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**FEBRUARY 2006 SOIL AND GROUNDWATER SAMPLING REPORT
HOBBS (FRACMASTER), NEW MEXICO FACILITY**

BJ SERVICES COMPANY, U.S.A.

June 1, 2006


**FEBRUARY 2006 SOIL AND GROUNDWATER SAMPLING REPORT
HOBBS (FRACMASTER), NEW MEXICO FACILITY**

Prepared for

BJ Services Company, U.S.A.
11211 FM 2920
Tomball, Texas 77375

BC Project Number: 128125


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June 1, 2006

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P:\Wp\BJSERV\128125\003R.doc

Lynn Wright

"This report was prepared in accordance with the standards of the environmental consulting industry at the time it was prepared. It should not be relied upon by parties other than those for whom it was prepared, and then only to the extent of the scope of work which was authorized. This report does not guarantee that no additional environmental contamination beyond that described in this report exists at this site."

2.0 FIELD ACTIVITIES

Brown and Caldwell installed three monitor wells in the vicinity of the formerly excavated area using hollow stem auger drilling techniques to determine the direction of groundwater flow, to more fully evaluate impact to groundwater at the site, and to define the lateral extent of soil impacts. An area approximately 25 feet by 30 feet was determined to be the extent of the excavated area (See Figure 2). The sampling event included three monitor wells (MW-1, MW-2, and MW-3) that were installed and sampled for the first time in February 2006. The locations of the monitor wells in the area of the facility are shown in Figure 3. Soil samples were collected from the borings associated with the monitor wells MW-1 and MW-2. The following subsections describe the field activities conducted by Brown and Caldwell during the groundwater sampling and soil sampling event. Section 3.0 presents an evaluation of these data.

2.1 Soil Sampling Activities

Soil samples were collected from the approximate 19- to 20-foot depth interval of the MW-1 boring and from the 14- to 15-foot interval of the MW-2 boring in an attempt to define the lateral extent of soil impacts detected at those depths at the respective July 2005 WS and ES locations.

Brown and Caldwell advanced one soil boring each at the MW-1 and MW-2 locations. Soil cores were collected at approximate 5-foot centers from the ground surface to the total depth (TD) of the boring at each of these locations. Recovered soil cores were logged in accordance with the Unified Soil Classification System (USCS) and scanned with a calibrated photoionization detector (PID). The soil borings were advanced until the top of the saturated zone was encountered. Soil boring logs, indicating lithology and PID responses, are provided in Appendix A.

The soil samples were analyzed for the following parameters:

- TPH-G and TPH-D by Method 8015M; and
- BTEX by Method 8021.

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DISTRIBUTION AND QA/QC REVIEWER'S SIGNATURE

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- B Groundwater Sampling Forms
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1.0 INTRODUCTION

Brown and Caldwell conducted a monitor well installation and soil and groundwater sampling investigation at the BJ Services Company, U.S.A. (BJ Services) FracMaster facility located at 1329 N. West County Road in Hobbs, New Mexico on February 21-23, 2006 (See Figure 1). This report presents a description of the field activities and a summary and evaluation of the analytical results. A site location map and a groundwater potentiometric surface map are included.

A layout of the facility is shown in Figure 2. A former field waste tank and approximately 1,400 tons of soil were previously removed at the inactive BJ Services FracMaster facility in Hobbs, New Mexico. Post-excavation samples reportedly indicated impacts to soil by gasoline- and diesel-range total petroleum hydrocarbons (TPH-G and TPH-D). Volatile and semivolatile organic compounds (VOCs and SVOCs) were reportedly detected in the post-excavation floor sample; the post-excavation sidewall samples were not analyzed for VOCs and SVOCs. The approximately 25-foot deep excavated area was subsequently backfilled. Subsurface sampling conducted by Brown and Caldwell in July 2005 indicated impacts to vadose zone soils by benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) at the Sample ES and WS locations to the east and west of the former field waste tank area, as well as impacts to underlying groundwater by benzene, naphthalene, and xylenes. Pursuant to a request by BJ Services, Brown and Caldwell installed three monitor wells in the area of the former field waste tank to determine the direction of groundwater flow and to more fully evaluate impact to groundwater at the site.

2.0 FIELD ACTIVITIES

Brown and Caldwell installed three monitor wells in the vicinity of the formerly excavated area using hollow stem auger drilling techniques to determine the direction of groundwater flow, to more fully evaluate impact to groundwater at the site, and to define the lateral extent of soil impacts. An area approximately 25 feet by 30 feet was determined to be the extent of the excavated area (See Figure 2). The sampling event included three monitor wells (MW-1, MW-2, and MW-3) that were installed and sampled for the first time in February 2006. The locations of the monitor wells in the area of the facility are shown in Figure 3. Soil samples were collected from the borings associated with the monitor wells MW-1 and MW-2. The following subsections describe the field activities conducted by Brown and Caldwell during the groundwater sampling and soil sampling event. Section 3.0 presents an evaluation of these data.

2.1 Soil Sampling Activities

Soil samples were collected from the approximate 19- to 20-foot depth interval of the MW-1 boring and from the 14- to 15-foot interval of the MW-2 boring in an attempt to define the lateral extent of soil impacts detected at those depths at the respective July 2005 WS and ES locations.

Brown and Caldwell advanced one soil boring each at the MW-1 and MW-2 locations. Soil cores were collected at approximate 5-foot centers from the ground surface to the total depth (TD) of the boring at each of these locations. Recovered soil cores were logged in accordance with the Unified Soil Classification System (USCS) and scanned with a calibrated photoionization detector (PID). The soil borings were advanced until the top of the saturated zone was encountered. Soil boring logs, indicating lithology and PID responses, are provided in Appendix A.

The soil samples were analyzed for the following parameters:

- TPH-G and TPH-D by Method 8015M; and
- BTEX by Method 8021.

The laboratory analytical reports and chain-of-custody documentation for the soil samples are provided in Appendix B.

2.2 Monitor Well Installation and Development Activities

Monitor wells MW-1, MW-2, and MW-3 were installed in the area of the former field waste tank to determine the direction of groundwater flow and to more fully evaluate impact to groundwater at the site. The wells were installed in accordance with New Mexico Environment Department guidelines. Soil cores were collected at approximate 5-foot centers from ground surface to TD at each well location. Recovered cores were scanned with a calibrated PID and classified in accordance with the USCS. Monitor well MW-1 was installed approximately 20 feet west of the July 2005 WS location, west of the former field waste tank excavation. Monitor well MW-2 was installed approximately 50 feet east of the July 2005 ES location, east of the former field waste tank excavation. Monitor well MW-3 was installed approximately 50 feet north of the former field waste tank excavation.

The monitor well soil borings were advanced to an approximate depth of 64 feet to 65 feet below ground surface, and approximately 15 feet below the observed top of the uppermost saturated zone. The depth to static water was measured at approximately 53.64 feet below top of casing (btoc) at the MW-1 location, 52.78 feet btoc at the MW-2 location, and 53.22 feet btoc at the MW-3 location. Groundwater appears to exist under unconfined conditions in the uppermost aquifer at the facility (see boring logs in Appendix A).

The wells were constructed with 20 feet of 2-inch diameter 0.010-inch slotted Schedule 40 PVC screen, a 1-foot Schedule 40 PVC sediment sump, and sufficient 2-inch diameter Schedule 40 PVC riser to extend the top of the riser to approximately 2.5 feet above grade. The well screens were placed to capture the saturated zone such that approximately 5 feet of screen are situated above the apparent top of the saturated zone and approximately 15 feet of screen are situated below the apparent top of the saturated zone. The annular area of each well was backfilled with 20/40-grade filter sand installed from the total depth of the well to approximately 2 feet above the top of the screen. A 2-foot hydrated bentonite seal was placed atop the filter pack, and the remaining annular area was backfilled with cement-bentonite grout. The wells were constructed with a

concrete surface pad measuring approximately 2 feet by 2 feet by 4 inches thick, with an above-grade locking steel protective cover. Construction diagrams for monitor wells MW-1, MW-2, and MW-3 are presented in Appendix A.

The newly installed monitor wells were developed with previously unused disposable bailers and monitored with a turbidity meter until produced groundwater was clear and reasonably free of suspended sediment. The development methods of the new wells were monitored by Brown and Caldwell in order to acknowledge that the wells were free of suspended sediment.

The top-of-casing (TOC) elevations of monitor wells MW-1, MW-2, and MW-3 were surveyed relative to an arbitrary benchmark of 100.00 feet, located on the concrete surface near the warehouse, using field surveying techniques. The horizontal locations of the wells were measured relative to existing features at the facility.

2.3 Groundwater Sampling Activities

After allowing the wells to return to static conditions following development, the monitor wells were gauged using a decontaminated electronic water-level indicator prior to purging and sampling. Current groundwater elevation data for each well are presented in Table 1. A groundwater elevation map for February 23, 2006 is presented in Figure 3. The groundwater elevation data indicate that the groundwater flow direction is to the north.

Monitor wells MW-1, MW-2, and MW-3 were purged with a submersible pump and previously unused down-hole tubing until groundwater stabilization occurred. Low flow/low stress purging was performed to maintain the water level at or near the static water level. Field parameter measurements for pH, temperature, specific conductivity, dissolved oxygen, and redox potential were collected during purging activities. Each well was purged until variability of less than 10 percent for specific conductivity, less than 0.1 standard pH units, and less than 0.5°C for temperature was achieved. Groundwater dissolved oxygen and ferrous iron concentrations were measured in each monitor well upon conclusion of purging activities. Field parameter readings were recorded on the groundwater sampling forms included in Appendix B.

Groundwater samples were obtained directly from the discharge line of the submersible pump. The groundwater samples were placed in laboratory-prepared, clean glass containers, sealed with Teflon[®]-lined lids, labeled, and placed on ice in an insulated cooler for delivery to Southern Petroleum Laboratory in Houston, Texas for analysis using standard chain-of-custody procedures. The laboratory analytical reports and chain-of-custody documentation for groundwater samples collected during the current sampling event are provided in Appendix C.

Groundwater samples were analyzed for gasoline- and diesel-range total petroleum hydrocarbons (TPH-G and TPH-D) by Method 8015M, chloride (Method 325.3), and the Method 8260B volatile organic compounds (VOCs) and Method 8270C semivolatile organic compounds (SVOCs) detected in site soil samples collected in July 2005.

2.4 Quality Assurance / Quality Control (QA/QC) Samples

A trip blank and a field blank were collected on each day that a soil or groundwater sample was collected. The QA/QC samples associated with groundwater samples were analyzed for TPH-G (Method 8015M) and VOCs (Method 8260B). The QA/QC samples associated with soil samples were analyzed for TPH-G (Method 8015M) and BTEX (Method 8021B). An equipment rinse blank pertaining to soil samples and an equipment rinse blank pertaining to groundwater samples were also collected. The rinsate samples were analyzed for the same parameters as the corresponding soil or groundwater samples (omitting chloride).

2.5 Decontamination and Waste Management

Decontamination procedures consisted of washing drilling equipment with a pressurized steam cleaner and potable water. The sampling equipment was decontaminated using distilled water and a non-phosphate detergent. Soil cuttings, decontamination fluids, and produced groundwater were containerized in DOT-approved 55-gallon drums. A composite sample was collected for the characterization and waste profiling of investigation-derived waste (IDW) from the field activities.

3.0 ANALYTICAL RESULTS

The following subsections present the analytical results for soil and groundwater samples collected during the February 2006 sampling event.

3.1 Soil Samples

The soil samples were analyzed for the following parameters using the indicated analytical methodologies:

- TPH-G and TPH-D by Method 8015M; and
- BTEX by Method 8021.

TPH and BTEX analysis results were compared to New Mexico Oil Conservation Division (NMOCD) criteria listed in "Guidelines for Remediation of Leaks, Spills, and Releases (NMOCD, August 13, 1993). The NMOCD soil remediation action levels for unsaturated contaminated soils (for a NMOCD hazard ranking of >19, based on groundwater occurrence at <50 feet) are benzene at 10 milligrams per kilogram (mg/kg), total benzene, toluene, ethylbenzene, and xylenes (BTEX) at 50 mg/kg, and TPH at 100 mg/kg. TPH and BTEX were not detected above the associated method detection limits in both soil samples MW-1-19-20' and MW-2-14-15'. Table 2 summarizes the results for soil samples collected from soil borings MW-1 and MW-2. The laboratory analytical report and chain-of-custody documentation for soil samples collected during the February 2006 sampling activities are provided in Appendix C.

3.2 Groundwater Samples

Groundwater samples from monitor wells MW-1, MW-2, and MW-3 were analyzed for the following parameters using the indicated analytical methodologies:

- (TPH-G and TPH-D) by Method 8015M;
- Chloride by Method 325.3;
- SVOCs by Method 8270C; and
- VOCs by Method 8260B.

Table 3 presents results for analyses of the groundwater samples collected at the facility.

With the exception of chloride concentrations in MW-1 and MW-2, concentrations of TPH-G, TPH-D, and all VOCs and SVOCs are less than applicable New Mexico Water Quality Control Commission (NMWQCC) standards. Chloride concentrations ranged from 1,070 milligrams per liter (mg/L) in the on-site up-gradient monitor well (MW-1) to 512 mg/L in lateral to down-gradient monitor well MW-2 to 66.6 mg/L in down-gradient monitor well MW-3. The NMWQCC standard for chloride is 250 mg/L. Naphthalene, 1,2,4,-trimethylbenzene, and m,p-xylenes were detected in MW-2, but at concentrations less than the applicable NMWQCC criteria, as indicated in Table 2. TPH-G was also detected in the MW-2 groundwater sample.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on information obtained during the February 2006 sampling event at the BJ Services FracMaster Hobbs, New Mexico facility.

4.1 Conclusions

- TPH and BTEX concentrations measured in on-site soil borings MW-1 and MW-2 during the current soil sampling event are less than the NMOCD remediation action levels, indicating that the lateral extents of impacted soils at the ES and WS soil boring locations are defined on-site.
- Groundwater is present at approximately 49 feet to 50 feet below grade under unconfined conditions in the uppermost aquifer in the vicinity of the formerly excavated area at the site.
- The groundwater elevation data indicate that the groundwater flow direction is to the north.
- Chloride concentrations measured in up-gradient monitor well MW-1 and lateral to down-gradient MW-2 during the current groundwater sampling event are greater than the NMWQCC standard of 250 mg/L; the chloride concentration in the down-gradient onsite monitor well MW-3 is less than the NMWQCC standard.
- TPH-G, naphthalene, 1,2,4,-trimethylbenzene, and m,p-xylenes were detected in the groundwater sample collected from the uppermost aquifer at the MW-2 location, but concentrations of these constituents are less than the applicable NMWQCC criteria.

4.2 Recommendations

- Conduct follow-up sampling of monitor wells MW-1, MW-2, and MW-3 in 6 months to verify that concentrations of organics are stable and are less than NMWQCC criteria.

DISTRIBUTION

February 2006 Soil and Groundwater Sampling Report
BJ Services Company, U.S.A.
Hobbs (Fracmaster), New Mexico Facility

April 14, 2006

Final Distribution as follows:

1 copy to: State of New Mexico
Energy, Minerals, and Natural Resources Department
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Attention: Mr. Wayne Price

1 copy to: State of New Mexico
Oil Conservation Division, Hobbs District Office
1625 N. French Dr.
Post Office Box 1980
Hobbs, New Mexico 88240

Attention: Mr. Chris Williams

1 copy to: BJ Services Company, U.S.A.
2708 West County Road
Hobbs, New Mexico 88240

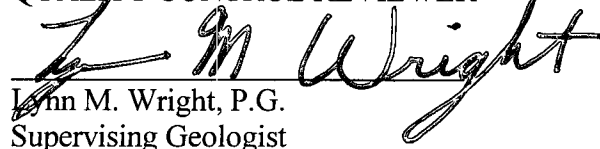
Attention: Mr. John Adcock

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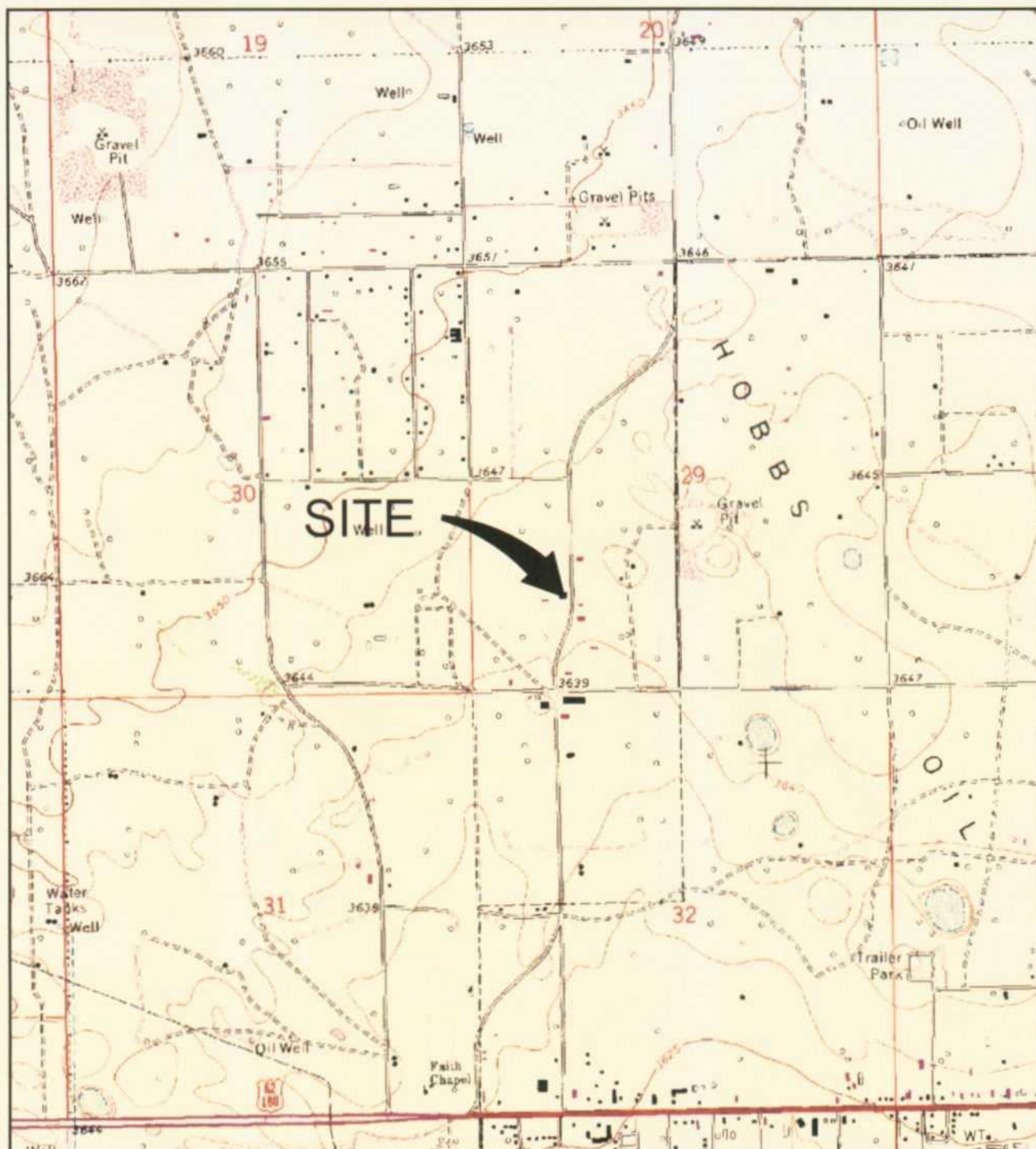
Attention: Ms. Jo Ann Cobb

1 copy to: Brown and Caldwell Project File

QUALITY CONTROL REVIEWER


Lynn M. Wright, P.G.
Supervising Geologist

FIGURES



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE - HOBBS, NEW MEXICO, 1979

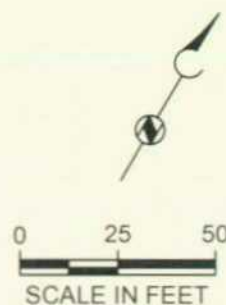


SCALE: 1" = 2000'

