)

QC Batch: 32808

Date Analyzed: 2006-12-14

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.6	101	90 - 110	2006-12-14
Fluoride		mg/L	2.50	2.44	98	90 - 110	2006-12-14
Sulfate		mg/L	12.5	12.2	98	90 - 110	2006-12-14

Standard (CCV-1)

QC Batch: 32808

Date Analyzed: 2006-12-14

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.51	100	90 - 110	2006-12-14

Standard (CCV-1)

QC Batch: 32808

Date Analyzed: 2006-12-14

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.7	102	90 - 110	2006-12-14
Fluoride		mg/L	2.50	2.44	98	90 - 110	2006-12-14
Sulfate		mg/L	12.5	12.2	98	90 - 110	2006-12-14

Standard (CCV-1)

QC Batch: 32809

Date Analyzed: 2006-12-13

Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	50.0	100	80 - 120	2006-12-13
1,1-Dichloroethene		µg/L	50.0	51.6	103	80 - 120	2006-12-13
Chloroform		µg/L	50.0	50.4	101	80 - 120	2006-12-13
1,2-Dichloropropane		µg/L	50.0	52.3	105	80 - 120	2006-12-13
Toluene		µg/L	50.0	49.8	100	80 - 120	2006-12-13
Chlorobenzene		µg/L	50.0	51.7	103	80 - 120	2006-12-13
Ethylbenzene		µg/L	50.0	53.4	107	80 - 120	2006-12-13

Standard (ICV-1)

QC Batch: 32844

Date Analyzed: 2006-12-15

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1008	101	90 - 110	2006-12-15

Standard (CCV-1)

QC Batch: 32844

Date Analyzed: 2006-12-15

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1005	100	90 - 110	2006-12-15

Standard (ICV-1)

QC Batch: 32864

Date Analyzed: 2006-12-15

Analyzed By: TS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Mercury		mg/L	0.00100	0.00106	106	80 - 120	2006-12-15

Standard (CCV-1)

QC Batch: 32864

Date Analyzed: 2006-12-15

Analyzed By: TS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Mercury		mg/L	0.00100	0.00101	101	80 - 120	2006-12-15

Standard (ICV-1)

QC Batch: 32921

Date Analyzed: 2006-12-18

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.128	102	90 - 110	2006-12-18
Dissolved Arsenic		mg/L	1.00	0.987	99	90 - 110	2006-12-18
Dissolved Barium		mg/L	1.00	0.996	100	90 - 110	2006-12-18
Dissolved Cadmium		mg/L	1.00	0.985	98	95 - 105	2006-12-18
Dissolved Chromium		mg/L	1.00	0.982	98	90 - 110	2006-12-18
Dissolved Lead		mg/L	1.00	0.986	99	90 - 110	2006-12-18
Dissolved Selenium		mg/L	1.00	1.06	106	90 - 110	2006-12-18

Standard (CCV-1)

QC Batch: 32921

Date Analyzed: 2006-12-18

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.129	103	90 - 110	2006-12-18
Dissolved Arsenic		mg/L	1.00	1.04	104	90 - 110	2006-12-18
Dissolved Barium		mg/L	1.00	1.03	103	90 - 110	2006-12-18
Dissolved Cadmium		mg/L	1.00	0.991	99	90 - 110	2006-12-18
Dissolved Chromium		mg/L	1.00	0.983	98	90 - 110	2006-12-18
Dissolved Lead		mg/L	1.00	0.983	98	90 - 110	2006-12-18
Dissolved Selenium		mg/L	1.00	1.02	102	90 - 110	2006-12-18

Standard (ICV-1)

QC Batch: 32942

Date Analyzed: 2006-12-19

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	52.9	106	90 - 110	2006-12-19
Dissolved Potassium		mg/L	50.0	52.6	105	90 - 110	2006-12-19
Dissolved Magnesium		mg/L	50.0	52.5	105	90 - 110	2006-12-19
Dissolved Sodium		mg/L	50.0	52.5	105	90 - 110	2006-12-19

Standard (CCV-1)

QC Batch: 32942

Date Analyzed: 2006-12-19

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	47.7	95	90 - 110	2006-12-19
Dissolved Potassium		mg/L	50.0	46.4	93	90 - 110	2006-12-19
Dissolved Magnesium		mg/L	50.0	47.3	95	90 - 110	2006-12-19
Dissolved Sodium		mg/L	50.0	46.9	94	90 - 110	2006-12-19

Standard (CCV-1)

QC Batch: 32956

Date Analyzed: 2006-12-14

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60.0	67.1	112	80 - 120	2006-12-14
1,4-Dichlorobenzene (para)		mg/L	60.0	61.2	102	80 - 120	2006-12-14
2-Nitrophenol		mg/L	60.0	65.1	108	80 - 120	2006-12-14
2,4-Dichlorophenol		mg/L	60.0	71.1	118	80 - 120	2006-12-14
Hexachlorobutadiene		mg/L	60.0	64.5	108	80 - 120	2006-12-14
4-Chloro-3-methylphenol		mg/L	60.0	58.9	98	80 - 120	2006-12-14
2,4,6-Trichlorophenol		mg/L	60.0	64.0	107	80 - 120	2006-12-14
Acenaphthene		mg/L	60.0	60.4	101	80 - 120	2006-12-14
Diphenylamine		mg/L	60.0	61.1	102	80 - 120	2006-12-14
Pentachlorophenol		mg/L	60.0	67.2	112	80 - 120	2006-12-14
Fluoranthene		mg/L	60.0	61.5	102	80 - 120	2006-12-14
Di-n-octylphthalate		mg/L	60.0	54.5	91	80 - 120	2006-12-14
Benzo(a)pyrene		mg/L	60.0	65.0	108	80 - 120	2006-12-14