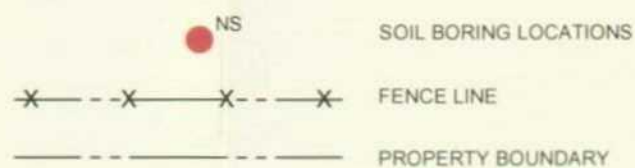
**BROWN AND
CALDWELL**

Figure 1
SITE LOCATION MAP
BJ SERVICES FRACMASTER
BJ SERVICES COMPANY, U.S.A.
1329 N. WEST COUNTY ROAD
HOBBS, NEW MEXICO

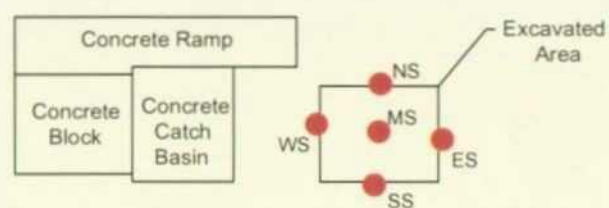
**BROWN AND
CALDWELL**



SITE PLAN LEGEND



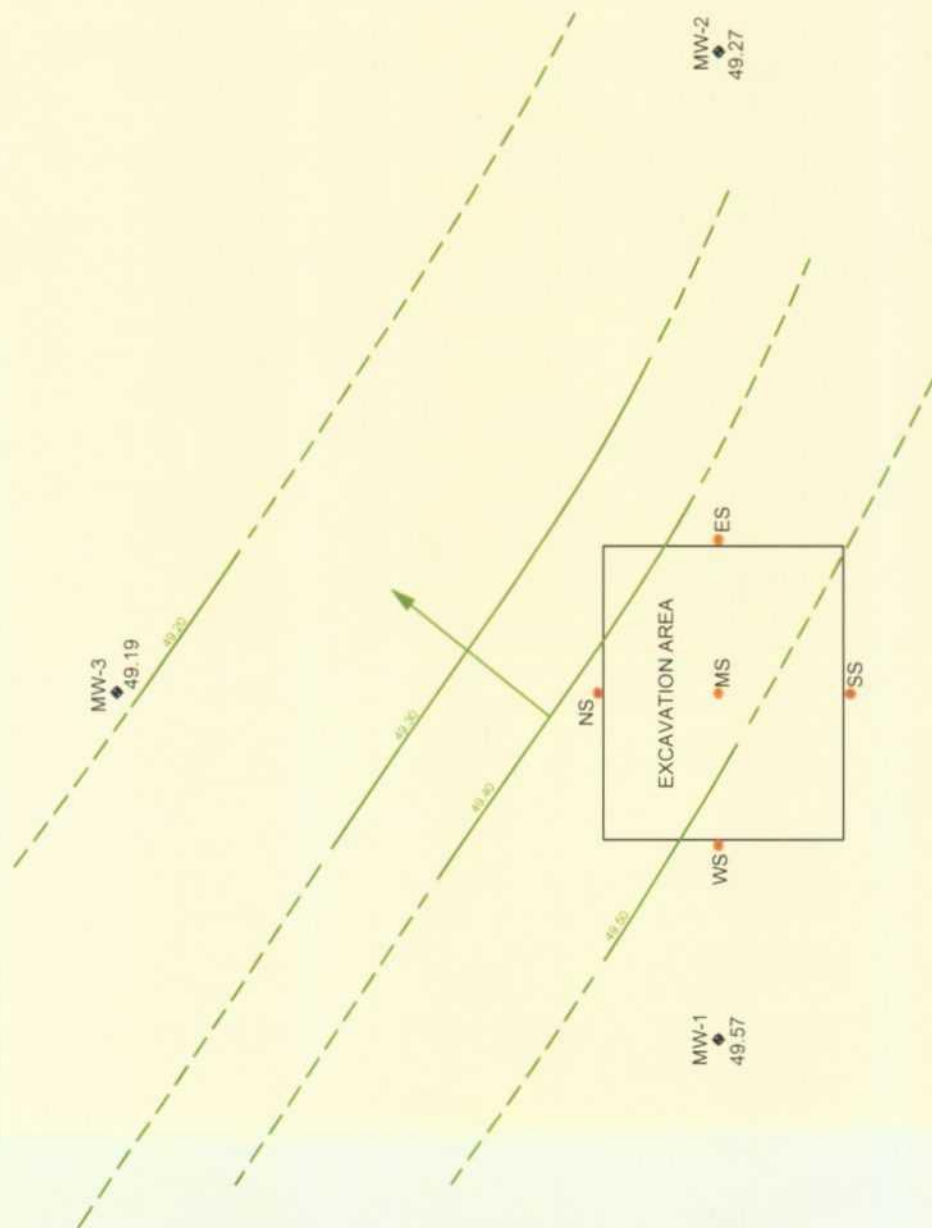
(West Property Boundary not defined)



Gravel lot

1329 N. West County RD.

Figure 2
SITE MAP
BJ SERVICES FRACMASTER
BJ SERVICES COMPANY, U.S.A.
1329 N. WEST COUNTY ROAD
HOBBS, NEW MEXICO



SITE PLAN LEGEND

- NS PREVIOUS SOIL BORING W/LOCATION
- MONITOR WELL LOCATION
- 49.19 GROUNDWATER ELEVATION (FEET)
- GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION MAP FEBRUARY 23, 2006 BJ SERVICES FRACMASTER-FACILITY

BJ SERVICES COMPANY, U.S.A.
1329 N. WEST COUNTY ROAD
HOBBBS, NEW MEXICO

PROJECT
LOCATION

PROJECT NUMBER
128125

DATE
3-21-05

BROWN AND
CALDWELL

HOUSTON



FIGURE
3

TABLES

Table 1
Groundwater Elevation Data
BJ Services Fracmaster Facility
Hobbs, New Mexico

Well Number	Date	TOC Elevation	Depth to Groundwater	Corrected Groundwater Elevation ⁽¹⁾	Depth to Product	Total Product Thickness
MW-1	2/23/2006	103.21	53.64	49.57	-	-
MW-2	2/23/2006	102.05	52.78	49.27	-	-
MW-3	2/23/2006	102.41	53.22	49.19	-	-

⁽¹⁾ Groundwater elevation calculated with the following formula:
Groundwater Elevation = (TOC Elevation - Depth to Groundwater)

Table 2
Analytical Results⁽¹⁾ for Soil Samples
BJ Services - Hobbs (Fracmaster Facility), New Mexico

Sample ID	Depth (feet)	Sample Date	BTEX ⁽²⁾				TPH-D ⁽²⁾ Diesel Range Organics (C10-C28)	TPH-G ⁽²⁾ Gasoline Range Organics
			Benzene ⁽²⁾	Toluene ⁽²⁾	Ethylbenzene ⁽²⁾	Total Xylenes ⁽²⁾		
MW-1	19-20	2/21/2006	<0.001	<0.001	<0.001	<0.001	<5.0	<0.1
MW-2	14-15	2/22/2006	<0.001	<0.001	<0.001	<0.001	<5.0	<0.1

⁽¹⁾ - All analytical results in mg/kg

⁽²⁾ - NMOCD Soil Remediation Action Levels for Unsaturated Contaminated Soils, based on Hazard Ranking >19^{(3),(4)}

Benzene	10 mg/kg
Total BTEX	50 mg/kg
TPH	100 mg/kg

⁽³⁾ - Hazard Ranking determined at >19, based on groundwater occurrence at <50 feet

⁽⁴⁾ - from NMOCD Publication "Guidelines for Remediation of Leaks, Spills and Releases" (August 18, 1993) (www.emnrd.state.nm.us/OCD)

Table 3
Summary of Detected Constituents⁽¹⁾ in Groundwater
BJ Services - Hobbs (Fracmaster Facility), New Mexico

Monitor Well ID	MW-1	MW-2	MW-3	NMWQCC Groundwater Standard ⁽²⁾
Sample Date	2/23/2006	2/23/2006	2/23/2006	
VOCs				
Naphthalene ⁽³⁾	<0.005	0.006	<0.005	0.03
1,2,4-Trimethylbenzene	<0.005	0.019	<0.005	-
m,p-Xylenes	<0.005	0.056	<0.005	-
Total Xylenes	<0.005	0.056	<0.005	0.62
Chloride	1070	512	66.6	250
TPH-D	<1.0	<1.0	<1.0	-
TPH-G	<0.1	0.19	<0.1	-
SVOCs⁽⁴⁾	ND	ND	ND	-

(1) - All analytical results and standards in mg/L

(2) - from NMOCD Publication "Guidelines for Remediation of Leaks, Spills and Releases" (August 18, 1993) (www.emnrd.state.nm.us/OCD)

(3) - Standard applies to PAHs: naphthalene plus monomethylnaphthalenes

(4) - ND - not detected

Bold font indicates exceedance of Groundwater Standard

APPENDICES

APPENDIX A

Boring Logs and Monitor Well Construction Diagrams:
Monitor Wells MW-1, MW-2, and MW-3

Project Name: **BJ Services Company, U.S.A. - Fracmaster Facility**Project Number: **128125**Sheet **1** of **2**

Project Location: Hobbs, NM		Logged By: B.Camacho	Checked By: R.Rexroad
Drilling Contractor: Geoprojects International		Date Started: 2/21/06	Date Finished: 2/22/06
Drilling Equipment: CME-75	Driller: Richard	Total Boring Depth: (feet) 65.0	Depth to Static Water: (feet) 49.00
Drilling Method: Hollow Stem Auger	Borehole Diameter: 8"	TOC Elevation: 103.21	Ground Elevation:
Sampling Method: Split Spoon		Diameter and Type of Well Casing: 2" Schedule 40 PVC	
Comments:		Slot Size: 0.010	Filter Material: 20/40
		Development Method: Bailer	

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
0		SC	Fill - cobbles, gravel, sand, silt, etc.	CLAYEY SAND (SC); Dark brown; slightly moist; medium grained sand; contains caliche rock	0	2			3X3 Above-grade completion.
2							1.5		
4					6	2			
6			Tan; moist			2			
8					14	2			
10		SP	SAND (SP); Tan; loose; slightly moist; fine to medium grained sand; poorly sorted; contains <1/4" diameter nodules of fine lithified sandstone nodules			1			
12					11	1.5			
14						.5			
16			SANDSTONE; Pinkish; dry; hard		15	1.5			
18		SP	SAND (SP); Pinkish tan; moist; fine to medium grained sand; contains 1/4" to 1/2" diameter nodules of very fine lithified sandstone nodules			1.5		19-20	Sampled MW-1-19-20'
20					19	1.25			Bentonite-cement grout.
22						1.5			
24					2	1.5			
26						1			
28					0	1.5			
		SM	SILTY SAND (SM); Tan; medium dense; moist; fine						

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/3/06

This log should not be used separately from the original report.

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
32				grained sand; contains <1/2" diameter nodules of very fine lithified sandstone nodules		.5			
34		SW			0	2			
36						1.25			
38				SAND (SW); Pinkish tan; moist; fine grained sand; contains 1/4" to 1/2" diameter nodules of very fine lithified sandstone nodules	0	1.5			
40						.5			
42					0	.5			Bentonite Seal
44						1			
46					0	.5			
48						.5			
50			SAA, wet		0	.5			
52						0			20/40 Silica filter pack
54					0	0			0.01 slotted PVC screen
56						.5			
58					0	0			
60						.5			
62				very fine to fine grained sand; wet	0	.5			
64				SANDSTONE; Pinkish tan; slightly moist; coarse grained sand to fine gravel	0	.5			2" Diameter Schedule 40 PVC Bottom Cap.

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/3/06

This log should not be used separately from the original report.

Project Name: **BJ Services Company, U.S.A. - Fracmaster Facility**Project Number: **128125**Sheet **1** of **2**

Project Location: Hobbs, NM		Logged By: B.Camacho		Checked By: R.Rexroad	
Drilling Contractor: Geoprojects International		Date Started: 2/22/06		Date Finished: 2/22/06	
Drilling Equipment: CME-75	Driller: Richard	Total Boring Depth: (feet) 65.0	Depth to Static Water: (feet) 49.00		
Drilling Method: Hollow Stem Auger	Borehole Diameter: 8"	TOC Elevation: 102.05	Ground Elevation:		
Sampling Method: Split Spoon		Diameter and Type of Well Casing: 2" Schedule 40 PVC			
Comments:		Slot Size: 0.010		Filter Material: 20/40	
		Development Method: Bailer			

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
2		SM	XXXX	Fill - cobbles, gravel, sand, silt, etc.	0	2	1.5		3X3 Above-grade completion.
4				SILTY SAND (SM); Tan; moist; fine grained sand; contains caliche rock					
6		SP		SAND (SP); Pinkish tan; loose; slightly moist; fine to medium grained sand; poorly sorted; contains 1/2" to 1" diameter nodules of very fine lithified sandstone nodules	0	1.5	1		
8					0	1			
10									
12					0	2			
14									
16					0	2		14-15	
18				SANDSTONE; Pinkish; dry; hard					
20		SP		SAND (SP); Pinkish tan; moist; fine to medium grained sand	0	1.25			
22									Sampled MW-2-14-15' Bentonite-cement grout.
24				contains <1/4" diameter nodules of very fine lithified sandstone nodules	0	1.5			
26									
28					0	1.25			
		SW		SAND (SW); Pinkish tan; moist; fine grained sand;	0	1.5			

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/2/06

This log should not be used separately from the original report.

Project Name: **BJ Services Company, U.S.A. - Fracmaster Facility**Project Number: **128125**Sheet **2** of **2**

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
32				contains 1/4" to 1/2" diameter nodules of very fine lithified sandstone nodules	0	.5			
34					0	1			
36					0	1.5			
38					0	1			
40					0	1			
42				slightly moist	0	.5			
44					0	1			
46					0	.5			
48					0	1			
50				wet; very fine to fine grained sand	0	.5			
52					0	1			
54					0	.5			
56					0	2			
58					0	1			
60					0	.5			
62					0	1			
64				SANDSTONE; Pinkish tan; slightly moist; fine to medium grained sand; hard	0	.5			
65.0									

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/3/06

2" Diameter Schedule 40 PVC Riser.

Bentonite Seal

20/40 Silica filter pack

0.01 slotted PVC screen

2" Diameter Schedule 40 PVC Bottom Cap.

This log should not be used separately from the original report.

Project Name: **BJ Services Company, U.S.A. - Fracmaster Facility**Project Number: **128125**Sheet **1** of **2**

Project Location: Hobbs, NM		Logged By: B.Camacho		Checked By: R.Rexroad	
Drilling Contractor: Geoprojects International		Date Started: 2/21/05		Date Finished: 2/21/05	
Drilling Equipment: CME-75	Driller: Richard	Total Boring Depth: (feet) 64.0	Depth to Static Water: (feet) 48.00		
Drilling Method: Hollow Stem Auger	Borehole Diameter: 8"	TOC Elevation: 102.41	Ground Elevation:		
Sampling Method: Split Spoon		Diameter and Type of Well Casing: 2" Schedule 40 PVC			
Comments:		Slot Size: 0.010		Filter Material: 20/40	
		Development Method: Bailer			

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
2		SC		Fill - cobbles, gravel, sand, silt, etc. CLAYEY SAND (SC); Tan; moist; medium to coarse grained sand; contains caliche rock	0	2	1.5		3X3 Above-grade completion.
4				slightly moist; contains caliche rock	0	2	1		
6		SM		SILTY SAND (SM); Tan; moist; fine grained sand; calcareous nodules	0	1	1		
8					0	1	1		
10		SP		SAND (SP); Tan; loose; moist; fine to medium grained sand; poorly sorted; contains 1/2" to 1" diameter nodules of very fine lithified sandstone nodules	0	1.5	1		
12					0	1.5	1		
14					0	1	1		
16				SANDSTONE; Pinkish brown; dry; hard	0	1	1		
18		SP		SAND (SP); Pinkish tan; slightly moist; fine to medium grained sand; poorly sorted; contains <1/4" diameter nodules of very fine lithified sandstone nodules	0	.5	.5		
20				contains 1/4" to 1/2" diameter nodules of very fine lithified sandstone nodules	0	1.5	.5		
22					0	.5	.5		Bentonite-cement grout.
24					0	.5	.5		
26					0	1	1		
28				moist	0	1	1		

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/3/05

This log should not be used separately from the original report.

Depth (feet)	Depth to Water	USC Soil Type	Lithology	Description	PID Readings	Sampled Interval	Recovery (feet)	Sample ID	Monitoring Well Remarks
32					0	1.5			2" Diameter Schedule 40 PVC Riser.
34					0	.5			
36		SW		SAND (SW); Pinkish tan; moist; fine grained sand; contains 1/4" to 1/2" diameter nodules of very fine lithified sandstone nodules	0	0			
38					0	.5			
40					0	0			
42					0	.5			
44					0	1			
46				slightly moist; contains <1/4" diameter nodules of very fine lithified sandstone nodules	0	.5			
48				wet; very fine to fine grained sand	0	.5			
50					0	0			20/40 Silica filter pack
52					0	0			0.01 slotted PVC screen
54					0	.5			
56					0	.5			
58					0	0			
60					0	.5			
62					0	1			
64					0	.5			2" Diameter Schedule 40 PVC Bottom Cap.
									Bentonite Seal
									39.0
									41.0
									63.0
									64.0

HOUSTON 4 128125.GPJ CHRIS10.GDT 4/3/06

This log should not be used separately from the original report.

APPENDIX B

Groundwater Sampling Forms

WELL ID: MW-1

1. PROJECT INFORMATION

Project Number: 108125Task Number: 44Date: 2-23-06Time: 1500Client: B5-servicesPersonnel: B. CAMACHOProject Location: Hobbs NMWeather: 50°F, raining

2. WELL DATA

Casing Diameter: 2 inchesType: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____Screen Diameter: 2 inchesType: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____Total Depth of Well: 65 feetFrom: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____Depth to Static Water: 53.64 feetFrom: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____Depth to Product: NA feetFrom: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____Length of Water Column: 11.36 feetWell Volume: 1.82 galScreened Interval (from GS): 44.64'Pump intake depth: 2 (from GS) TOC

Note: 2-inch well = 0.16 gal/ft 4-inch well = 0.65 gal/ft

3. PURGE DATA

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____Materials: Pump/Bailer☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ Disposable

Equipment Model(s)

Materials: Rope/Tubing☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ Disposable

Was well purged dry?

☐ Yes ☒ NoPumping Rate: 0.2 gal/min

Time	Cum. Gallons Removed	pH	Temp	Spec. Cond.	Eh	Dissolved Oxygen	Turbidity	Depth to Water (TOC)	Comments
1523	.6	7.07	18.72	3.021	-281.6	2.46	580	53.78	
1526	1.2	7.05	19.20	2.964	-301.7	1.72	458	53.79	
1529	1.8	7.07	20.43	2.942	-372.8	0.92	329	53.85	
1532	2.4	7.02	20.09	2.973	-405.4	0.79	265	53.82	
1535	3.0	7.02	20.11	3.004	-442.1	0.68	121	53.83	
1538	3.6	7.01	20.85	3.056	-426.7	0.60	67	53.83	

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____Materials: Pump/Bailer☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ DisposableMaterials: Tubing/Rope☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ DisposableDepth to Water at Time of Sampling: 53.83Field Filtered? ☐ Yes ☒ NoSample ID: MW-1Sample Time: 1545# of Containers: 9

Duplicate Sample Collected?

☐ Yes ☒ No ID: -

Geochemical Analyses

Ferrous Iron: 710 mg/LDO: 1.7 mg/LNitrate: / mg/LSulfate: / mg/LAlkalinity: / mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-2

1. PROJECT INFORMATION

Project Number: 125125 Task Number: 444 Date: 2/23/06 Time: 2000
Client: B5-Services Personnel: B. CAMACHO
Project Location: Hebbs, NM Weather: 50°+ rainy

2. WELL DATA

Casing Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____
Screen Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____
Total Depth of Well: 65 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Depth to Static Water: 52.78 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Length of Water Column: 12.22 feet Well Volume: 1.96 gal Screened Interval (from GS): 44-64
Pump intake depth 58' (from GS) TOC Note: 2-inch well = 0.16 gal/ft 4-inch well = 0.65 gal/ft

3. PURGE DATA

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____ Equipment Model(s) _____
Materials: Pump/Bailer ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ Disposable
Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ Disposable
Was well purged dry? ☐ Yes ☒ No Pumping Rate: .2 gal/min
1. 10 Hz pump
2. YSI 600 XL
3. _____

Time	Cum. Gallons Removed	pH	Temp	Spec. Cond.	Eh	Dissolved Oxygen	Turbidity	Depth to Water (TOC)	Comments
2003	.6	7.25	15.07	2.595	-180.7	7.57	7500	52.81	Turbid
2006	1.2	7.22	14.14	2.594	-207.4	7.40	384	52.83	
2009	1.8	7.19	15.03	2.534	-205.5	6.78	203	52.83	
2012	2.4	7.17	15.37	2.542	-218.8	6.59	175	52.84	
2015	3.0	7.17	18.50	2.398	-324.1	4.70	101	52.84	
2018	3.6	7.17	18.66	2.385	-340.4	4.55	62	52.85	
2021	4.2	7.16	18.87	2.366	-334.4	4.34	40	52.85	

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
Materials: Pump/Bailer ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ Disposable
Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ Disposable
Depth to Water at Time of Sampling: 52.85 Field Filtered? ☐ Yes ☒ No
Sample ID: MW-2 Sample Time: 2020 # of Containers: 9
Duplicate Sample Collected? ☐ Yes ☒ No ID: _____

Geochemical Analyses

Ferrous Iron: 5-6 mg/L
DO: 4.2 mg/L
Nitrate: X mg/L
Sulfate: X mg/L
Alkalinity: X mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-3

1. PROJECT INFORMATION

Project Number: 128125 Task Number: 444 Date: 2-23-06 Time: 1344
Client: BS-Services Personnel: 504, drizzle
Project Location: Hobbs, NM Weather: _____

2. WELL DATA

Casing Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____
Screen Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____
Total Depth of Well: 64 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Depth to Static Water: 53.22 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____
Length of Water Column: 10.78 feet Well Volume: 1.72 gal Screened Interval (from GS): 43'-63'
Pump intake depth 58' (from GS) TOC Note: 2-inch well = 0.16 gal/ft 4-inch well = 0.65 gal/ft

3. PURGE DATA

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____ Equipment Model(s) _____
Materials: Pump/Bailer ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ Disposable
Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ Disposable
Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.2 gal/min
1.45 3. HACH Turbidity

Time	Cum. Gallons Removed	pH	Temp	Spec. Cond.	Eh	Dissolved Oxygen	Turbidity	Depth to Water (TOC)	Comments
1347	.6	7.20	19.51	0.817	-119.2	2.46	283	54.01	
1350	1.2	7.22	19.55	0.821	-172.7	2.18	203	54.03	
1353	1.4	7.24	19.64	0.836	-253.8	1.27	165	54.05	
1356	2.4	7.29	19.63	0.816	-296.3	1.01	79	54.05	
1359	3.0	7.31	19.66	0.804	-302.5	0.76	48	54.06	
1402	3.6	7.31	19.78	0.801	-298.5	0.64	25.6	54.06	

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☒ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
Materials: Pump/Bailer ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned ☐ Disposable
Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Other: _____
☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned ☒ Disposable
Depth to Water at Time of Sampling: 54.06 Field Filtered? ☐ Yes ☒ No
Sample ID: MW-3 Sample Time: 1410 # of Containers: 9
Duplicate Sample Collected? ☐ Yes ☒ No ID: _____

Geochemical Analyses

Ferrous Iron: 1 mg/L
DO: 7.6 mg/L
Nitrate: / mg/L
Sulfate: / mg/L
Alkalinity: / mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

APPENDIX C

Laboratory Analytical Reports



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021136

Report To: Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	Project Name: BJ Service, Hobbs, NM Site: Hobbs, NM Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 3/9/2006
--	--

This Report Contains A Total Of 31 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

3/10/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Brown & Caldwell

Certificate of Analysis Number:

06021136

Report To: Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	Project Name: BJ Service, Hobbs, NM Site: Hobbs, NM Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 3/9/2006
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Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

06021136 Page 1

3/10/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021136

Report To: Brown & Caldwell
Rick Rexroad
1415 Louisiana
Suite 2500
Houston
TX
77002-
ph: (713) 759-0999

fax: (713) 308-3886

Project Name: BJ Service, Hobbs, NM
Site: Hobbs, NM
Site Address:

PO Number:
State: New Mexico
State Cert. No.:
Date Reported: 3/9/2006

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-3	06021136-01	Water	2/23/2006 2:10:00 PM	2/25/2006 10:00:00 AM	237452	<input type="checkbox"/>
MW-1	06021136-02	Water	2/23/2006 3:45:00 PM	2/25/2006 10:00:00 AM	237446	<input type="checkbox"/>
Trip Blank	06021136-03	Water	2/23/2006	2/25/2006 10:00:00 AM	237452	<input type="checkbox"/>

Sonia West

3/10/2006

Sonia West
Senior Project Manager

Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3

Collected: 02/23/2006 14:10 SPL Sample ID: 06021136-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CHLORIDE, TOTAL							
			MCL		E325.2	Units: mg/L	
Chloride	66.6		1	1	03/06/06 17:32 T_H		3189805

DIESEL RANGE ORGANICS							
			MCL		SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		1	1	03/04/06 2:19 NW		3189087
Surr: n-Pentacosane	82.8		% 20-150	1	03/04/06 2:19 NW		3189087

<u>Prep Method</u>	<u>Prep Date</u>	<u>Prep Initials</u>	<u>Prep Factor</u>
SW3510C	03/02/2006 13:12	N_M	1.00

GASOLINE RANGE ORGANICS							
			MCL		SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	03/08/06 1:10 DY		3191662
Surr: 1,4-Difluorobenzene	98.7		% 60-155	1	03/08/06 1:10 DY		3191662
Surr: 4-Bromofluorobenzene	96.7		% 50-158	1	03/08/06 1:10 DY		3191662

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3

Collected: 02/23/2006 14:10 SPL Sample ID: 06021136-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			MCL	SW8270C	Units: ug/L		
1,2,4-Trichlorobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
1,2-Dichlorobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
1,2-Diphenylhydrazine	ND		10	1	03/03/06 19:43	GQ	3188645
1,3-Dichlorobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
1,4-Dichlorobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
2,4,5-Trichlorophenol	ND		10	1	03/03/06 19:43	GQ	3188645
2,4,6-Trichlorophenol	ND		5	1	03/03/06 19:43	GQ	3188645
2,4-Dichlorophenol	ND		5	1	03/03/06 19:43	GQ	3188645
2,4-Dimethylphenol	ND		5	1	03/03/06 19:43	GQ	3188645
2,4-Dinitrophenol	ND		25	1	03/03/06 19:43	GQ	3188645
2,4-Dinitrotoluene	ND		5	1	03/03/06 19:43	GQ	3188645
2,6-Dinitrotoluene	ND		5	1	03/03/06 19:43	GQ	3188645
2-Chloronaphthalene	ND		5	1	03/03/06 19:43	GQ	3188645
2-Chlorophenol	ND		5	1	03/03/06 19:43	GQ	3188645
2-Methylnaphthalene	ND		5	1	03/03/06 19:43	GQ	3188645
2-Nitroaniline	ND		25	1	03/03/06 19:43	GQ	3188645
2-Nitrophenol	ND		5	1	03/03/06 19:43	GQ	3188645
3,3'-Dichlorobenzidine	ND		10	1	03/03/06 19:43	GQ	3188645
3-Nitroaniline	ND		25	1	03/03/06 19:43	GQ	3188645
4,6-Dinitro-2-methylphenol	ND		25	1	03/03/06 19:43	GQ	3188645
4-Bromophenyl phenyl ether	ND		5	1	03/03/06 19:43	GQ	3188645
4-Chloro-3-methylphenol	ND		5	1	03/03/06 19:43	GQ	3188645
4-Chloroaniline	ND		5	1	03/03/06 19:43	GQ	3188645
4-Chlorophenyl phenyl ether	ND		5	1	03/03/06 19:43	GQ	3188645
4-Nitroaniline	ND		25	1	03/03/06 19:43	GQ	3188645
4-Nitrophenol	ND		25	1	03/03/06 19:43	GQ	3188645
Acenaphthene	ND		5	1	03/03/06 19:43	GQ	3188645
Acenaphthylene	ND		5	1	03/03/06 19:43	GQ	3188645
Aniline	ND		5	1	03/03/06 19:43	GQ	3188645
Anthracene	ND		5	1	03/03/06 19:43	GQ	3188645
Benz(a)anthracene	ND		5	1	03/03/06 19:43	GQ	3188645
Benzo(a)pyrene	ND		5	1	03/03/06 19:43	GQ	3188645
Benzo(b)fluoranthene	ND		5	1	03/03/06 19:43	GQ	3188645
Benzo(g,h,i)perylene	ND		5	1	03/03/06 19:43	GQ	3188645
Benzo(k)fluoranthene	ND		5	1	03/03/06 19:43	GQ	3188645
Benzoic acid	ND		25	1	03/03/06 19:43	GQ	3188645
Benzyl alcohol	ND		5	1	03/03/06 19:43	GQ	3188645
Bis(2-chloroethoxy)methane	ND		5	1	03/03/06 19:43	GQ	3188645
Bis(2-chloroethyl)ether	ND		5	1	03/03/06 19:43	GQ	3188645
Bis(2-chloroisopropyl)ether	ND		5	1	03/03/06 19:43	GQ	3188645

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3

Collected: 02/23/2006 14:10 SPL Sample ID: 06021136-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-ethylhexyl)phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Butyl benzyl phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Carbazole	ND		5	1	03/03/06 19:43	GQ	3188645
Chrysene	ND		5	1	03/03/06 19:43	GQ	3188645
Dibenz(a,h)anthracene	ND		5	1	03/03/06 19:43	GQ	3188645
Dibenzofuran	ND		5	1	03/03/06 19:43	GQ	3188645
Diethyl phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Dimethyl phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Di-n-butyl phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Di-n-octyl phthalate	ND		5	1	03/03/06 19:43	GQ	3188645
Fluoranthene	ND		5	1	03/03/06 19:43	GQ	3188645
Fluorene	ND		5	1	03/03/06 19:43	GQ	3188645
Hexachlorobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
Hexachlorobutadiene	ND		5	1	03/03/06 19:43	GQ	3188645
Hexachlorocyclopentadiene	ND		5	1	03/03/06 19:43	GQ	3188645
Hexachloroethane	ND		5	1	03/03/06 19:43	GQ	3188645
Indeno(1,2,3-cd)pyrene	ND		5	1	03/03/06 19:43	GQ	3188645
Isophorone	ND		5	1	03/03/06 19:43	GQ	3188645
Naphthalene	ND		5	1	03/03/06 19:43	GQ	3188645
Nitrobenzene	ND		5	1	03/03/06 19:43	GQ	3188645
N-Nitrosodi-n-propylamine	ND		5	1	03/03/06 19:43	GQ	3188645
N-Nitrosodiphenylamine	ND		5	1	03/03/06 19:43	GQ	3188645
Pentachlorophenol	ND		25	1	03/03/06 19:43	GQ	3188645
Phenanthrene	ND		5	1	03/03/06 19:43	GQ	3188645
Phenol	ND		5	1	03/03/06 19:43	GQ	3188645
Pyrene	ND		5	1	03/03/06 19:43	GQ	3188645
Pyridine	ND		5	1	03/03/06 19:43	GQ	3188645
2-Methylphenol	ND		5	1	03/03/06 19:43	GQ	3188645
3 & 4-Methylphenol	ND		5	1	03/03/06 19:43	GQ	3188645
Surr: 2,4,6-Tribromophenol	86.7		% 10-123	1	03/03/06 19:43	GQ	3188645
Surr: 2-Fluorobiphenyl	66.0		% 23-116	1	03/03/06 19:43	GQ	3188645
Surr: 2-Fluorophenol	42.7		% 16-110	1	03/03/06 19:43	GQ	3188645
Surr: Nitrobenzene-d5	56.0		% 21-114	1	03/03/06 19:43	GQ	3188645
Surr: Phenol-d5	30.7		% 10-110	1	03/03/06 19:43	GQ	3188645
Surr: Terphenyl-d14	80.0		% 22-141	1	03/03/06 19:43	GQ	3188645

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/01/2006 17:48	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3

Collected: 02/23/2006 14:10 SPL Sample ID: 06021136-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
1,1,1,2-Tetrachloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,1,1-Trichloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,1,2,2-Tetrachloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,1,2-Trichloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,1-Dichloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,1-Dichloroethene	ND		5	1	03/02/06 21:43	C_V	3188597
1,1-Dichloropropene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2,3-Trichlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2,3-Trichloropropane	ND		5	1	03/02/06 21:43	C_V	3188597
1,2,4-Trichlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2,4-Trimethylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dibromo-3-chloropropane	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dibromoethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dichlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dichloroethane	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dichloropropane	ND		5	1	03/02/06 21:43	C_V	3188597
1,3,5-Trimethylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,3-Dichlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
1,3-Dichloropropane	ND		5	1	03/02/06 21:43	C_V	3188597
1,4-Dichlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
2,2-Dichloropropane	ND		5	1	03/02/06 21:43	C_V	3188597
2-Butanone	ND		20	1	03/02/06 21:43	C_V	3188597
2-Chloroethyl vinyl ether	ND		10	1	03/02/06 21:43	C_V	3188597
2-Chlorotoluene	ND		5	1	03/02/06 21:43	C_V	3188597
2-Hexanone	ND		10	1	03/02/06 21:43	C_V	3188597
4-Chlorotoluene	ND		5	1	03/02/06 21:43	C_V	3188597
4-Isopropyltoluene	ND		5	1	03/02/06 21:43	C_V	3188597
4-Methyl-2-pentanone	ND		10	1	03/02/06 21:43	C_V	3188597
Acetone	ND		100	1	03/02/06 21:43	C_V	3188597
Acrylonitrile	ND		50	1	03/02/06 21:43	C_V	3188597
Benzene	ND		5	1	03/02/06 21:43	C_V	3188597
Bromobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Bromochloromethane	ND		5	1	03/02/06 21:43	C_V	3188597
Bromodichloromethane	ND		5	1	03/02/06 21:43	C_V	3188597
Bromoform	ND		5	1	03/02/06 21:43	C_V	3188597
Bromomethane	ND		10	1	03/02/06 21:43	C_V	3188597
Carbon disulfide	ND		5	1	03/02/06 21:43	C_V	3188597
Carbon tetrachloride	ND		5	1	03/02/06 21:43	C_V	3188597
Chlorobenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Chloroethane	ND		10	1	03/02/06 21:43	C_V	3188597

Qualifiers: ND/U - Not Detected at the Reporting Limit
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-3

Collected: 02/23/2006 14:10

SPL Sample ID: 06021136-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/02/06 21:43	C_V	3188597
Chloromethane	ND		10	1	03/02/06 21:43	C_V	3188597
Dibromochloromethane	ND		5	1	03/02/06 21:43	C_V	3188597
Dibromomethane	ND		5	1	03/02/06 21:43	C_V	3188597
Dichlorodifluoromethane	ND		10	1	03/02/06 21:43	C_V	3188597
Ethylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Hexachlorobutadiene	ND		5	1	03/02/06 21:43	C_V	3188597
Isopropylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Methyl tert-butyl ether	ND		5	1	03/02/06 21:43	C_V	3188597
Methylene chloride	ND		5	1	03/02/06 21:43	C_V	3188597
Naphthalene	ND		5	1	03/02/06 21:43	C_V	3188597
n-Butylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
n-Propylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
sec-Butylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Styrene	ND		5	1	03/02/06 21:43	C_V	3188597
tert-Butylbenzene	ND		5	1	03/02/06 21:43	C_V	3188597
Tetrachloroethene	ND		5	1	03/02/06 21:43	C_V	3188597
Toluene	ND		5	1	03/02/06 21:43	C_V	3188597
Trichloroethene	ND		5	1	03/02/06 21:43	C_V	3188597
Trichlorofluoromethane	ND		5	1	03/02/06 21:43	C_V	3188597
Vinyl acetate	ND		10	1	03/02/06 21:43	C_V	3188597
Vinyl chloride	ND		10	1	03/02/06 21:43	C_V	3188597
cis-1,2-Dichloroethene	ND		5	1	03/02/06 21:43	C_V	3188597
cis-1,3-Dichloropropene	ND		5	1	03/02/06 21:43	C_V	3188597
m,p-Xylene	ND		5	1	03/02/06 21:43	C_V	3188597
o-Xylene	ND		5	1	03/02/06 21:43	C_V	3188597
trans-1,2-Dichloroethene	ND		5	1	03/02/06 21:43	C_V	3188597
trans-1,3-Dichloropropene	ND		5	1	03/02/06 21:43	C_V	3188597
1,2-Dichloroethene (total)	ND		5	1	03/02/06 21:43	C_V	3188597
Xylenes, Total	ND		5	1	03/02/06 21:43	C_V	3188597
Surr: 1,2-Dichloroethane-d4	110		% 62-130	1	03/02/06 21:43	C_V	3188597
Surr: 4-Bromofluorobenzene	76.0		% 70-130	1	03/02/06 21:43	C_V	3188597
Surr: Toluene-d8	90.0		% 74-122	1	03/02/06 21:43	C_V	3188597

Qualifiers:

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1

Collected: 02/23/2006 15:45 SPL Sample ID: 06021136-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CHLORIDE, TOTAL				MCL	E325.2	Units: mg/L	
Chloride	1070		20	20	03/06/06 18:21	T_H	3189811
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		1	1	03/04/06 2:42	NW	3189088
Surr: n-Pentacosane	74.0	%	20-150	1	03/04/06 2:42	NW	3189088

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/02/2006 13:12	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	03/08/06 7:11	DY	3191671
Surr: 1,4-Difluorobenzene	107	%	60-155	1	03/08/06 7:11	DY	3191671
Surr: 4-Bromofluorobenzene	96.7	%	50-158	1	03/08/06 7:11	DY	3191671

Qualifiers: ND/U - Not Detected at the Reporting Limit
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1

Collected: 02/23/2006 15:45 SPL Sample ID: 06021136-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C				MCL	SW8270C	Units: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
1,2-Dichlorobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
1,2-Diphenylhydrazine	ND		10	1	03/03/06 20:13	GQ	3188646
1,3-Dichlorobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
1,4-Dichlorobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
2,4,5-Trichlorophenol	ND		10	1	03/03/06 20:13	GQ	3188646
2,4,6-Trichlorophenol	ND		5	1	03/03/06 20:13	GQ	3188646
2,4-Dichlorophenol	ND		5	1	03/03/06 20:13	GQ	3188646
2,4-Dimethylphenol	ND		5	1	03/03/06 20:13	GQ	3188646
2,4-Dinitrophenol	ND		25	1	03/03/06 20:13	GQ	3188646
2,4-Dinitrotoluene	ND		5	1	03/03/06 20:13	GQ	3188646
2,6-Dinitrotoluene	ND		5	1	03/03/06 20:13	GQ	3188646
2-Chloronaphthalene	ND		5	1	03/03/06 20:13	GQ	3188646
2-Chlorophenol	ND		5	1	03/03/06 20:13	GQ	3188646
2-Methylnaphthalene	ND		5	1	03/03/06 20:13	GQ	3188646
2-Nitroaniline	ND		25	1	03/03/06 20:13	GQ	3188646
2-Nitrophenol	ND		5	1	03/03/06 20:13	GQ	3188646
3,3'-Dichlorobenzidine	ND		10	1	03/03/06 20:13	GQ	3188646
3-Nitroaniline	ND		25	1	03/03/06 20:13	GQ	3188646
4,6-Dinitro-2-methylphenol	ND		25	1	03/03/06 20:13	GQ	3188646
4-Bromophenyl phenyl ether	ND		5	1	03/03/06 20:13	GQ	3188646
4-Chloro-3-methylphenol	ND		5	1	03/03/06 20:13	GQ	3188646
4-Chloroaniline	ND		5	1	03/03/06 20:13	GQ	3188646
4-Chlorophenyl phenyl ether	ND		5	1	03/03/06 20:13	GQ	3188646
4-Nitroaniline	ND		25	1	03/03/06 20:13	GQ	3188646
4-Nitrophenol	ND		25	1	03/03/06 20:13	GQ	3188646
Acenaphthene	ND		5	1	03/03/06 20:13	GQ	3188646
Acenaphthylene	ND		5	1	03/03/06 20:13	GQ	3188646
Aniline	ND		5	1	03/03/06 20:13	GQ	3188646
Anthracene	ND		5	1	03/03/06 20:13	GQ	3188646
Benz(a)anthracene	ND		5	1	03/03/06 20:13	GQ	3188646
Benzo(a)pyrene	ND		5	1	03/03/06 20:13	GQ	3188646
Benzo(b)fluoranthene	ND		5	1	03/03/06 20:13	GQ	3188646
Benzo(g,h,i)perylene	ND		5	1	03/03/06 20:13	GQ	3188646
Benzo(k)fluoranthene	ND		5	1	03/03/06 20:13	GQ	3188646
Benzoic acid	ND		25	1	03/03/06 20:13	GQ	3188646
Benzyl alcohol	ND		5	1	03/03/06 20:13	GQ	3188646
Bis(2-chloroethoxy)methane	ND		5	1	03/03/06 20:13	GQ	3188646
Bis(2-chloroethyl)ether	ND		5	1	03/03/06 20:13	GQ	3188646
Bis(2-chloroisopropyl)ether	ND		5	1	03/03/06 20:13	GQ	3188646

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1

Collected: 02/23/2006 15:45

SPL Sample ID: 06021136-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-ethylhexyl)phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Butyl benzyl phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Carbazole	ND		5	1	03/03/06 20:13	GQ	3188646
Chrysene	ND		5	1	03/03/06 20:13	GQ	3188646
Dibenz(a,h)anthracene	ND		5	1	03/03/06 20:13	GQ	3188646
Dibenzofuran	ND		5	1	03/03/06 20:13	GQ	3188646
Diethyl phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Dimethyl phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Di-n-butyl phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Di-n-octyl phthalate	ND		5	1	03/03/06 20:13	GQ	3188646
Fluoranthene	ND		5	1	03/03/06 20:13	GQ	3188646
Fluorene	ND		5	1	03/03/06 20:13	GQ	3188646
Hexachlorobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
Hexachlorobutadiene	ND		5	1	03/03/06 20:13	GQ	3188646
Hexachlorocyclopentadiene	ND		5	1	03/03/06 20:13	GQ	3188646
Hexachloroethane	ND		5	1	03/03/06 20:13	GQ	3188646
Indeno(1,2,3-cd)pyrene	ND		5	1	03/03/06 20:13	GQ	3188646
Isophorone	ND		5	1	03/03/06 20:13	GQ	3188646
Naphthalene	ND		5	1	03/03/06 20:13	GQ	3188646
Nitrobenzene	ND		5	1	03/03/06 20:13	GQ	3188646
N-Nitrosodi-n-propylamine	ND		5	1	03/03/06 20:13	GQ	3188646
N-Nitrosodiphenylamine	ND		5	1	03/03/06 20:13	GQ	3188646
Pentachlorophenol	ND		25	1	03/03/06 20:13	GQ	3188646
Phenanthrene	ND		5	1	03/03/06 20:13	GQ	3188646
Phenol	ND		5	1	03/03/06 20:13	GQ	3188646
Pyrene	ND		5	1	03/03/06 20:13	GQ	3188646
Pyridine	ND		5	1	03/03/06 20:13	GQ	3188646
2-Methylphenol	ND		5	1	03/03/06 20:13	GQ	3188646
3 & 4-Methylphenol	ND		5	1	03/03/06 20:13	GQ	3188646
Surr: 2,4,6-Tribromophenol	85.3		% 10-123	1	03/03/06 20:13	GQ	3188646
Surr: 2-Fluorobiphenyl	64.0		% 23-116	1	03/03/06 20:13	GQ	3188646
Surr: 2-Fluorophenol	45.3		% 16-110	1	03/03/06 20:13	GQ	3188646
Surr: Nitrobenzene-d5	60.0		% 21-114	1	03/03/06 20:13	GQ	3188646
Surr: Phenol-d5	33.3		% 10-110	1	03/03/06 20:13	GQ	3188646
Surr: Terphenyl-d14	74.0		% 22-141	1	03/03/06 20:13	GQ	3188646