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		62.8	mg/L	1	60.0	105	80 - 120
Phenol-d5		66.5	mg/L	1	60.0	111	80 - 120
Nitrobenzene-d5		65.7	mg/L	1	60.0	110	80 - 120
2-Fluorobiphenyl		61.0	mg/L	1	60.0	102	80 - 120
2,4,6-Tribromophenol	⁵	78.3	mg/L	1	60.0	130	80 - 120
Terphenyl-d14		65.5	mg/L	1	60.0	109	80 - 120

⁵2,4,6-Tribromophenol outside of control limits on CCV(ICV). CCV(ICV) component average is 107% which is within acceptable range. This is acceptable by Method 8000.

[illegible]

Report Date: December 21, 2006
6-0142

Work Order: 6121827
Hobbs Facility

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Summary Report

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

Report Date: December 21, 2006

Work Order: 6121827



Project Name: Hobbs Facility
Project Number: 6-0142

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
112174	Pump	water	2006-12-14	15:30	2006-12-15
112175	Sump	water	2006-12-14	15:30	2006-12-15

Sample: 112174 - Pump

Param	Flag	Result	Units	RL
TCLP Chromium		<0.100	mg/L	0.100
TCLP Lead		<0.100	mg/L	0.100

Sample: 112175 - Sump

Param	Flag	Result	Units	RL
TCLP Chromium		<0.100	mg/L	0.100
TCLP Lead		<0.100	mg/L	0.100



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Analytical and Quality Control Report

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

Report Date: December 21, 2006

Work Order: 6121827



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
112174	Pump	water	2006-12-14	15:30	2006-12-15
112175	Sump	water	2006-12-14	15:30	2006-12-15

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 6 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: 112174 - Pump

Analysis: TCLP Cr
QC Batch: 33030
Prep Batch: 28688

Analytical Method: S 6010B
Date Analyzed: 2006-12-21
Sample Preparation: 2006-12-20
TCLP Extraction: 2006-12-19

Prep Method: TCLP 1311
Analyzed By: RR
Prepared By: TS
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		<0.100	mg/L	1	0.100

Sample: 112174 - Pump

Analysis: TCLP Pb
QC Batch: 33030
Prep Batch: 28688

Analytical Method: S 6010B
Date Analyzed: 2006-12-21
Sample Preparation: 2006-12-20
TCLP Extraction: 2006-12-19

Prep Method: TCLP 1311
Analyzed By: RR
Prepared By: TS
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Lead		<0.100	mg/L	1	0.100

Sample: 112175 - Sump

Analysis: TCLP Cr
QC Batch: 33030
Prep Batch: 28688

Analytical Method: S 6010B
Date Analyzed: 2006-12-21
Sample Preparation: 2006-12-20
TCLP Extraction: 2006-12-19

Prep Method: TCLP 1311
Analyzed By: RR
Prepared By: TS
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		<0.100	mg/L	1	0.100

Sample: 112175 - Sump

Analysis: TCLP Pb
QC Batch: 33030
Prep Batch: 28688

Analytical Method: S 6010B
Date Analyzed: 2006-12-21
Sample Preparation: 2006-12-20
TCLP Extraction: 2006-12-19

Prep Method: TCLP 1311
Analyzed By: RR
Prepared By: TS
Prepared By: TS

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Lead		<0.100	mg/L	1	0.100

Method Blank (1) QC Batch: 33030

QC Batch: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Lead		<0.0370	mg/L	0.1

Method Blank (1) QC Batch: 33030

QC Batch: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
TCLP Chromium		<0.00600	mg/L	0.1

Laboratory Control Spike (LCS-1)

QC Batch: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	4.99	mg/L	1	5.00	<0.0370	100	84.8 - 109

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 Lead	4.89	mg/L	1	5.00	<0.0370	98	84.8 - 109	2	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: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	1.01	mg/L	1	1.00	<0.00600	101	84.9 - 118

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 Chromium	1.04	mg/L	1	1.00	<0.00600	104	84.9 - 118	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: 112174

QC Batch: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Lead	4.64	mg/L	1	5.00	<0.0370	93	79.8 - 110

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 Lead	4.62	mg/L	1	5.00	<0.0370	92	79.8 - 110	0	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: 112174

QC Batch: 33030
Prep Batch: 28688

Date Analyzed: 2006-12-21
QC Preparation: 2006-12-20

Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TCLP Chromium	0.840	mg/L	1	1.00	<0.00600	84	75 - 125

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 Chromium	0.834	mg/L	1	1.00	<0.00600	83	75 - 125	1	20

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

Standard (ICV-1)

QC Batch: 33030

Date Analyzed: 2006-12-21

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	0.967	97	90 - 110	2006-12-21

Standard (ICV-1)

QC Batch: 33030

Date Analyzed: 2006-12-21

Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	0.915	92	90 - 110	2006-12-21

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Standard (CCV-1)

QC Batch: 33030

Date Analyzed: 2006-12-21

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Lead		mg/L	1.00	0.959	96	90 - 110	2006-12-21

Standard (CCV-1)

QC Batch: 33030

Date Analyzed: 2006-12-21

Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Chromium		mg/L	1.00	0.945	94	90 - 110	2006-12-21

2-H-5

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