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/01/2006 17:48	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1

Collected: 02/23/2006 15:45 SPL Sample ID: 06021136-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
1,1,1,2-Tetrachloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,1,1-Trichloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,1,2,2-Tetrachloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,1,2-Trichloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,1-Dichloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,1-Dichloroethene	ND		5	1	03/02/06 22:10	C_V	3188598
1,1-Dichloropropene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2,3-Trichlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2,3-Trichloropropane	ND		5	1	03/02/06 22:10	C_V	3188598
1,2,4-Trichlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2,4-Trimethylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dibromo-3-chloropropane	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dibromoethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dichlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dichloroethane	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dichloropropane	ND		5	1	03/02/06 22:10	C_V	3188598
1,3,5-Trimethylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,3-Dichlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
1,3-Dichloropropane	ND		5	1	03/02/06 22:10	C_V	3188598
1,4-Dichlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
2,2-Dichloropropane	ND		5	1	03/02/06 22:10	C_V	3188598
2-Butanone	ND		20	1	03/02/06 22:10	C_V	3188598
2-Chloroethyl vinyl ether	ND		10	1	03/02/06 22:10	C_V	3188598
2-Chlorotoluene	ND		5	1	03/02/06 22:10	C_V	3188598
2-Hexanone	ND		10	1	03/02/06 22:10	C_V	3188598
4-Chlorotoluene	ND		5	1	03/02/06 22:10	C_V	3188598
4-Isopropyltoluene	ND		5	1	03/02/06 22:10	C_V	3188598
4-Methyl-2-pentanone	ND		10	1	03/02/06 22:10	C_V	3188598
Acetone	ND		100	1	03/02/06 22:10	C_V	3188598
Acrylonitrile	ND		50	1	03/02/06 22:10	C_V	3188598
Benzene	ND		5	1	03/02/06 22:10	C_V	3188598
Bromobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Bromochloromethane	ND		5	1	03/02/06 22:10	C_V	3188598
Bromodichloromethane	ND		5	1	03/02/06 22:10	C_V	3188598
Bromoform	ND		5	1	03/02/06 22:10	C_V	3188598
Bromomethane	ND		10	1	03/02/06 22:10	C_V	3188598
Carbon disulfide	ND		5	1	03/02/06 22:10	C_V	3188598
Carbon tetrachloride	ND		5	1	03/02/06 22:10	C_V	3188598
Chlorobenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Chloroethane	ND		10	1	03/02/06 22:10	C_V	3188598

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1

Collected: 02/23/2006 15:45 SPL Sample ID: 06021136-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/02/06 22:10	C_V	3188598
Chloromethane	ND		10	1	03/02/06 22:10	C_V	3188598
Dibromochloromethane	ND		5	1	03/02/06 22:10	C_V	3188598
Dibromomethane	ND		5	1	03/02/06 22:10	C_V	3188598
Dichlorodifluoromethane	ND		10	1	03/02/06 22:10	C_V	3188598
Ethylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Hexachlorobutadiene	ND		5	1	03/02/06 22:10	C_V	3188598
Isopropylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Methyl tert-butyl ether	ND		5	1	03/02/06 22:10	C_V	3188598
Methylene chloride	ND		5	1	03/02/06 22:10	C_V	3188598
Naphthalene	ND		5	1	03/02/06 22:10	C_V	3188598
n-Butylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
n-Propylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
sec-Butylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Styrene	ND		5	1	03/02/06 22:10	C_V	3188598
tert-Butylbenzene	ND		5	1	03/02/06 22:10	C_V	3188598
Tetrachloroethene	ND		5	1	03/02/06 22:10	C_V	3188598
Toluene	ND		5	1	03/02/06 22:10	C_V	3188598
Trichloroethene	ND		5	1	03/02/06 22:10	C_V	3188598
Trichlorofluoromethane	ND		5	1	03/02/06 22:10	C_V	3188598
Vinyl acetate	ND		10	1	03/02/06 22:10	C_V	3188598
Vinyl chloride	ND		10	1	03/02/06 22:10	C_V	3188598
cis-1,2-Dichloroethene	ND		5	1	03/02/06 22:10	C_V	3188598
cis-1,3-Dichloropropene	ND		5	1	03/02/06 22:10	C_V	3188598
m,p-Xylene	ND		5	1	03/02/06 22:10	C_V	3188598
o-Xylene	ND		5	1	03/02/06 22:10	C_V	3188598
trans-1,2-Dichloroethene	ND		5	1	03/02/06 22:10	C_V	3188598
trans-1,3-Dichloropropene	ND		5	1	03/02/06 22:10	C_V	3188598
1,2-Dichloroethene (total)	ND		5	1	03/02/06 22:10	C_V	3188598
Xylenes, Total	ND		5	1	03/02/06 22:10	C_V	3188598
Surr: 1,2-Dichloroethane-d4	110		% 62-130	1	03/02/06 22:10	C_V	3188598
Surr: 4-Bromofluorobenzene	78.0		% 70-130	1	03/02/06 22:10	C_V	3188598
Surr: Toluene-d8	90.0		% 74-122	1	03/02/06 22:10	C_V	3188598

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Trip Blank Collected: 02/23/2006 0:00 SPL Sample ID: 06021136-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS							
			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/08/06 6:41	DY	3191670
Surr: 1,4-Difluorobenzene	99.7		% 60-155	1	03/08/06 6:41	DY	3191670
Surr: 4-Bromofluorobenzene	99.3		% 50-158	1	03/08/06 6:41	DY	3191670

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Trip Blank

Collected: 02/23/2006 0:00

SPL Sample ID: 06021136-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			MCL	SW8260B	Units: ug/L		
1,1,1,2-Tetrachloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,1,1-Trichloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,1,2,2-Tetrachloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,1,2-Trichloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,1-Dichloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,1-Dichloroethene	ND		5	1	03/02/06 15:55	C_V	3188596
1,1-Dichloropropene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2,3-Trichlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2,3-Trichloropropane	ND		5	1	03/02/06 15:55	C_V	3188596
1,2,4-Trichlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2,4-Trimethylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dibromo-3-chloropropane	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dibromoethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dichlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dichloroethane	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dichloropropane	ND		5	1	03/02/06 15:55	C_V	3188596
1,3,5-Trimethylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,3-Dichlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
1,3-Dichloropropane	ND		5	1	03/02/06 15:55	C_V	3188596
1,4-Dichlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
2,2-Dichloropropane	ND		5	1	03/02/06 15:55	C_V	3188596
2-Butanone	ND		20	1	03/02/06 15:55	C_V	3188596
2-Chloroethyl vinyl ether	ND		10	1	03/02/06 15:55	C_V	3188596
2-Chlorotoluene	ND		5	1	03/02/06 15:55	C_V	3188596
2-Hexanone	ND		10	1	03/02/06 15:55	C_V	3188596
4-Chlorotoluene	ND		5	1	03/02/06 15:55	C_V	3188596
4-Isopropyltoluene	ND		5	1	03/02/06 15:55	C_V	3188596
4-Methyl-2-pentanone	ND		10	1	03/02/06 15:55	C_V	3188596
Acetone	ND		100	1	03/02/06 15:55	C_V	3188596
Acrylonitrile	ND		50	1	03/02/06 15:55	C_V	3188596
Benzene	ND		5	1	03/02/06 15:55	C_V	3188596
Bromobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Bromochloromethane	ND		5	1	03/02/06 15:55	C_V	3188596
Bromodichloromethane	ND		5	1	03/02/06 15:55	C_V	3188596
Bromoform	ND		5	1	03/02/06 15:55	C_V	3188596
Bromomethane	ND		10	1	03/02/06 15:55	C_V	3188596
Carbon disulfide	ND		5	1	03/02/06 15:55	C_V	3188596
Carbon tetrachloride	ND		5	1	03/02/06 15:55	C_V	3188596
Chlorobenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Chloroethane	ND		10	1	03/02/06 15:55	C_V	3188596

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Trip Blank

Collected: 02/23/2006 0:00

SPL Sample ID: 06021136-03

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/02/06 15:55	C_V	3188596
Chloromethane	ND		10	1	03/02/06 15:55	C_V	3188596
Dibromochloromethane	ND		5	1	03/02/06 15:55	C_V	3188596
Dibromomethane	ND		5	1	03/02/06 15:55	C_V	3188596
Dichlorodifluoromethane	ND		10	1	03/02/06 15:55	C_V	3188596
Ethylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Hexachlorobutadiene	ND		5	1	03/02/06 15:55	C_V	3188596
Isopropylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Methyl tert-butyl ether	ND		5	1	03/02/06 15:55	C_V	3188596
Methylene chloride	ND		5	1	03/02/06 15:55	C_V	3188596
Naphthalene	ND		5	1	03/02/06 15:55	C_V	3188596
n-Butylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
n-Propylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
sec-Butylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Styrene	ND		5	1	03/02/06 15:55	C_V	3188596
tert-Butylbenzene	ND		5	1	03/02/06 15:55	C_V	3188596
Tetrachloroethene	ND		5	1	03/02/06 15:55	C_V	3188596
Toluene	ND		5	1	03/02/06 15:55	C_V	3188596
Trichloroethene	ND		5	1	03/02/06 15:55	C_V	3188596
Trichlorofluoromethane	ND		5	1	03/02/06 15:55	C_V	3188596
Vinyl acetate	ND		10	1	03/02/06 15:55	C_V	3188596
Vinyl chloride	ND		10	1	03/02/06 15:55	C_V	3188596
cis-1,2-Dichloroethene	ND		5	1	03/02/06 15:55	C_V	3188596
cis-1,3-Dichloropropene	ND		5	1	03/02/06 15:55	C_V	3188596
m,p-Xylene	ND		5	1	03/02/06 15:55	C_V	3188596
o-Xylene	ND		5	1	03/02/06 15:55	C_V	3188596
trans-1,2-Dichloroethene	ND		5	1	03/02/06 15:55	C_V	3188596
trans-1,3-Dichloropropene	ND		5	1	03/02/06 15:55	C_V	3188596
1,2-Dichloroethene (total)	ND		5	1	03/02/06 15:55	C_V	3188596
Xylenes, Total	ND		5	1	03/02/06 15:55	C_V	3188596
Surr: 1,2-Dichloroethane-d4	116		% 62-130	1	03/02/06 15:55	C_V	3188596
Surr: 4-Bromofluorobenzene	72.0		% 70-130	1	03/02/06 15:55	C_V	3188596
Surr: Toluene-d8	90.0		% 74-122	1	03/02/06 15:55	C_V	3188596

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 06021136
Lab Batch ID: 55558

Method Blank

Samples in Analytical Batch:

RunID: HP_V_060303I-3189079 Units: mg/L
Analysis Date: 03/03/2006 21:41 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Lab Sample ID	Client Sample ID
06021136-01D	MW-3
06021136-02D	MW-1

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	1.0
Surr: n-Pentacosane	75.6	20-150

Laboratory Control Sample (LCS)

RunID: HP_V_060303I-3189080 Units: mg/L
Analysis Date: 03/03/2006 22:04 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	2.00	1.90	95.0	21	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021169-05
RunID: HP_V_060303I-3189082 Units: mg/L
Analysis Date: 03/03/2006 22:51 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	4	4.38	105	4	3.97	95.1	9.93	39	26	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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3/10/2006 10:39:11 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 06021136
Lab Batch ID: R164356

Method Blank

Samples in Analytical Batch:

RunID: HP_J_060307C-3191657 Units: mg/L
Analysis Date: 03/07/2006 21:12 Analyst: DY
Preparation Date: 03/07/2006 21:12 Prep By: Method SW5030B

Lab Sample ID	Client Sample ID
06021136-01B	MW-3
06021136-02B	MW-1
06021136-03B	Trip Blank

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	98.3	60-155
Surr: 4-Bromofluorobenzene	93.0	50-158

Laboratory Control Sample (LCS)

RunID: HP_J_060307C-3191656 Units: mg/L
Analysis Date: 03/07/2006 20:42 Analyst: DY
Preparation Date: 03/07/2006 20:42 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.881	88.1	42	136

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021135-03
RunID: HP_J_060307C-3191665 Units: mg/L
Analysis Date: 03/08/2006 3:40 Analyst: DY

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.960	107	0.9	0.887	98.6	7.84	36	22	174

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Method Blank

Samples in Analytical Batch:

RunID: J_060306D-3190374
Analysis Date: 03/06/2006 12:20
Preparation Date: 03/01/2006 17:48

Units: ug/L
Analyst: S_G
Prep By: N_M Method SW3510C

Lab Sample ID	Client Sample ID
06021136-01C	MW-3
06021136-02C	MW-1

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Diphenylhydrazine	ND	10
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,4,5-Trichlorophenol	ND	10
2,4,6-Trichlorophenol	ND	5.0
2,4-Dichlorophenol	ND	5.0
2,4-Dimethylphenol	ND	5.0
2,4-Dinitrophenol	ND	25
2,4-Dinitrotoluene	ND	5.0
2,6-Dinitrotoluene	ND	5.0
2-Chloronaphthalene	ND	5.0
2-Chlorophenol	ND	5.0
2-Methylnaphthalene	ND	5.0
2-Nitroaniline	ND	25
2-Nitrophenol	ND	5.0
3,3'-Dichlorobenzidine	ND	10
3-Nitroaniline	ND	25
4,6-Dinitro-2-methylphenol	ND	25
4-Bromophenyl phenyl ether	ND	5.0
4-Chloro-3-methylphenol	ND	5.0
4-Chloroaniline	ND	5.0
4-Chlorophenyl phenyl ether	ND	5.0
4-Nitroaniline	ND	25
4-Nitrophenol	ND	25
Acenaphthene	ND	5.0
Acenaphthylene	ND	5.0
Aniline	ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND	5.0
Benzo(a)pyrene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzoic acid	ND	25
Benzyl alcohol	ND	5.0
Bis(2-chloroethoxy)methane	ND	5.0
Bis(2-chloroethyl)ether	ND	5.0
Bis(2-chloroisopropyl)ether	ND	5.0
Bis(2-ethylhexyl)phthalate	ND	5.0
Butyl benzyl phthalate	ND	5.0
Carbazole	ND	5.0
Chrysene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Dibenzofuran	ND	5.0
Diethyl phthalate	ND	5.0
Dimethyl phthalate	ND	5.0

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Method Blank

RunID: J_060306D-3190374 Units: ug/L
Analysis Date: 03/06/2006 12:20 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Result	Rep Limit
Di-n-butyl phthalate	ND	5.0
Di-n-octyl phthalate	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Hexachlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Hexachlorocyclopentadiene	ND	5.0
Hexachloroethane	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Isophorone	ND	5.0
Naphthalene	ND	5.0
Nitrobenzene	ND	5.0
N-Nitrosodi-n-propylamine	ND	5.0
N-Nitrosodiphenylamine	ND	5.0
Pentachlorophenol	ND	25
Phenanthrene	ND	5.0
Phenol	ND	5.0
Pyrene	ND	5.0
Pyridine	ND	5.0
2-Methylphenol	ND	5.0
3 & 4-Methylphenol	ND	5.0
Surr: 2,4,6-Tribromophenol	70.7	10-123
Surr: 2-Fluorobiphenyl	68.0	23-116
Surr: 2-Fluorophenol	66.7	16-110
Surr: Nitrobenzene-d5	66.0	21-114
Surr: Phenol-d5	73.3	10-110
Surr: Terphenyl-d14	68.0	22-141

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375 Units: ug/L
Analysis Date: 03/06/2006 12:59 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	20.0	80.0	21	120
1,2-Dichlorobenzene	25.0	20.0	80.0	20	150
1,2-Diphenylhydrazine	25.0	18.0	72.0	10	160
1,3-Dichlorobenzene	25.0	20.0	80.0	20	150
1,4-Dichlorobenzene	25.0	19.0	76.0	20	150
2,4,5-Trichlorophenol	25.0	20.0	80.0	30	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375 Units: ug/L
Analysis Date: 03/06/2006 12:59 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
2,4,6-Trichlorophenol	25.0	20.0	80.0	30	150
2,4-Dichlorophenol	25.0	20.0	80.0	30	150
2,4-Dimethylphenol	25.0	21.0	84.0	32	140
2,4-Dinitrophenol	25.0	15.0	60.0	10	160
2,4-Dinitrotoluene	25.0	22.0	88.0	30	150
2,6-Dinitrotoluene	25.0	22.0	88.0	30	150
2-Chloronaphthalene	25.0	19.0	76.0	30	150
2-Chlorophenol	25.0	19.0	76.0	23	134
2-Methylnaphthalene	25.0	21.0	84.0	20	170
2-Nitroaniline	25.0	18.0	72.0	20	160
2-Nitrophenol	25.0	19.0	76.0	29	182
3,3'-Dichlorobenzidine	25.0	17.0	68.0	30	200
3-Nitroaniline	25.0	19.0	76.0	20	160
4,6-Dinitro-2-methylphenol	25.0	15.0	60.0	10	160
4-Bromophenyl phenyl ether	25.0	16.0	64.0	30	150
4-Chloro-3-methylphenol	25.0	21.0	84.0	25	160
4-Chloroaniline	25.0	17.0	68.0	20	160
4-Chlorophenyl phenyl ether	25.0	20.0	80.0	25	158
4-Nitroaniline	25.0	19.0	76.0	20	160
4-Nitrophenol	25.0	21.0	84.0	10	132
Acenaphthene	25.0	21.0	84.0	30	150
Acenaphthylene	25.0	21.0	84.0	33	250
Aniline	25.0	14.0	56.0	10	135
Anthracene	25.0	19.0	76.0	27	133
Benz(a)anthracene	25.0	20.0	80.0	33	143
Benzo(a)pyrene	25.0	23.0	92.0	17	163
Benzo(b)fluoranthene	25.0	23.0	92.0	24	159
Benzo(g,h,i)perylene	25.0	23.0	92.0	30	160
Benzo(k)fluoranthene	25.0	24.0	96.0	11	162
Benzoic acid	25.0	8.00	32.0	10	400
Benzyl alcohol	25.0	18.0	72.0	30	160
Bis(2-chloroethoxy)methane	25.0	22.0	88.0	33	184
Bis(2-chloroethyl)ether	25.0	17.0	68.0	12	158
Bis(2-chloroisopropyl)ether	25.0	19.0	76.0	20	160
Bis(2-ethylhexyl)phthalate	25.0	20.0	80.0	10	158

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375 Units: ug/L
Analysis Date: 03/06/2006 12:59 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Butyl benzyl phthalate	25.0	21.0	84.0	30	160
Carbazole	25.0	20.0	80.0	30	150
Chrysene	25.0	19.0	76.0	17	168
Dibenz(a,h)anthracene	25.0	23.0	92.0	30	160
Dibenzofuran	25.0	21.0	84.0	30	150
Diethyl phthalate	25.0	23.0	92.0	30	160
Dimethyl phthalate	25.0	22.0	88.0	30	160
Di-n-butyl phthalate	25.0	20.0	80.0	30	160
Di-n-octyl phthalate	25.0	19.0	76.0	20	150
Fluoranthene	25.0	21.0	84.0	26	137
Fluorene	25.0	21.0	84.0	30	150
Hexachlorobenzene	25.0	18.0	72.0	20	150
Hexachlorobutadiene	25.0	22.0	88.0	20	140
Hexachlorocyclopentadiene	25.0	13.0	52.0	10	150
Hexachloroethane	25.0	20.0	80.0	14	120
Indeno(1,2,3-cd)pyrene	25.0	18.0	72.0	30	160
Isophorone	25.0	25.0	100	21	196
Naphthalene	25.0	21.0	84.0	21	133
Nitrobenzene	25.0	20.0	80.0	20	160
N-Nitrosodi-n-propylamine	25.0	20.0	80.0	30	160
N-Nitrosodiphenylamine	50.0	37.0	74.0	30	150
Pentachlorophenol	25.0	16.0	64.0	14	176
Phenanthrene	25.0	19.0	76.0	10	140
Phenol	25.0	19.0	76.0	10	112
Pyrene	25.0	20.0	80.0	30	150
Pyridine	25.0	13.0	52.0	10	150
2-Methylphenol	25.0	19.0	76.0	30	160
3 & 4-Methylphenol	25.0	19.0	76.0	10	160

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatiles Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Sample Spiked: 06021107-02
RunID: J_060306D-3190376 Units: mg/L
Analysis Date: 03/06/2006 15:32 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trichlorobenzene	ND	0.05	0.0400	80.0	0.05	0.0390	78.0	2.53	28	10	142
1,2-Dichlorobenzene	ND	0.05	0.0390	78.0	0.05	0.0370	74.0	5.26	50	20	150
1,2-Diphenylhydrazine	ND	0.05	0.0420	84.0	0.05	0.0420	84.0	0	50	10	160
1,3-Dichlorobenzene	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	20	150
1,4-Dichlorobenzene	ND	0.05	0.0360	72.0	0.05	0.0360	72.0	0	45	20	150
2,4,5-Trichlorophenol	ND	0.05	0.0440	88.0	0.05	0.0430	86.0	2.30	50	30	150
2,4,6-Trichlorophenol	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	30	150
2,4-Dichlorophenol	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	50	30	150
2,4-Dimethylphenol	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	50	32	140
2,4-Dinitrophenol	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	10	160
2,4-Dinitrotoluene	ND	0.05	0.0460	92.0	0.05	0.0420	84.0	9.09	50	30	150
2,6-Dinitrotoluene	ND	0.05	0.0460	92.0	0.05	0.0430	86.0	6.74	50	30	150
2-Chloronaphthalene	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	30	150
2-Chlorophenol	ND	0.05	0.0400	80.0	0.05	0.0410	82.0	2.47	40	23	134
2-Methylnaphthalene	ND	0.05	0.0440	88.0	0.05	0.0430	86.0	2.30	50	20	170
2-Nitroaniline	ND	0.05	0.00800	16.0 *	0.05	0.00800	16.0 *	0	50	20	160
2-Nitrophenol	ND	0.05	0.0410	82.0	0.05	0.0410	82.0	0	50	29	182
3,3'-Dichlorobenzidine	ND	0.05	0	0 *	0.05	0	0 *	0	50	30	200
3-Nitroaniline	ND	0.05	0.00900	18.0 *	0.05	0.00900	18.0 *	0	50	20	160
4,6-Dinitro-2-methylphenol	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	10	160
4-Bromophenyl phenyl ether	ND	0.05	0.0350	70.0	0.05	0.0350	70.0	0	50	30	150
4-Chloro-3-methylphenol	ND	0.05	0.0450	90.0	0.05	0.0450	90.0	0	42	25	160
4-Chloroaniline	ND	0.05	0.0290	58.0	0.05	0.0280	56.0	3.51	50	20	160
4-Chlorophenyl phenyl ether	ND	0.05	0.0420	84.0	0.05	0.0400	80.0	4.88	50	25	158
4-Nitroaniline	ND	0.05	0.00200	4.00 *	0.05	0.00200	4.00 *	0	50	20	160
4-Nitrophenol	ND	0.05	0.0310	62.0	0.05	0.0340	68.0	9.23	50	10	132
Acenaphthene	ND	0.05	0.0450	90.0	0.05	0.0420	84.0	6.90	31	30	150
Acenaphthylene	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	33	250
Aniline	ND	0.05	0.0270	54.0	0.05	0.0220	44.0	20.4	50	10	135
Anthracene	ND	0.05	0.0430	86.0	0.05	0.0410	82.0	4.76	50	27	133
Benz(a)anthracene	ND	0.05	0.0430	86.0	0.05	0.0430	86.0	0	50	33	143
Benzo(a)pyrene	ND	0.05	0.0490	98.0	0.05	0.0490	98.0	0	50	17	163
Benzo(b)fluoranthene	ND	0.05	0.0500	100	0.05	0.0480	96.0	4.08	50	24	159
Benzo(g,h,i)perylene	ND	0.05	0.0520	104	0.05	0.0540	108	3.77	50	30	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
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J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021107-02
RunID: J_060306D-3190376 Units: mg/L
Analysis Date: 03/06/2006 15:32 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzo(k)fluoranthene	ND	0.05	0.0500	100	0.05	0.0510	102	1.98	50	11	162
Benzoic acid	ND	0.05	0.0100	20.0	0.05	0.0190	38.0	62.1 *	50	10	400
Benzyl alcohol	ND	0.05	0.0410	82.0	0.05	0.0420	84.0	2.41	50	30	160
Bis(2-chloroethoxy)methane	ND	0.05	0.0470	94.0	0.05	0.0460	92.0	2.15	50	33	184
Bis(2-chloroethyl)ether	ND	0.05	0.0400	80.0	0.05	0.0390	78.0	2.53	50	12	158
Bis(2-chloroisopropyl)ether	ND	0.05	0.0430	86.0	0.05	0.0430	86.0	0	50	20	160
Bis(2-ethylhexyl)phthalate	ND	0.05	0.0480	96.0	0.05	0.0470	94.0	2.11	50	10	158
Butyl benzyl phthalate	ND	0.05	0.0480	96.0	0.05	0.0470	94.0	2.11	50	30	160
Carbazole	ND	0.05	0.0440	88.0	0.05	0.0420	84.0	4.65	50	30	150
Chrysene	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	17	168
Dibenz(a,h)anthracene	ND	0.05	0.0500	100	0.05	0.0510	102	1.98	50	30	160
Dibenzofuran	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	30	150
Diethyl phthalate	ND	0.05	0.0470	92.0	0.05	0.0450	88.0	4.35	50	30	160
Dimethyl phthalate	ND	0.05	0.0450	90.0	0.05	0.0440	88.0	2.25	50	30	160
Di-n-butyl phthalate	ND	0.05	0.0460	92.0	0.05	0.0440	88.0	4.44	50	30	160
Di-n-octyl phthalate	ND	0.05	0.0450	90.0	0.05	0.0440	88.0	2.25	50	20	150
Fluoranthene	ND	0.05	0.0470	94.0	0.05	0.0430	86.0	8.89	50	26	137
Fluorene	ND	0.05	0.0440	88.0	0.05	0.0420	84.0	4.65	50	30	150
Hexachlorobenzene	ND	0.05	0.0410	82.0	0.05	0.0400	80.0	2.47	50	20	150
Hexachlorobutadiene	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	20	140
Hexachlorocyclopentadiene	ND	0.05	0.0300	60.0	0.05	0.0280	56.0	6.90	50	10	150
Hexachloroethane	ND	0.05	0.0380	76.0	0.05	0.0380	76.0	0	50	10	140
Indeno(1,2,3-cd)pyrene	ND	0.05	0.0440	88.0	0.05	0.0440	88.0	0	50	30	160
Isophorone	ND	0.05	0.0530	106	0.05	0.0530	106	0	50	21	196
Naphthalene	ND	0.05	0.0620	124	0.05	0.0590	118	4.96	50	21	133
Nitrobenzene	ND	0.05	0.0540	108	0.05	0.0510	102	5.71	50	20	160
N-Nitrosodi-n-propylamine	ND	0.05	0.0450	90.0	0.05	0.0460	92.0	2.20	38	30	160
N-Nitrosodiphenylamine	ND	0.1	0.0810	81.0	0.1	0.0810	81.0	0	50	30	150
Pentachlorophenol	ND	0.05	0.0370	64.0	0.05	0.0400	70.0	7.79	50	14	176
Phenanthrene	ND	0.05	0.0410	82.0	0.05	0.0400	80.0	2.47	50	10	140
Phenol	ND	0.05	0.0250	50.0	0.05	0.0330	66.0	27.6	42	10	112
Pyrene	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	31	30	150
Pyridine	ND	0.05	0.0140	28.0	0.05	0.00600	12.0	80.0 *	50	10	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021136
Lab Batch ID: 55541A

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021107-02
RunID: J_060306D-3190376 Units: mg/L
Analysis Date: 03/06/2006 15:32 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
2-Methylphenol	ND	0.05	0.0410	82.0	0.05	0.0440	88.0	7.06	50	30	160
3 & 4-Methylphenol	ND	0.05	0.0370	74.0	0.05	0.0420	84.0	12.7	50	10	160

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021136
Lab Batch ID: R164154

Method Blank

Samples in Analytical Batch:

RunID: Q_060302G-3188464 Units: ug/L
Analysis Date: 03/02/2006 15:02 Analyst: C_V
Preparation Date: 03/02/2006 15:02 Prep By: Method

Lab Sample ID	Client Sample ID
06021136-01A	MW-3
06021136-02A	MW-1
06021136-03A	Trip Blank

Analyte	Result	Rep Limit
1,1,1,2-Tetrachloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloropropene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dibromoethane	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
2-Butanone	ND	20
2-Chloroethyl vinyl ether	ND	10
2-Chlorotoluene	ND	5.0
2-Hexanone	ND	10
4-Chlorotoluene	ND	5.0
4-Isopropyltoluene	ND	5.0
4-Methyl-2-pentanone	ND	10
Acetone	ND	100
Acrylonitrile	ND	50
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	5.0
Bromodichloromethane	ND	5.0
Bromoform	ND	5.0
Bromomethane	ND	10
Carbon disulfide	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	10
Chloroform	ND	5.0
Chloromethane	ND	10
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	10
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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3/10/2006 10:39:12 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021136
Lab Batch ID: R164154

Method Blank

RunID: Q_060302G-3188464 Units: ug/L
Analysis Date: 03/02/2006 15:02 Analyst: C_V
Preparation Date: 03/02/2006 15:02 Prep By: Method

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	10
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	116.0	62-130
Surr: 4-Bromofluorobenzene	74.0	70-130
Surr: Toluene-d8	88.0	74-122

Laboratory Control Sample (LCS)

RunID: Q_060302G-3188463 Units: ug/L
Analysis Date: 03/02/2006 13:03 Analyst: C_V
Preparation Date: 03/02/2006 13:03 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50.0	46.0	92.0	71	146
Benzene	50.0	49.0	98.0	76	126
Chlorobenzene	50.0	49.0	98.0	78	125
Toluene	50.0	52.0	104	83	131
Trichloroethene	50.0	47.0	94.0	64	137

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021136
Lab Batch ID: R164154

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021136-01
RunID: Q_060302G-3188599 Units: ug/L
Analysis Date: 03/02/2006 22:36 Analyst: C_V

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	50	43.0	86.0	50	43.0	86.0	0	14	71	146
Benzene	ND	50	48.0	96.0	50	48.0	96.0	0	11	78	126
Chlorobenzene	ND	50	47.0	94.0	50	46.0	92.0	2.15	13	78	125
Toluene	ND	50	49.0	98.0	50	48.0	96.0	2.06	13	83	131
Trichloroethene	ND	50	45.0	90.0	50	45.0	90.0	0	14	77	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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3/10/2006 10:39:12 AM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service, Hobbs, NM

Analysis: Chloride, Total
Method: E325.2

WorkOrder: 06021136
Lab Batch ID: R164251

Method Blank

Samples in Analytical Batch:

RunID: KONELAB_060306C-3189797 Units: mg/L
Analysis Date: 03/06/2006 17:31 Analyst: T_H

Lab Sample ID	Client Sample ID
06021136-01E	MW-3
06021136-02E	MW-1

Analyte	Result	Rep Limit
Chloride	ND	1.0

Laboratory Control Sample (LCS)

RunID: KONELAB_060306C-31897 Units: mg/L
Analysis Date: 03/06/2006 17:31 Analyst: T_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	50.00	52.77	105.5	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021136-01
RunID: KONELAB_060306C-31898 Units: mg/L
Analysis Date: 03/06/2006 18:29 Analyst: T_H

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	66.61	50	113.3	93.35	50	113.2	93.12	0.1016	20	76	131

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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3/10/2006 10:39:13 AM

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	06021136	Received By:	RE
Date and Time Received:	2/25/2006 10:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	2.5°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance
Issues:

Client Instructions:



SPL, Inc.

Analysis Request & Chain of Custody Record

Client Name: Browning Caldwell
Address: 1415 Louisiana Ste 2500
Phone/Fax: 713-759-0999
Client Contact: R. Rexroad Email:
Project Name/No.: BJ-Fracmaster 128125
Site Name: BJ-Services - Fracmaster
Site Location: Hobbs, NM
Invoice To: R. Rexroad Ph: 713-759-0999

SAMPLE ID DATE TIME compl grab

MW-3 2/22/06 1410 X
MW-1 2/22/06 1545 X
RW-2 (BC)
RB-3 (BC)
FB-3 (BC)
Trip blank Lab prepared X

matrix bottle size pres.
W=water S=soil O=oil
SL=siludge X=other
P=plastic A=amber glass
G=glass V=vial X=other
1=1 liter 4=4oz 40=vial
8=8oz 16=16oz X=other
1=HCl 2=HNO3
3=H2SO4 X=other
Number of Containers
Requested Analysis
VOCs 8200 B
TPH - G80
TPH - DR0
SVOCs
Chloride

Client/Consultant Remarks:

Laboratory remarks:

Intact? Ice? Temp: 2.5C
Y Y N
Y Y N

Requested TAT

Contract ☐ 72hr
☐ 24hr
☐ 48hr
☐ Other

Standard QC ☒ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

1. Relinquished by Sampler: Ben Camacho
3. Relinquished by:
5. Relinquished by:

Special Reporting Requirements Results: Fax ☐ Email ☐ PDF ☐

Special Detection Limits (specify):

2. Received by: time 1000
4. Received by: time
6. Received by Laboratory: time 1000

☒ 8880 Interchange Drive
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive
Traverse City, MI 49686 (231) 947-5777

SPL Workorder No. 0602-1136 page 237446 of



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021075

<u>Report To:</u> Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	<u>Project Name:</u> BJ Service Fracmaster 128125.002 <u>Site:</u> Hobbs, NM <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> New Mexico <u>State Cert. No.:</u> <u>Date Reported:</u> 3/9/2006
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This Report Contains A Total Of 28 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

3/9/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Brown & Caldwell

Certificate of Analysis Number:

06021075

Report To: Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	Project Name: BJ Service Fracmaster 128125.002 Site: Hobbs, NM Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 3/9/2006
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Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

06021075 Page 1

3/9/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021075

Report To: Brown & Caldwell

Rick Rexroad

1415 Louisiana

Suite 2500

Houston

TX

77002-

ph: (713) 759-0999

fax: (713) 308-3886

Project Name:

BJ Service Fracmaster 128125.002

Site:

Hobbs, NM

Site Address:

PO Number:

State:

New Mexico

State Cert. No.:

Date Reported: 3/9/2006

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1-19-20	06021075-01	Soil	2/21/2006 4:00:00 PM	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
FB-1	06021075-02	Water	2/21/2006 6:30:00 PM	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
Trip Blank	06021075-03	Water	2/21/2006	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
RB-1	06021075-04	Water	2/21/2006 6:40:00 PM	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
MW-2-14-15	06021075-05	Soil	2/22/2006 1:40:00 PM	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
IDW	06021075-06	Soil	2/22/2006 3:45:00 PM	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
FB-2	06021075-07	Water	2/22/2006	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
RB-2	06021075-08	Water	2/22/2006	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>
Trip Blank	06021075-09	Water	2/22/2006	2/24/2006 9:30:00 AM	237447	<input type="checkbox"/>

Sonia West

Sonia West
Senior Project Manager

3/9/2006

Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-1-19-20

Collected: 02/21/2006 16:00 SPL Sample ID: 06021075-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: mg/Kg		
Diesel Range Organics (C10-C28)	ND		5	1	03/04/06 4:37	AE	3191762
Surr: n-Pentacosane	88.8		% 20-154	1	03/04/06 4:37	AE	3191762

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	02/28/2006 15:38	LLL	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/Kg		
Gasoline Range Organics	ND		0.1	1	02/27/06 17:30	JWW	3180534
Surr: 1,4-Difluorobenzene	98.0		% 63-142	1	02/27/06 17:30	JWW	3180534
Surr: 4-Bromofluorobenzene	99.7		% 50-159	1	02/27/06 17:30	JWW	3180534

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:15	EMB	1.00

PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/Kg		
Benzene	ND		1	1	02/27/06 17:30	JWW	3180514
Toluene	ND		1	1	02/27/06 17:30	JWW	3180514
Ethylbenzene	ND		1	1	02/27/06 17:30	JWW	3180514
m,p-Xylene	ND		1	1	02/27/06 17:30	JWW	3180514
o-Xylene	ND		1	1	02/27/06 17:30	JWW	3180514
Xylenes, Total	ND		1	1	02/27/06 17:30	JWW	3180514
Surr: 1,4-Difluorobenzene	101		% 77-126	1	02/27/06 17:30	JWW	3180514
Surr: 4-Bromofluorobenzene	91.5		% 60-160	1	02/27/06 17:30	JWW	3180514

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:15	EMB	1.00

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:FB-1

Collected: 02/21/2006 18:30

SPL Sample ID: 06021075-02

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/01/06 13:40	DMN	3183805
Surr: 1,4-Difluorobenzene	100	%	60-155	1	03/01/06 13:40	DMN	3183805
Surr: 4-Bromofluorobenzene	100	%	50-158	1	03/01/06 13:40	DMN	3183805
PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/L		
Benzene	ND		1	1	03/02/06 18:55	DMN	3185594
Toluene	ND		1	1	03/02/06 18:55	DMN	3185594
Ethylbenzene	ND		1	1	03/02/06 18:55	DMN	3185594
m,p-Xylene	ND		1	1	03/02/06 18:55	DMN	3185594
o-Xylene	ND		1	1	03/02/06 18:55	DMN	3185594
Xylenes, Total	ND		1	1	03/02/06 18:55	DMN	3185594
Surr: 1,4-Difluorobenzene	101	%	39-163	1	03/02/06 18:55	DMN	3185594
Surr: 4-Bromofluorobenzene	101	%	57-157	1	03/02/06 18:55	DMN	3185594

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Trip Blank

Collected: 02/21/2006 0:00

SPL Sample ID: 06021075-03

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/01/06 14:07	DMN	3183806
Surr: 1,4-Difluorobenzene	102		% 60-155	1	03/01/06 14:07	DMN	3183806
Surr: 4-Bromofluorobenzene	98.3		% 50-158	1	03/01/06 14:07	DMN	3183806
PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/L		
Benzene	ND		1	1	03/01/06 14:07	DMN	3183626
Toluene	ND		1	1	03/01/06 14:07	DMN	3183626
Ethylbenzene	ND		1	1	03/01/06 14:07	DMN	3183626
m,p-Xylene	ND		1	1	03/01/06 14:07	DMN	3183626
o-Xylene	ND		1	1	03/01/06 14:07	DMN	3183626
Xylenes, Total	ND		1	1	03/01/06 14:07	DMN	3183626
Surr: 1,4-Difluorobenzene	102		% 39-163	1	03/01/06 14:07	DMN	3183626
Surr: 4-Bromofluorobenzene	101		% 57-157	1	03/01/06 14:07	DMN	3183626

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-1

Collected: 02/21/2006 18:40

SPL Sample ID: 06021075-04

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Diesel Range Organics (C10-C28)	ND		1	1	03/07/06 20:39	NW	3191470
Surr: n-Pentacosane	85.8		% 20-150	1	03/07/06 20:39	NW	3191470

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/28/2006 16:29	N_M	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/01/06 14:34	DMN	3183807
Surr: 1,4-Difluorobenzene	99.3		% 60-155	1	03/01/06 14:34	DMN	3183807
Surr: 4-Bromofluorobenzene	96.7		% 50-158	1	03/01/06 14:34	DMN	3183807

PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/L		
Benzene	ND		1	1	03/01/06 14:34	DMN	3183627
Toluene	ND		1	1	03/01/06 14:34	DMN	3183627
Ethylbenzene	ND		1	1	03/01/06 14:34	DMN	3183627
m,p-Xylene	ND		1	1	03/01/06 14:34	DMN	3183627
o-Xylene	ND		1	1	03/01/06 14:34	DMN	3183627
Xylenes, Total	ND		1	1	03/01/06 14:34	DMN	3183627
Surr: 1,4-Difluorobenzene	100		% 39-163	1	03/01/06 14:34	DMN	3183627
Surr: 4-Bromofluorobenzene	99.7		% 57-157	1	03/01/06 14:34	DMN	3183627

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2-14-15

Collected: 02/22/2006 13:40

SPL Sample ID: 06021075-05

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/Kg	
Diesel Range Organics (C10-C28)	ND		5	1	03/04/06 5:46	AE	3191765
Surr: n-Pentacosane	86.5		% 20-154	1	03/04/06 5:46	AE	3191765

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	02/28/2006 15:38	LLL	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/Kg	
Gasoline Range Organics	ND		0.1	1	02/27/06 19:04	JWW	3180535
Surr: 1,4-Difluorobenzene	97.7		% 63-142	1	02/27/06 19:04	JWW	3180535
Surr: 4-Bromofluorobenzene	97.7		% 50-159	1	02/27/06 19:04	JWW	3180535

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:27	EMB	1.00

PURGEABLE AROMATICS				MCL	SW8021B	Units: ug/Kg	
Benzene	ND		1	1	02/27/06 19:04	JWW	3180517
Toluene	ND		1	1	02/27/06 19:04	JWW	3180517
Ethylbenzene	ND		1	1	02/27/06 19:04	JWW	3180517
m,p-Xylene	ND		1	1	02/27/06 19:04	JWW	3180517
o-Xylene	ND		1	1	02/27/06 19:04	JWW	3180517
Xylenes, Total	ND		1	1	02/27/06 19:04	JWW	3180517
Surr: 1,4-Difluorobenzene	102		% 77-126	1	02/27/06 19:04	JWW	3180517
Surr: 4-Bromofluorobenzene	90.8		% 60-160	1	02/27/06 19:04	JWW	3180517

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:27	EMB	1.00

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
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Client Sample ID:IDW

Collected: 02/22/2006 15:45 SPL Sample ID: 06021075-06

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: mg/Kg		
Diesel Range Organics (C10-C28)	8.8		5	1	03/04/06 4:14	AE	3191761
Surr: n-Pentacosane	75.7		% 20-154	1	03/04/06 4:14	AE	3191761

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	02/28/2006 15:38	LLL	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/Kg		
Gasoline Range Organics	ND		0.1	1	02/27/06 19:36	JWW	3180536
Surr: 1,4-Difluorobenzene	98.0		% 63-142	1	02/27/06 19:36	JWW	3180536
Surr: 4-Bromofluorobenzene	99.3		% 50-159	1	02/27/06 19:36	JWW	3180536

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:29	EMB	1.00

MERCURY, TOTAL			MCL	SW7471A	Units: mg/Kg		
Mercury	ND		0.03	1	03/01/06 10:19	T_H	3182513

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	03/01/2006 8:00	EMB	1.00

METALS BY METHOD 6010B, TOTAL			MCL	SW6010B	Units: mg/Kg		
Arsenic	2.69		0.5	1	03/01/06 12:05	MW	3182976
Lead	1.82		0.5	1	03/01/06 12:05	MW	3182976
Selenium	ND		0.5	1	03/01/06 12:05	MW	3182976
Barium	240		0.5	1	03/01/06 23:54	EG	3184786
Cadmium	ND		0.5	1	03/01/06 23:54	EG	3184786
Chromium	6.45		1	1	03/01/06 23:54	EG	3184786
Silver	ND		1	1	03/01/06 23:54	EG	3184786

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	02/28/2006 7:30	ACW	1.00

PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/Kg		
Benzene	ND		1	1	02/27/06 19:36	JWW	3180518
Toluene	ND		1	1	02/27/06 19:36	JWW	3180518
Ethylbenzene	ND		1	1	02/27/06 19:36	JWW	3180518
m,p-Xylene	ND		1	1	02/27/06 19:36	JWW	3180518
o-Xylene	ND		1	1	02/27/06 19:36	JWW	3180518
Xylenes, Total	ND		1	1	02/27/06 19:36	JWW	3180518
Surr: 1,4-Difluorobenzene	102		% 77-126	1	02/27/06 19:36	JWW	3180518
Surr: 4-Bromofluorobenzene	90.3		% 60-160	1	02/27/06 19:36	JWW	3180518

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



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Client Sample ID: IDW

Collected: 02/22/2006 15:45

SPL Sample ID: 06021075-06

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
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Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	02/27/2006 9:29	EMB	1.00

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



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8880 INTERCHANGE DRIVE
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Client Sample ID:FB-2

Collected: 02/22/2006 0:00

SPL Sample ID: 06021075-07

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/01/06 15:01	DMN	3183808
Surr: 1,4-Difluorobenzene	99.0		% 60-155	1	03/01/06 15:01	DMN	3183808
Surr: 4-Bromofluorobenzene	95.3		% 50-158	1	03/01/06 15:01	DMN	3183808
PURGEABLE AROMATICS			MCL	SW8021B	Units: ug/L		
Benzene	ND		1	1	03/01/06 15:01	DMN	3183628
Toluene	ND		1	1	03/01/06 15:01	DMN	3183628
Ethylbenzene	ND		1	1	03/01/06 15:01	DMN	3183628
m,p-Xylene	ND		1	1	03/01/06 15:01	DMN	3183628
o-Xylene	ND		1	1	03/01/06 15:01	DMN	3183628
Xylenes,Total	ND		1	1	03/01/06 15:01	DMN	3183628
Surr: 1,4-Difluorobenzene	101		% 39-163	1	03/01/06 15:01	DMN	3183628
Surr: 4-Bromofluorobenzene	99.6		% 57-157	1	03/01/06 15:01	DMN	3183628

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



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8880 INTERCHANGE DRIVE
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Client Sample ID:RB-2

Collected: 02/22/2006 0:00

SPL Sample ID: 06021075-08

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		1	1	03/07/06 21:03	NW	3191471
Surr: n-Pentacosane	69.2		% 20-150	1	03/07/06 21:03	NW	3191471

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/28/2006 16:29	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	03/01/06 15:28	DMN	3183809
Surr: 1,4-Difluorobenzene	99.3		% 60-155	1	03/01/06 15:28	DMN	3183809
Surr: 4-Bromofluorobenzene	95.7		% 50-158	1	03/01/06 15:28	DMN	3183809

PURGEABLE AROMATICS				MCL	SW8021B	Units: ug/L	
Benzene	ND		1	1	03/01/06 15:28	DMN	3183629
Toluene	ND		1	1	03/01/06 15:28	DMN	3183629
Ethylbenzene	ND		1	1	03/01/06 15:28	DMN	3183629
m,p-Xylene	ND		1	1	03/01/06 15:28	DMN	3183629
o-Xylene	ND		1	1	03/01/06 15:28	DMN	3183629
Xylenes, Total	ND		1	1	03/01/06 15:28	DMN	3183629
Surr: 1,4-Difluorobenzene	102		% 39-163	1	03/01/06 15:28	DMN	3183629
Surr: 4-Bromofluorobenzene	100		% 57-157	1	03/01/06 15:28	DMN	3183629

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 06021075
Lab Batch ID: 55503

Method Blank

Samples in Analytical Batch:

RunID: HP_V_060304A-3191759 Units: mg/Kg

Lab Sample ID

Client Sample ID

Analysis Date: 03/04/2006 3:28

Analyst: AE

06021075-01B

MW-1-19-20

Preparation Date: 02/28/2006 15:38

Prep By: LLL Method SW3550B

06021075-05B

MW-2-14-15

06021075-06B

IDW

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	5.0
Surr: n-Pentacosane	90.7	20-154

Laboratory Control Sample (LCS)

RunID: HP_V_060304A-3191760 Units: mg/Kg

Analysis Date: 03/04/2006 3:51

Analyst: AE

Preparation Date: 02/28/2006 15:38

Prep By: LLL Method SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	66.6	59.8	89.8	57	150

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-01

RunID: HP_V_060304A-3191763 Units: mg/Kg

Analysis Date: 03/04/2006 5:00

Analyst: AE

Preparation Date: 02/28/2006 15:38

Prep By: LLL Method SW3550B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	66.6	54.3	81.5	66.6	56.1	84.2	3.29	50	21	175

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 06021075
Lab Batch ID: 55511

Method Blank

Samples in Analytical Batch:

RunID: HP_V_060307B-3191464	Units: mg/L	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date: 03/07/2006 15:13	Analyst: NW	06021075-04B	RB-1
Preparation Date: 02/28/2006 16:29	Prep By: N_M Method SW3510C	06021075-08B	RB-2

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	1.0
Surr: n-Pentacosane	81.2	20-150

Laboratory Control Sample (LCS)

RunID: HP_V_060307B-3191465	Units: mg/L
Analysis Date: 03/07/2006 15:36	Analyst: NW
Preparation Date: 02/28/2006 16:29	Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	2.00	1.36	67.9	21	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021067-01	
RunID: HP_V_060307B-3191466	Units: mg/L
Analysis Date: 03/07/2006 17:10	Analyst: NW
Preparation Date: 02/28/2006 16:29	Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	4	3.37	79.2	4	3.49	82.2	3.53	39	26	130

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
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(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163711

Method Blank

Samples in Analytical Batch:

RunID: HP_O_060227A-3180505 Units: ug/Kg
Analysis Date: 02/27/2006 12:14 Analyst: JWW
Preparation Date: 02/27/2006 12:14 Prep By: Method

Lab Sample ID	Client Sample ID
06021075-01A	MW-1-19-20
06021075-05A	MW-2-14-15
06021075-06A	IDW

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes, Total	ND	1.0
Surr: 1,4-Difluorobenzene	101.9	77-126
Surr: 4-Bromofluorobenzene	91.3	60-160

Laboratory Control Sample (LCS)

RunID: HP_O_060227A-3180504 Units: ug/Kg
Analysis Date: 02/27/2006 11:11 Analyst: JWW
Preparation Date: 02/27/2006 11:11 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	17.0	84.9	70	130
Ethylbenzene	20.0	18.6	92.8	70	130
Toluene	20.0	18.3	91.5	70	130
m,p-Xylene	40.0	37.4	93.5	70	130
o-Xylene	20.0	18.7	93.3	70	130
Xylenes, Total	60.0	56.1	93.4	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-01
RunID: HP_O_060227A-3180515 Units: ug/Kg
Analysis Date: 02/27/2006 18:01 Analyst: JWW
Preparation Date: 02/27/2006 9:18 Prep By: EMB Method SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	20.1	101	20	18.6	92.8	7.94	32	36	139
Ethylbenzene	ND	20	19.9	99.4	20	18.4	91.8	7.95	32	25	138

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163711

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-01
RunID: HP_O_060227A-3180515 Units: ug/Kg
Analysis Date: 02/27/2006 18:01 Analyst: JWW
Preparation Date: 02/27/2006 9:18 Prep By: EMB Method SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	19.9	99.3	20	18.3	91.5	8.18	34	31	138
m,p-Xylene	ND	40	39.5	98.7	40	36.4	91.1	8.02	34	25	139
o-Xylene	ND	20	19.7	98.5	20	18.1	90.5	8.45	32	19	144
Xylenes, Total	ND	60	59.2	98.6	60	54.5	90.9	8.16	34	19	144

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 06021075
Lab Batch ID: R163713

Method Blank

Samples in Analytical Batch:

RunID: HP_O_060227B-3180531 Units: mg/Kg
Analysis Date: 02/27/2006 12:14 Analyst: JWW
Preparation Date: 02/27/2006 12:14 Prep By: Method

Lab Sample ID	Client Sample ID
06021075-01A	MW-1-19-20
06021075-05A	MW-2-14-15
06021075-06A	IDW

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	98.3	63-142
Surr: 4-Bromofluorobenzene	100.0	50-159

Laboratory Control Sample (LCS)

RunID: HP_O_060227B-3180530 Units: mg/Kg
Analysis Date: 02/27/2006 11:43 Analyst: JWW
Preparation Date: 02/27/2006 11:43 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.907	90.7	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-01
RunID: HP_O_060227B-3180539 Units: mg/Kg
Analysis Date: 02/27/2006 23:48 Analyst: JWW
Preparation Date: 02/27/2006 9:22 Prep By: EMB Method SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	1	0.808	80.8	1	0.818	81.8	1.17	50	26	147

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163888

Method Blank

Samples in Analytical Batch:

RunID: VARD_060301A-3183620 Units: ug/L
Analysis Date: 03/01/2006 4:17 Analyst: DMN
Preparation Date: 03/01/2006 4:17 Prep By: Method SW5030B

Lab Sample ID	Client Sample ID
06021075-03A	Trip Blank
06021075-04A	RB-1
06021075-07A	FB-2
06021075-08A	RB-2
06021075-09A	Trip Blank

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes, Total	ND	1.0
Surr: 1,4-Difluorobenzene	100.4	39-163
Surr: 4-Bromofluorobenzene	102.8	57-157

Laboratory Control Sample (LCS)

RunID: VARD_060301A-3183619 Units: ug/L
Analysis Date: 03/01/2006 3:50 Analyst: DMN
Preparation Date: 03/01/2006 3:50 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	20.1	100	70	130
Ethylbenzene	20.0	20.2	101	70	130
Toluene	20.0	20.4	102	70	130
m,p-Xylene	40.0	40.2	101	70	130
o-Xylene	20.0	20.3	101	70	130
Xylenes, Total	60.0	60.5	101	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021000-01
RunID: VARD_060301A-3183622 Units: ug/L
Analysis Date: 03/01/2006 9:13 Analyst: DMN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	15.8	20	30.3	72.6	20	29.8	70.4	1.49	26	40	165
Ethylbenzene	45.1	20	60.2	75.7	20	59.8	73.6	0.701	34	51	156

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163888

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021000-01
RunID: VARD_060301A-3183622 Units: ug/L
Analysis Date: 03/01/2006 9:13 Analyst: DMN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	2.58	20	21.0	92.0	20	21.0	92.1	0.0124	25	58	153
m,p-Xylene	4.38	40	45.1	102	40	44.9	101	0.583	27	51	155
o-Xylene	2.63	20	23.7	105	20	23.6	105	0.514	25	58	151
Xylenes, Total	7.01	60	68.8	103	60	68.5	102	0.559	27	51	155

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell BJ Service Fracmaster 128125.002

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 06021075
Lab Batch ID: R163896

Method Blank

Samples in Analytical Batch:

RunID: VARD_060301C-3183799 Units: mg/L
Analysis Date: 03/01/2006 4:17 Analyst: DMN
Preparation Date: 03/01/2006 4:17 Prep By: Method SW5030B

Lab Sample ID	Client Sample ID
06021075-02A	FB-1
06021075-03A	Trip Blank
06021075-04A	RB-1
06021075-07A	FB-2
06021075-08A	RB-2
06021075-09A	Trip Blank

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	101.0	60-155
Surr: 4-Bromofluorobenzene	100.0	50-158

Laboratory Control Sample (LCS)

RunID: VARD_060301C-3183798 Units: mg/L
Analysis Date: 03/01/2006 3:23 Analyst: DMN
Preparation Date: 03/01/2006 3:23 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.896	89.6	42	136

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021000-02
RunID: VARD_060301C-3183801 Units: mg/L
Analysis Date: 03/01/2006 10:06 Analyst: DMN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	2.28	0.9	2.82	60.0	0.9	2.86	64.6	1.46	36	22	174

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163984

Method Blank

Samples in Analytical Batch:

RunID: VARD_060302A-3185571 Units: ug/L
Analysis Date: 03/02/2006 8:58 Analyst: DMN
Preparation Date: 03/02/2006 8:58 Prep By: Method SW5030B

Lab Sample ID 06021075-02A
Client Sample ID FB-1

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes, Total	ND	1.0
Surr: 1,4-Difluorobenzene	100.9	39-163
Surr: 4-Bromofluorobenzene	98.0	57-157

Laboratory Control Sample (LCS)

RunID: VARD_060302A-3185569 Units: ug/L
Analysis Date: 03/02/2006 8:31 Analyst: DMN
Preparation Date: 03/02/2006 8:31 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.7	98.7	70	130
Ethylbenzene	20.0	19.6	98.2	70	130
Toluene	20.0	19.9	99.3	70	130
m,p-Xylene	40.0	39.0	97.5	70	130
o-Xylene	20.0	19.5	97.6	70	130
Xylenes, Total	60.0	58.5	97.5	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021114-04
RunID: VARD_060302A-3185597 Units: ug/L
Analysis Date: 03/02/2006 19:48 Analyst: DMN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	19.9	99.4	20	19.9	99.3	0.143	26	40	165
Ethylbenzene	ND	20	19.6	98.0	20	19.6	98.1	0.132	34	51	156

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 06021075
Lab Batch ID: R163984

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021114-04
RunID: VARD_060302A-3185597 Units: ug/L
Analysis Date: 03/02/2006 19:48 Analyst: DMN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	19.9	99.4	20	20.0	100	0.743	25	58	153
m,p-Xylene	ND	40	38.7	96.8	40	38.9	97.4	0.611	27	51	155
o-Xylene	ND	20	19.7	98.4	20	19.6	98.0	0.364	25	58	151
Xylenes, Total	ND	60	58.4	97.3	60	58.5	97.6	0.284	27	51	155

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell BJ Service Fracmaster 128125.002

Analysis: Metals by Method 6010B, Total
Method: SW6010B

WorkOrder: 06021075
Lab Batch ID: 55485

Method Blank

Samples in Analytical Batch:

RunID: TJA_060301A-3184317 Units: mg/Kg
Analysis Date: 03/01/2006 23:45 Analyst: EG
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Lab Sample ID 06021075-06C
Client Sample ID IDW

Analyte	Result	Rep Limit
Barium	ND	0.5
Cadmium	ND	0.5
Chromium	ND	1
Silver	ND	1

Laboratory Control Sample (LCS)

RunID: TJA_060301A-3184318 Units: mg/Kg
Analysis Date: 03/01/2006 23:49 Analyst: EG
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Barium	156.0	149.1	95.59	82	119
Cadmium	233.0	200.4	86.02	81	119
Chromium	60.80	56.54	93.00	78	121
Silver	80.00	73.50	91.88	61	139

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-06
RunID: TJA_060301A-3184787 Units: mg/Kg
Analysis Date: 03/01/2006 23:59 Analyst: EG
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	239.8	100	349.3	109.4	100	346.7	106.8	0.7423	20	75	125
Cadmium	ND	100	96.44	96.44	100	92.96	92.96	3.676	20	75	125
Chromium	6.448	100	100.0	93.57	100	97.39	90.94	2.666	20	75	125
Silver	ND	100	98.22	98.22	100	96.15	96.15	2.122	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell BJ Service Fracmaster 128125.002

Analysis: Metals by Method 6010B, Total
Method: SW6010B

WorkOrder: 06021075
Lab Batch ID: 55485-T

Method Blank

Samples in Analytical Batch:

RunID: TJAT_060301A-3182973 Units: mg/Kg
Analysis Date: 03/01/2006 11:54 Analyst: MW
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Lab Sample ID 06021075-06C
Client Sample ID IDW

Analyte	Result	Rep Limit
Arsenic	ND	0.5
Lead	ND	0.5
Selenium	ND	0.5

Laboratory Control Sample (LCS)

RunID: TJAT_060301A-3182975 Units: mg/Kg
Analysis Date: 03/01/2006 11:59 Analyst: MW
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	80.90	75.06	92.79	79	121
Lead	76.80	71.23	92.75	81	120
Selenium	82.90	80.66	97.30	76	124

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021075-06
RunID: TJAT_060301A-3182977 Units: mg/Kg
Analysis Date: 03/01/2006 12:10 Analyst: MW
Preparation Date: 02/28/2006 7:30 Prep By: AC Method SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Arsenic	2.693	10	13.28	105.8	10	12.80	101.1	3.666	20	75	125
Lead	1.822	10	12.19	103.7	10	11.74	99.21	3.768	20	75	125
Selenium	ND	10	10.49	104.9	10	10.04	100.4	4.315	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125.002

Analysis: Mercury, Total
Method: SW7471A

WorkOrder: 06021075
Lab Batch ID: 55502

Method Blank

Samples in Analytical Batch:

RunID: HGLC_060301A-3182499 Units: mg/Kg
Analysis Date: 03/01/2006 9:32 Analyst: T_H
Preparation Date: 03/01/2006 8:00 Prep By: EMB Method SW7471A

Lab Sample ID 06021075-06C
Client Sample ID IDW

Analyte	Result	Rep Limit
Mercury	ND	0.03

Laboratory Control Sample (LCS)

RunID: HGLC_060301A-3182500 Units: mg/Kg
Analysis Date: 03/01/2006 9:34 Analyst: T_H
Preparation Date: 03/01/2006 8:00 Prep By: EMB Method SW7471A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	3.710	3.543	95.50	68	132

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021191-01
RunID: HGLC_060301A-3182502 Units: mg/Kg-dry
Analysis Date: 03/01/2006 9:47 Analyst: T_H
Preparation Date: 03/01/2006 8:00 Prep By: EMB Method SW7471A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	5.860	0.3302	5.389	N/C	0.3302	5.408	N/C	N/C	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	06021075	Received By:	R_R
Date and Time Received:	2/24/2006 9:30:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	3.0°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:

Contact Date & Time:

Non Conformance
Issues:

Client Instructions:



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021135

<u>Report To:</u> Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	<u>Project Name:</u> BJ Service Fracmaster 128125 <u>Site:</u> Hobbs,NM <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> New Mexico <u>State Cert. No.:</u> <u>Date Reported:</u> 3/14/2006
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This Report Contains A Total Of 31 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

3/14/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
Brown & Caldwell

Certificate of Analysis Number:

06021135

Report To: Brown & Caldwell Rick Rexroad 1415 Louisiana Suite 2500 Houston TX 77002- ph: (713) 759-0999 fax:	Project Name: BJ Service Fracmaster 128125 Site: Hobbs, NM Site Address: PO Number: State: New Mexico State Cert. No.: Date Reported: 3/14/2006
--	--

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

The pH of sample ID "RB-3" (SPL ID:06021135-03) was checked at the time of the Volatile Organics analysis and the pH was greater than 2. Although the sample was collected in a VOA vial preserved with HCl, the sample was not properly preserved to a pH less than 2, which may be due to the matrix of the sample. The analysis of the sample was not completed within seven days of the collection date.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

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3/14/2006

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

Certificate of Analysis Number:

06021135

Report To: Brown & Caldwell

Rick Rexroad

1415 Louisiana

Suite 2500

Houston

TX

77002-

ph: (713) 759-0999

fax: (713) 308-3886

Project Name:

BJ Service Fracmaster 128125

Site:

Hobbs, NM

Site Address:

PO Number:

State:

New Mexico

State Cert. No.:

Date Reported:

3/14/2006

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-2	06021135-01	Water	2/23/2006 8:20:00 PM	2/25/2006 10:00:00 AM	237452	<input type="checkbox"/>
FB-3	06021135-02	Water	2/23/2006 8:30:00 PM	2/25/2006 10:00:00 AM	237452	<input type="checkbox"/>
RB-3	06021135-03	Water	2/23/2006 8:50:00 PM	2/25/2006 10:00:00 AM	237452	<input type="checkbox"/>

Sonia West

Sonia West

Senior Project Manager

3/14/2006

Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2

Collected: 02/23/2006 20:20 SPL Sample ID: 06021135-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CHLORIDE, TOTAL				MCL	E325.2	Units: mg/L	
Chloride	512		10	10	03/06/06 17:43	T_H	3189806
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		1	1	03/04/06 1:33	NW	3189085
Surr: n-Pentacosane	71.2		% 20-150	1	03/04/06 1:33	NW	3189085

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/02/2006 13:12	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	0.19		0.1	1	03/08/06 2:10	DY	3191664
Surr: 1,4-Difluorobenzene	103		% 60-155	1	03/08/06 2:10	DY	3191664
Surr: 4-Bromofluorobenzene	97.3		% 50-158	1	03/08/06 2:10	DY	3191664

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2

Collected: 02/23/2006 20:20

SPL Sample ID: 06021135-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			MCL	SW8270C	Units: ug/L		
1,2,4-Trichlorobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
1,2-Dichlorobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
1,2-Diphenylhydrazine	ND		10	1	03/03/06 18:42	GQ	3188643
1,3-Dichlorobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
1,4-Dichlorobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
2,4,5-Trichlorophenol	ND		10	1	03/03/06 18:42	GQ	3188643
2,4,6-Trichlorophenol	ND		5	1	03/03/06 18:42	GQ	3188643
2,4-Dichlorophenol	ND		5	1	03/03/06 18:42	GQ	3188643
2,4-Dimethylphenol	ND		5	1	03/03/06 18:42	GQ	3188643
2,4-Dinitrophenol	ND		25	1	03/03/06 18:42	GQ	3188643
2,4-Dinitrotoluene	ND		5	1	03/03/06 18:42	GQ	3188643
2,6-Dinitrotoluene	ND		5	1	03/03/06 18:42	GQ	3188643
2-Chloronaphthalene	ND		5	1	03/03/06 18:42	GQ	3188643
2-Chlorophenol	ND		5	1	03/03/06 18:42	GQ	3188643
2-Methylnaphthalene	ND		5	1	03/03/06 18:42	GQ	3188643
2-Nitroaniline	ND		25	1	03/03/06 18:42	GQ	3188643
2-Nitrophenol	ND		5	1	03/03/06 18:42	GQ	3188643
3,3'-Dichlorobenzidine	ND		10	1	03/03/06 18:42	GQ	3188643
3-Nitroaniline	ND		25	1	03/03/06 18:42	GQ	3188643
4,6-Dinitro-2-methylphenol	ND		25	1	03/03/06 18:42	GQ	3188643
4-Bromophenyl phenyl ether	ND		5	1	03/03/06 18:42	GQ	3188643
4-Chloro-3-methylphenol	ND		5	1	03/03/06 18:42	GQ	3188643
4-Chloroaniline	ND		5	1	03/03/06 18:42	GQ	3188643
4-Chlorophenyl phenyl ether	ND		5	1	03/03/06 18:42	GQ	3188643
4-Nitroaniline	ND		25	1	03/03/06 18:42	GQ	3188643
4-Nitrophenol	ND		25	1	03/03/06 18:42	GQ	3188643
Acenaphthene	ND		5	1	03/03/06 18:42	GQ	3188643
Acenaphthylene	ND		5	1	03/03/06 18:42	GQ	3188643
Aniline	ND		5	1	03/03/06 18:42	GQ	3188643
Anthracene	ND		5	1	03/03/06 18:42	GQ	3188643
Benz(a)anthracene	ND		5	1	03/03/06 18:42	GQ	3188643
Benzo(a)pyrene	ND		5	1	03/03/06 18:42	GQ	3188643
Benzo(b)fluoranthene	ND		5	1	03/03/06 18:42	GQ	3188643
Benzo(g,h,i)perylene	ND		5	1	03/03/06 18:42	GQ	3188643
Benzo(k)fluoranthene	ND		5	1	03/03/06 18:42	GQ	3188643
Benzoic acid	ND		25	1	03/03/06 18:42	GQ	3188643
Benzyl alcohol	ND		5	1	03/03/06 18:42	GQ	3188643
Bis(2-chloroethoxy)methane	ND		5	1	03/03/06 18:42	GQ	3188643
Bis(2-chloroethyl)ether	ND		5	1	03/03/06 18:42	GQ	3188643
Bis(2-chloroisopropyl)ether	ND		5	1	03/03/06 18:42	GQ	3188643

Qualifiers:
ND/U - Not Detected at the Reporting Limit
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* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2

Collected: 02/23/2006 20:20

SPL Sample ID: 06021135-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-ethylhexyl)phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Butyl benzyl phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Carbazole	ND		5	1	03/03/06 18:42	GQ	3188643
Chrysene	ND		5	1	03/03/06 18:42	GQ	3188643
Dibenz(a,h)anthracene	ND		5	1	03/03/06 18:42	GQ	3188643
Dibenzofuran	ND		5	1	03/03/06 18:42	GQ	3188643
Diethyl phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Dimethyl phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Di-n-butyl phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Di-n-octyl phthalate	ND		5	1	03/03/06 18:42	GQ	3188643
Fluoranthene	ND		5	1	03/03/06 18:42	GQ	3188643
Fluorene	ND		5	1	03/03/06 18:42	GQ	3188643
Hexachlorobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
Hexachlorobutadiene	ND		5	1	03/03/06 18:42	GQ	3188643
Hexachlorocyclopentadiene	ND		5	1	03/03/06 18:42	GQ	3188643
Hexachloroethane	ND		5	1	03/03/06 18:42	GQ	3188643
Indeno(1,2,3-cd)pyrene	ND		5	1	03/03/06 18:42	GQ	3188643
Isophorone	ND		5	1	03/03/06 18:42	GQ	3188643
Naphthalene	ND		5	1	03/03/06 18:42	GQ	3188643
Nitrobenzene	ND		5	1	03/03/06 18:42	GQ	3188643
N-Nitrosodi-n-propylamine	ND		5	1	03/03/06 18:42	GQ	3188643
N-Nitrosodiphenylamine	ND		5	1	03/03/06 18:42	GQ	3188643
Pentachlorophenol	ND		25	1	03/03/06 18:42	GQ	3188643
Phenanthrene	ND		5	1	03/03/06 18:42	GQ	3188643
Phenol	ND		5	1	03/03/06 18:42	GQ	3188643
Pyrene	ND		5	1	03/03/06 18:42	GQ	3188643
Pyridine	ND		5	1	03/03/06 18:42	GQ	3188643
2-Methylphenol	ND		5	1	03/03/06 18:42	GQ	3188643
3 & 4-Methylphenol	ND		5	1	03/03/06 18:42	GQ	3188643
Surr: 2,4,6-Tribromophenol	72.0		% 10-123	1	03/03/06 18:42	GQ	3188643
Surr: 2-Fluorobiphenyl	54.0		% 23-116	1	03/03/06 18:42	GQ	3188643
Surr: 2-Fluorophenol	34.7		% 16-110	1	03/03/06 18:42	GQ	3188643
Surr: Nitrobenzene-d5	48.0		% 21-114	1	03/03/06 18:42	GQ	3188643
Surr: Phenol-d5	24.0		% 10-110	1	03/03/06 18:42	GQ	3188643
Surr: Terphenyl-d14	56.0		% 22-141	1	03/03/06 18:42	GQ	3188643

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/01/2006 17:48	N_M	1.00

Qualifiers: ND/U - Not Detected at the Reporting Limit
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* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2

Collected: 02/23/2006 20:20 SPL Sample ID: 06021135-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
1,1,1,2-Tetrachloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1,1-Trichloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1,2,2-Tetrachloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1,2-Trichloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1-Dichloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1-Dichloroethene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,1-Dichloropropene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2,3-Trichlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2,3-Trichloropropane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2,4-Trichlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2,4-Trimethylbenzene	19		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dibromo-3-chloropropane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dibromoethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dichlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dichloroethane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dichloropropane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,3,5-Trimethylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,3-Dichlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,3-Dichloropropane	ND		5	1	03/01/06 21:24	LU_L	3187412
1,4-Dichlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
2,2-Dichloropropane	ND		5	1	03/01/06 21:24	LU_L	3187412
2-Butanone	ND		20	1	03/01/06 21:24	LU_L	3187412
2-Chloroethyl vinyl ether	ND		10	1	03/01/06 21:24	LU_L	3187412
2-Chlorotoluene	ND		5	1	03/01/06 21:24	LU_L	3187412
2-Hexanone	ND		10	1	03/01/06 21:24	LU_L	3187412
4-Chlorotoluene	ND		5	1	03/01/06 21:24	LU_L	3187412
4-Isopropyltoluene	ND		5	1	03/01/06 21:24	LU_L	3187412
4-Methyl-2-pentanone	ND		10	1	03/01/06 21:24	LU_L	3187412
Acetone	ND		100	1	03/01/06 21:24	LU_L	3187412
Acrylonitrile	ND		50	1	03/01/06 21:24	LU_L	3187412
Benzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Bromobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Bromochloromethane	ND		5	1	03/01/06 21:24	LU_L	3187412
Bromodichloromethane	ND		5	1	03/01/06 21:24	LU_L	3187412
Bromoform	ND		5	1	03/01/06 21:24	LU_L	3187412
Bromomethane	ND		10	1	03/01/06 21:24	LU_L	3187412
Carbon disulfide	ND		5	1	03/01/06 21:24	LU_L	3187412
Carbon tetrachloride	ND		5	1	03/01/06 21:24	LU_L	3187412
Chlorobenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Chloroethane	ND		10	1	03/01/06 21:24	LU_L	3187412

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2

Collected: 02/23/2006 20:20

SPL Sample ID: 06021135-01

Site: Hobbs, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/01/06 21:24	LU_L	3187412
Chloromethane	ND		10	1	03/01/06 21:24	LU_L	3187412
Dibromochloromethane	ND		5	1	03/01/06 21:24	LU_L	3187412
Dibromomethane	ND		5	1	03/01/06 21:24	LU_L	3187412
Dichlorodifluoromethane	ND		10	1	03/01/06 21:24	LU_L	3187412
Ethylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Hexachlorobutadiene	ND		5	1	03/01/06 21:24	LU_L	3187412
Isopropylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Methyl tert-butyl ether	ND		5	1	03/01/06 21:24	LU_L	3187412
Methylene chloride	ND		5	1	03/01/06 21:24	LU_L	3187412
Naphthalene	6		5	1	03/01/06 21:24	LU_L	3187412
n-Butylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
n-Propylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
sec-Butylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Styrene	ND		5	1	03/01/06 21:24	LU_L	3187412
tert-Butylbenzene	ND		5	1	03/01/06 21:24	LU_L	3187412
Tetrachloroethene	ND		5	1	03/01/06 21:24	LU_L	3187412
Toluene	ND		5	1	03/01/06 21:24	LU_L	3187412
Trichloroethene	ND		5	1	03/01/06 21:24	LU_L	3187412
Trichlorofluoromethane	ND		5	1	03/01/06 21:24	LU_L	3187412
Vinyl acetate	ND		10	1	03/01/06 21:24	LU_L	3187412
Vinyl chloride	ND		10	1	03/01/06 21:24	LU_L	3187412
cis-1,2-Dichloroethene	ND		5	1	03/01/06 21:24	LU_L	3187412
cis-1,3-Dichloropropene	ND		5	1	03/01/06 21:24	LU_L	3187412
m,p-Xylene	56		5	1	03/01/06 21:24	LU_L	3187412
o-Xylene	ND		5	1	03/01/06 21:24	LU_L	3187412
trans-1,2-Dichloroethene	ND		5	1	03/01/06 21:24	LU_L	3187412
trans-1,3-Dichloropropene	ND		5	1	03/01/06 21:24	LU_L	3187412
1,2-Dichloroethene (total)	ND		5	1	03/01/06 21:24	LU_L	3187412
Xylenes, Total	56		5	1	03/01/06 21:24	LU_L	3187412
Surr: 1,2-Dichloroethane-d4	98.0		% 62-130	1	03/01/06 21:24	LU_L	3187412
Surr: 4-Bromofluorobenzene	88.0		% 70-130	1	03/01/06 21:24	LU_L	3187412
Surr: Toluene-d8	94.0		% 74-122	1	03/01/06 21:24	LU_L	3187412

Qualifiers: ND/U - Not Detected at the Reporting Limit
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MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:FB-3

Collected: 02/23/2006 20:30 SPL Sample ID: 06021135-02

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	03/08/06 6:11	DY	3191669
Surr: 1,4-Difluorobenzene	98.3		% 60-155	1	03/08/06 6:11	DY	3191669
Surr: 4-Bromofluorobenzene	96.7		% 50-158	1	03/08/06 6:11	DY	3191669

Qualifiers:

ND/U - Not Detected at the Reporting Limit

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D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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3/14/2006 2:05:49 PM



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:FB-3

Collected: 02/23/2006 20:30 SPL Sample ID: 06021135-02

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
1,1,1,2-Tetrachloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1,1-Trichloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1,2,2-Tetrachloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1,2-Trichloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1-Dichloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1-Dichloroethene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,1-Dichloropropene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2,3-Trichlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2,3-Trichloropropane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2,4-Trichlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2,4-Trimethylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dibromo-3-chloropropane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dibromoethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dichlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dichloroethane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dichloropropane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,3,5-Trimethylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,3-Dichlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,3-Dichloropropane	ND		5	1	03/01/06 20:31	LU_L	3187410
1,4-Dichlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
2,2-Dichloropropane	ND		5	1	03/01/06 20:31	LU_L	3187410
2-Butanone	ND		20	1	03/01/06 20:31	LU_L	3187410
2-Chloroethyl vinyl ether	ND		10	1	03/01/06 20:31	LU_L	3187410
2-Chlorotoluene	ND		5	1	03/01/06 20:31	LU_L	3187410
2-Hexanone	ND		10	1	03/01/06 20:31	LU_L	3187410
4-Chlorotoluene	ND		5	1	03/01/06 20:31	LU_L	3187410
4-Isopropyltoluene	ND		5	1	03/01/06 20:31	LU_L	3187410
4-Methyl-2-pentanone	ND		10	1	03/01/06 20:31	LU_L	3187410
Acetone	ND		100	1	03/01/06 20:31	LU_L	3187410
Acrylonitrile	ND		50	1	03/01/06 20:31	LU_L	3187410
Benzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Bromobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Bromochloromethane	ND		5	1	03/01/06 20:31	LU_L	3187410
Bromodichloromethane	ND		5	1	03/01/06 20:31	LU_L	3187410
Bromoform	ND		5	1	03/01/06 20:31	LU_L	3187410
Bromomethane	ND		10	1	03/01/06 20:31	LU_L	3187410
Carbon disulfide	ND		5	1	03/01/06 20:31	LU_L	3187410
Carbon tetrachloride	ND		5	1	03/01/06 20:31	LU_L	3187410
Chlorobenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Chloroethane	ND		10	1	03/01/06 20:31	LU_L	3187410

Qualifiers: ND/U - Not Detected at the Reporting Limit
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D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:FB-3

Collected: 02/23/2006 20:30

SPL Sample ID: 06021135-02

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/01/06 20:31	LU_L	3187410
Chloromethane	ND		10	1	03/01/06 20:31	LU_L	3187410
Dibromochloromethane	ND		5	1	03/01/06 20:31	LU_L	3187410
Dibromomethane	ND		5	1	03/01/06 20:31	LU_L	3187410
Dichlorodifluoromethane	ND		10	1	03/01/06 20:31	LU_L	3187410
Ethylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Hexachlorobutadiene	ND		5	1	03/01/06 20:31	LU_L	3187410
Isopropylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Methyl tert-butyl ether	ND		5	1	03/01/06 20:31	LU_L	3187410
Methylene chloride	ND		5	1	03/01/06 20:31	LU_L	3187410
Naphthalene	ND		5	1	03/01/06 20:31	LU_L	3187410
n-Butylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
n-Propylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
sec-Butylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Styrene	ND		5	1	03/01/06 20:31	LU_L	3187410
tert-Butylbenzene	ND		5	1	03/01/06 20:31	LU_L	3187410
Tetrachloroethene	ND		5	1	03/01/06 20:31	LU_L	3187410
Toluene	ND		5	1	03/01/06 20:31	LU_L	3187410
Trichloroethene	ND		5	1	03/01/06 20:31	LU_L	3187410
Trichlorofluoromethane	ND		5	1	03/01/06 20:31	LU_L	3187410
Vinyl acetate	ND		10	1	03/01/06 20:31	LU_L	3187410
Vinyl chloride	ND		10	1	03/01/06 20:31	LU_L	3187410
cis-1,2-Dichloroethene	ND		5	1	03/01/06 20:31	LU_L	3187410
cis-1,3-Dichloropropene	ND		5	1	03/01/06 20:31	LU_L	3187410
m,p-Xylene	ND		5	1	03/01/06 20:31	LU_L	3187410
o-Xylene	ND		5	1	03/01/06 20:31	LU_L	3187410
trans-1,2-Dichloroethene	ND		5	1	03/01/06 20:31	LU_L	3187410
trans-1,3-Dichloropropene	ND		5	1	03/01/06 20:31	LU_L	3187410
1,2-Dichloroethene (total)	ND		5	1	03/01/06 20:31	LU_L	3187410
Xylenes, Total	ND		5	1	03/01/06 20:31	LU_L	3187410
Surr: 1,2-Dichloroethane-d4	94.0		% 62-130	1	03/01/06 20:31	LU_L	3187410
Surr: 4-Bromofluorobenzene	82.0		% 70-130	1	03/01/06 20:31	LU_L	3187410
Surr: Toluene-d8	94.0		% 74-122	1	03/01/06 20:31	LU_L	3187410

Qualifiers:

ND/U - Not Detected at the Reporting Limit
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* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-3

Collected: 02/23/2006 20:50 SPL Sample ID: 06021135-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Diesel Range Organics (C10-C28)	ND		1	1	03/04/06 1:56	NW	3189086
Surr: n-Pentacosane	86.0		% 20-150	1	03/04/06 1:56	NW	3189086

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/02/2006 13:12	N_M	1.00

GASOLINE RANGE ORGANICS			MCL	SW8015B	Units: mg/L		
Gasoline Range Organics	ND		0.1	1	03/08/06 1:41	DY	3191663
Surr: 1,4-Difluorobenzene	97.7		% 60-155	1	03/08/06 1:41	DY	3191663
Surr: 4-Bromofluorobenzene	97.3		% 50-158	1	03/08/06 1:41	DY	3191663

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-3

Collected: 02/23/2006 20:50

SPL Sample ID: 06021135-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C				MCL	SW8270C	Units: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
1,2-Dichlorobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
1,2-Diphenylhydrazine	ND		10	1	03/03/06 19:12	GQ	3188644
1,3-Dichlorobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
1,4-Dichlorobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
2,4,5-Trichlorophenol	ND		10	1	03/03/06 19:12	GQ	3188644
2,4,6-Trichlorophenol	ND		5	1	03/03/06 19:12	GQ	3188644
2,4-Dichlorophenol	ND		5	1	03/03/06 19:12	GQ	3188644
2,4-Dimethylphenol	ND		5	1	03/03/06 19:12	GQ	3188644
2,4-Dinitrophenol	ND		25	1	03/03/06 19:12	GQ	3188644
2,4-Dinitrotoluene	ND		5	1	03/03/06 19:12	GQ	3188644
2,6-Dinitrotoluene	ND		5	1	03/03/06 19:12	GQ	3188644
2-Chloronaphthalene	ND		5	1	03/03/06 19:12	GQ	3188644
2-Chlorophenol	ND		5	1	03/03/06 19:12	GQ	3188644
2-Methylnaphthalene	ND		5	1	03/03/06 19:12	GQ	3188644
2-Nitroaniline	ND		25	1	03/03/06 19:12	GQ	3188644
2-Nitrophenol	ND		5	1	03/03/06 19:12	GQ	3188644
3,3'-Dichlorobenzidine	ND		10	1	03/03/06 19:12	GQ	3188644
3-Nitroaniline	ND		25	1	03/03/06 19:12	GQ	3188644
4,6-Dinitro-2-methylphenol	ND		25	1	03/03/06 19:12	GQ	3188644
4-Bromophenyl phenyl ether	ND		5	1	03/03/06 19:12	GQ	3188644
4-Chloro-3-methylphenol	ND		5	1	03/03/06 19:12	GQ	3188644
4-Chloroaniline	ND		5	1	03/03/06 19:12	GQ	3188644
4-Chlorophenyl phenyl ether	ND		5	1	03/03/06 19:12	GQ	3188644
4-Nitroaniline	ND		25	1	03/03/06 19:12	GQ	3188644
4-Nitrophenol	ND		25	1	03/03/06 19:12	GQ	3188644
Acenaphthene	ND		5	1	03/03/06 19:12	GQ	3188644
Acenaphthylene	ND		5	1	03/03/06 19:12	GQ	3188644
Aniline	ND		5	1	03/03/06 19:12	GQ	3188644
Anthracene	ND		5	1	03/03/06 19:12	GQ	3188644
Benz(a)anthracene	ND		5	1	03/03/06 19:12	GQ	3188644
Benzo(a)pyrene	ND		5	1	03/03/06 19:12	GQ	3188644
Benzo(b)fluoranthene	ND		5	1	03/03/06 19:12	GQ	3188644
Benzo(g,h,i)perylene	ND		5	1	03/03/06 19:12	GQ	3188644
Benzo(k)fluoranthene	ND		5	1	03/03/06 19:12	GQ	3188644
Benzoic acid	ND		25	1	03/03/06 19:12	GQ	3188644
Benzyl alcohol	ND		5	1	03/03/06 19:12	GQ	3188644
Bis(2-chloroethoxy)methane	ND		5	1	03/03/06 19:12	GQ	3188644
Bis(2-chloroethyl)ether	ND		5	1	03/03/06 19:12	GQ	3188644
Bis(2-chloroisopropyl)ether	ND		5	1	03/03/06 19:12	GQ	3188644

Qualifiers: ND/U - Not Detected at the Reporting Limit
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J - Estimated Value between MDL and PQL

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MI - Matrix Interference



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-3

Collected: 02/23/2006 20:50

SPL Sample ID: 06021135-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-ethylhexyl)phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Butyl benzyl phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Carbazole	ND		5	1	03/03/06 19:12	GQ	3188644
Chrysene	ND		5	1	03/03/06 19:12	GQ	3188644
Dibenz(a,h)anthracene	ND		5	1	03/03/06 19:12	GQ	3188644
Dibenzofuran	ND		5	1	03/03/06 19:12	GQ	3188644
Diethyl phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Dimethyl phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Di-n-butyl phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Di-n-octyl phthalate	ND		5	1	03/03/06 19:12	GQ	3188644
Fluoranthene	ND		5	1	03/03/06 19:12	GQ	3188644
Fluorene	ND		5	1	03/03/06 19:12	GQ	3188644
Hexachlorobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
Hexachlorobutadiene	ND		5	1	03/03/06 19:12	GQ	3188644
Hexachlorocyclopentadiene	ND		5	1	03/03/06 19:12	GQ	3188644
Hexachloroethane	ND		5	1	03/03/06 19:12	GQ	3188644
Indeno(1,2,3-cd)pyrene	ND		5	1	03/03/06 19:12	GQ	3188644
Isophorone	ND		5	1	03/03/06 19:12	GQ	3188644
Naphthalene	ND		5	1	03/03/06 19:12	GQ	3188644
Nitrobenzene	ND		5	1	03/03/06 19:12	GQ	3188644
N-Nitrosodi-n-propylamine	ND		5	1	03/03/06 19:12	GQ	3188644
N-Nitrosodiphenylamine	ND		5	1	03/03/06 19:12	GQ	3188644
Pentachlorophenol	ND		25	1	03/03/06 19:12	GQ	3188644
Phenanthrene	ND		5	1	03/03/06 19:12	GQ	3188644
Phenol	ND		5	1	03/03/06 19:12	GQ	3188644
Pyrene	ND		5	1	03/03/06 19:12	GQ	3188644
Pyridine	ND		5	1	03/03/06 19:12	GQ	3188644
2-Methylphenol	ND		5	1	03/03/06 19:12	GQ	3188644
3 & 4-Methylphenol	ND		5	1	03/03/06 19:12	GQ	3188644
Surr: 2,4,6-Tribromophenol	80.0		% 10-123	1	03/03/06 19:12	GQ	3188644
Surr: 2-Fluorobiphenyl	72.0		% 23-116	1	03/03/06 19:12	GQ	3188644
Surr: 2-Fluorophenol	46.7		% 16-110	1	03/03/06 19:12	GQ	3188644
Surr: Nitrobenzene-d5	68.0		% 21-114	1	03/03/06 19:12	GQ	3188644
Surr: Phenol-d5	28.0		% 10-110	1	03/03/06 19:12	GQ	3188644
Surr: Terphenyl-d14	78.0		% 22-141	1	03/03/06 19:12	GQ	3188644

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	03/01/2006 17:48	N_M	1.00

Qualifiers: ND/U - Not Detected at the Reporting Limit
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-3

Collected: 02/23/2006 20:50

SPL Sample ID: 06021135-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
1,1,1,2-Tetrachloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1,1-Trichloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1,2,2-Tetrachloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1,2-Trichloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1-Dichloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1-Dichloroethene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,1-Dichloropropene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2,3-Trichlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2,3-Trichloropropane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2,4-Trichlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2,4-Trimethylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dibromo-3-chloropropane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dibromoethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dichlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dichloroethane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dichloropropane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,3,5-Trimethylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,3-Dichlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,3-Dichloropropane	ND		5	1	03/01/06 20:57	LU_L	3187411
1,4-Dichlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
2,2-Dichloropropane	ND		5	1	03/01/06 20:57	LU_L	3187411
2-Butanone	ND		20	1	03/01/06 20:57	LU_L	3187411
2-Chloroethyl vinyl ether	ND		10	1	03/01/06 20:57	LU_L	3187411
2-Chlorotoluene	ND		5	1	03/01/06 20:57	LU_L	3187411
2-Hexanone	ND		10	1	03/01/06 20:57	LU_L	3187411
4-Chlorotoluene	ND		5	1	03/01/06 20:57	LU_L	3187411
4-Isopropyltoluene	ND		5	1	03/01/06 20:57	LU_L	3187411
4-Methyl-2-pentanone	ND		10	1	03/01/06 20:57	LU_L	3187411
Acetone	ND		100	1	03/01/06 20:57	LU_L	3187411
Acrylonitrile	ND		50	1	03/01/06 20:57	LU_L	3187411
Benzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Bromobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Bromochloromethane	ND		5	1	03/01/06 20:57	LU_L	3187411
Bromodichloromethane	ND		5	1	03/01/06 20:57	LU_L	3187411
Bromoform	ND		5	1	03/01/06 20:57	LU_L	3187411
Bromomethane	ND		10	1	03/01/06 20:57	LU_L	3187411
Carbon disulfide	ND		5	1	03/01/06 20:57	LU_L	3187411
Carbon tetrachloride	ND		5	1	03/01/06 20:57	LU_L	3187411
Chlorobenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Chloroethane	ND		10	1	03/01/06 20:57	LU_L	3187411

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
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J - Estimated Value between MDL and PQL

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID:RB-3

Collected: 02/23/2006 20:50

SPL Sample ID: 06021135-03

Site: Hobbs,NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroform	ND		5	1	03/01/06 20:57	LU_L	3187411
Chloromethane	ND		10	1	03/01/06 20:57	LU_L	3187411
Dibromochloromethane	ND		5	1	03/01/06 20:57	LU_L	3187411
Dibromomethane	ND		5	1	03/01/06 20:57	LU_L	3187411
Dichlorodifluoromethane	ND		10	1	03/01/06 20:57	LU_L	3187411
Ethylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Hexachlorobutadiene	ND		5	1	03/01/06 20:57	LU_L	3187411
Isopropylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Methyl tert-butyl ether	ND		5	1	03/01/06 20:57	LU_L	3187411
Methylene chloride	ND		5	1	03/01/06 20:57	LU_L	3187411
Naphthalene	ND		5	1	03/01/06 20:57	LU_L	3187411
n-Butylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
n-Propylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
sec-Butylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Styrene	ND		5	1	03/01/06 20:57	LU_L	3187411
tert-Butylbenzene	ND		5	1	03/01/06 20:57	LU_L	3187411
Tetrachloroethene	ND		5	1	03/01/06 20:57	LU_L	3187411
Toluene	ND		5	1	03/01/06 20:57	LU_L	3187411
Trichloroethene	ND		5	1	03/01/06 20:57	LU_L	3187411
Trichlorofluoromethane	ND		5	1	03/01/06 20:57	LU_L	3187411
Vinyl acetate	ND		10	1	03/01/06 20:57	LU_L	3187411
Vinyl chloride	ND		10	1	03/01/06 20:57	LU_L	3187411
cis-1,2-Dichloroethene	ND		5	1	03/01/06 20:57	LU_L	3187411
cis-1,3-Dichloropropene	ND		5	1	03/01/06 20:57	LU_L	3187411
m,p-Xylene	ND		5	1	03/01/06 20:57	LU_L	3187411
o-Xylene	ND		5	1	03/01/06 20:57	LU_L	3187411
trans-1,2-Dichloroethene	ND		5	1	03/01/06 20:57	LU_L	3187411
trans-1,3-Dichloropropene	ND		5	1	03/01/06 20:57	LU_L	3187411
1,2-Dichloroethene (total)	ND		5	1	03/01/06 20:57	LU_L	3187411
Xylenes, Total	ND		5	1	03/01/06 20:57	LU_L	3187411
Surr: 1,2-Dichloroethane-d4	96.0		% 62-130	1	03/01/06 20:57	LU_L	3187411
Surr: 4-Bromofluorobenzene	86.0		% 70-130	1	03/01/06 20:57	LU_L	3187411
Surr: Toluene-d8	98.0		% 74-122	1	03/01/06 20:57	LU_L	3187411

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
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MI - Matrix Interference

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 06021135
Lab Batch ID: 55558

Method Blank

Samples in Analytical Batch:

RunID: HP_V_060303I-3189079 Units: mg/L
Analysis Date: 03/03/2006 21:41 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Lab Sample ID	Client Sample ID
06021135-01D	MW-2
06021135-03D	RB-3

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	1.0
Surr: n-Pentacosane	75.6	20-150

Laboratory Control Sample (LCS)

RunID: HP_V_060303I-3189080 Units: mg/L
Analysis Date: 03/03/2006 22:04 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	2.00	1.90	95.0	21	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021169-05
RunID: HP_V_060303I-3189082 Units: mg/L
Analysis Date: 03/03/2006 22:51 Analyst: NW
Preparation Date: 03/02/2006 13:12 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	4	4.38	105	4	3.97	95.1	9.93	39	26	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 06021135
Lab Batch ID: R164356

Method Blank

Samples in Analytical Batch:

RunID: HP_J_060307C-3191657 Units: mg/L
Analysis Date: 03/07/2006 21:12 Analyst: DY
Preparation Date: 03/07/2006 21:12 Prep By: Method SW5030B

Lab Sample ID	Client Sample ID
06021135-01B	MW-2
06021135-02B	FB-3
06021135-03B	RB-3

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	98.3	60-155
Surr: 4-Bromofluorobenzene	93.0	50-158

Laboratory Control Sample (LCS)

RunID: HP_J_060307C-3191656 Units: mg/L
Analysis Date: 03/07/2006 20:42 Analyst: DY
Preparation Date: 03/07/2006 20:42 Prep By: Method SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.881	88.1	42	136

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021135-03
RunID: HP_J_060307C-3191665 Units: mg/L
Analysis Date: 03/08/2006 3:40 Analyst: DY

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.960	107	0.9	0.887	98.6	7.84	36	22	174

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021135
Lab Batch ID: 55541A

Method Blank

Samples in Analytical Batch:

RunID: J_060306D-3190374

Units: ug/L

Lab Sample ID

Client Sample ID

Analysis Date: 03/06/2006 12:20

Analyst: S_G

06021135-01C

MW-2

Preparation Date: 03/01/2006 17:48

Prep By: N_M Method SW3510C

06021135-03C

RB-3

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Diphenylhydrazine	ND	10
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,4,5-Trichlorophenol	ND	10
2,4,6-Trichlorophenol	ND	5.0
2,4-Dichlorophenol	ND	5.0
2,4-Dimethylphenol	ND	5.0
2,4-Dinitrophenol	ND	25
2,4-Dinitrotoluene	ND	5.0
2,6-Dinitrotoluene	ND	5.0
2-Chloronaphthalene	ND	5.0
2-Chlorophenol	ND	5.0
2-Methylnaphthalene	ND	5.0
2-Nitroaniline	ND	25
2-Nitrophenol	ND	5.0
3,3'-Dichlorobenzidine	ND	10
3-Nitroaniline	ND	25
4,6-Dinitro-2-methylphenol	ND	25
4-Bromophenyl phenyl ether	ND	5.0
4-Chloro-3-methylphenol	ND	5.0
4-Chloroaniline	ND	5.0
4-Chlorophenyl phenyl ether	ND	5.0
4-Nitroaniline	ND	25
4-Nitrophenol	ND	25
Acenaphthene	ND	5.0
Acenaphthylene	ND	5.0
Aniline	ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND	5.0
Benzo(a)pyrene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzoic acid	ND	25
Benzyl alcohol	ND	5.0
Bis(2-chloroethoxy)methane	ND	5.0
Bis(2-chloroethyl)ether	ND	5.0
Bis(2-chloroisopropyl)ether	ND	5.0
Bis(2-ethylhexyl)phthalate	ND	5.0
Butyl benzyl phthalate	ND	5.0
Carbazole	ND	5.0
Chrysene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Dibenzofuran	ND	5.0
Diethyl phthalate	ND	5.0
Dimethyl phthalate	ND	5.0

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder: 06021135

Lab Batch ID: 55541A

Method Blank

RunID: J_060306D-3190374

Units: ug/L

Analysis Date: 03/06/2006 12:20

Analyst: S_G

Preparation Date: 03/01/2006 17:48

Prep By: N_M Method SW3510C

Analyte	Result	Rep Limit
Di-n-butyl phthalate	ND	5.0
Di-n-octyl phthalate	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Hexachlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Hexachlorocyclopentadiene	ND	5.0
Hexachloroethane	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Isophorone	ND	5.0
Naphthalene	ND	5.0
Nitrobenzene	ND	5.0
N-Nitrosodi-n-propylamine	ND	5.0
N-Nitrosodiphenylamine	ND	5.0
Pentachlorophenol	ND	25
Phenanthrene	ND	5.0
Phenol	ND	5.0
Pyrene	ND	5.0
Pyridine	ND	5.0
2-Methylphenol	ND	5.0
3 & 4-Methylphenol	ND	5.0
Surr: 2,4,6-Tribromophenol	70.7	10-123
Surr: 2-Fluorobiphenyl	68.0	23-116
Surr: 2-Fluorophenol	66.7	16-110
Surr: Nitrobenzene-d5	66.0	21-114
Surr: Phenol-d5	73.3	10-110
Surr: Terphenyl-d14	68.0	22-141

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375

Units: ug/L

Analysis Date: 03/06/2006 12:59

Analyst: S_G

Preparation Date: 03/01/2006 17:48

Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	20.0	80.0	21	120
1,2-Dichlorobenzene	25.0	20.0	80.0	20	150
1,2-Diphenylhydrazine	25.0	18.0	72.0	10	160
1,3-Dichlorobenzene	25.0	20.0	80.0	20	150
1,4-Dichlorobenzene	25.0	19.0	76.0	20	150
2,4,5-Trichlorophenol	25.0	20.0	80.0	30	150

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder: 06021135

Lab Batch ID: 55541A

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375 Units: ug/L
Analysis Date: 03/06/2006 12:59 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
2,4,6-Trichlorophenol	25.0	20.0	80.0	30	150
2,4-Dichlorophenol	25.0	20.0	80.0	30	150
2,4-Dimethylphenol	25.0	21.0	84.0	32	140
2,4-Dinitrophenol	25.0	15.0	60.0	10	160
2,4-Dinitrotoluene	25.0	22.0	88.0	30	150
2,6-Dinitrotoluene	25.0	22.0	88.0	30	150
2-Chloronaphthalene	25.0	19.0	76.0	30	150
2-Chlorophenol	25.0	19.0	76.0	23	134
2-Methylnaphthalene	25.0	21.0	84.0	20	170
2-Nitroaniline	25.0	18.0	72.0	20	160
2-Nitrophenol	25.0	19.0	76.0	29	182
3,3'-Dichlorobenzidine	25.0	17.0	68.0	30	200
3-Nitroaniline	25.0	19.0	76.0	20	160
4,6-Dinitro-2-methylphenol	25.0	15.0	60.0	10	160
4-Bromophenyl phenyl ether	25.0	16.0	64.0	30	150
4-Chloro-3-methylphenol	25.0	21.0	84.0	25	160
4-Chloroaniline	25.0	17.0	68.0	20	160
4-Chlorophenyl phenyl ether	25.0	20.0	80.0	25	158
4-Nitroaniline	25.0	19.0	76.0	20	160
4-Nitrophenol	25.0	21.0	84.0	10	132
Acenaphthene	25.0	21.0	84.0	30	150
Acenaphthylene	25.0	21.0	84.0	33	250
Aniline	25.0	14.0	56.0	10	135
Anthracene	25.0	19.0	76.0	27	133
Benz(a)anthracene	25.0	20.0	80.0	33	143
Benzo(a)pyrene	25.0	23.0	92.0	17	163
Benzo(b)fluoranthene	25.0	23.0	92.0	24	159
Benzo(g,h,i)perylene	25.0	23.0	92.0	30	160
Benzo(k)fluoranthene	25.0	24.0	96.0	11	162
Benzoic acid	25.0	8.00	32.0	10	400
Benzyl alcohol	25.0	18.0	72.0	30	160
Bis(2-chloroethoxy)methane	25.0	22.0	88.0	33	184
Bis(2-chloroethyl)ether	25.0	17.0	68.0	12	158
Bis(2-chloroisopropyl)ether	25.0	19.0	76.0	20	160
Bis(2-ethylhexyl)phthalate	25.0	20.0	80.0	10	158

Qualifiers: ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder: 06021135

Lab Batch ID: 55541A

Laboratory Control Sample (LCS)

RunID: J_060306D-3190375 Units: ug/L
Analysis Date: 03/06/2006 12:59 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Butyl benzyl phthalate	25.0	21.0	84.0	30	160
Carbazole	25.0	20.0	80.0	30	150
Chrysene	25.0	19.0	76.0	17	168
Dibenz(a,h)anthracene	25.0	23.0	92.0	30	160
Dibenzofuran	25.0	21.0	84.0	30	150
Diethyl phthalate	25.0	23.0	92.0	30	160
Dimethyl phthalate	25.0	22.0	88.0	30	160
Di-n-butyl phthalate	25.0	20.0	80.0	30	160
Di-n-octyl phthalate	25.0	19.0	76.0	20	150
Fluoranthene	25.0	21.0	84.0	26	137
Fluorene	25.0	21.0	84.0	30	150
Hexachlorobenzene	25.0	18.0	72.0	20	150
Hexachlorobutadiene	25.0	22.0	88.0	20	140
Hexachlorocyclopentadiene	25.0	13.0	52.0	10	150
Hexachloroethane	25.0	20.0	80.0	14	120
Indeno(1,2,3-cd)pyrene	25.0	18.0	72.0	30	160
Isophorone	25.0	25.0	100	21	196
Naphthalene	25.0	21.0	84.0	21	133
Nitrobenzene	25.0	20.0	80.0	20	160
N-Nitrosodi-n-propylamine	25.0	20.0	80.0	30	160
N-Nitrosodiphenylamine	50.0	37.0	74.0	30	150
Pentachlorophenol	25.0	16.0	64.0	14	176
Phenanthrene	25.0	19.0	76.0	10	140
Phenol	25.0	19.0	76.0	10	112
Pyrene	25.0	20.0	80.0	30	150
Pyridine	25.0	13.0	52.0	10	150
2-Methylphenol	25.0	19.0	76.0	30	160
3 & 4-Methylphenol	25.0	19.0	76.0	10	160

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder: 06021135

Lab Batch ID: 55541A

Sample Spiked: 06021107-02

RunID: J_060306D-3190376

Units: mg/L

Analysis Date: 03/06/2006 15:32

Analyst: S_G

Preparation Date: 03/01/2006 17:48

Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trichlorobenzene	ND	0.05	0.0400	80.0	0.05	0.0390	78.0	2.53	28	10	142
1,2-Dichlorobenzene	ND	0.05	0.0390	78.0	0.05	0.0370	74.0	5.26	50	20	150
1,2-Diphenylhydrazine	ND	0.05	0.0420	84.0	0.05	0.0420	84.0	0	50	10	160
1,3-Dichlorobenzene	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	20	150
1,4-Dichlorobenzene	ND	0.05	0.0360	72.0	0.05	0.0360	72.0	0	45	20	150
2,4,5-Trichlorophenol	ND	0.05	0.0440	88.0	0.05	0.0430	86.0	2.30	50	30	150
2,4,6-Trichlorophenol	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	30	150
2,4-Dichlorophenol	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	50	30	150
2,4-Dimethylphenol	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	50	32	140
2,4-Dinitrophenol	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	10	160
2,4-Dinitrotoluene	ND	0.05	0.0460	92.0	0.05	0.0420	84.0	9.09	50	30	150
2,6-Dinitrotoluene	ND	0.05	0.0460	92.0	0.05	0.0430	86.0	6.74	50	30	150
2-Chloronaphthalene	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	30	150
2-Chlorophenol	ND	0.05	0.0400	80.0	0.05	0.0410	82.0	2.47	40	23	134
2-Methylnaphthalene	ND	0.05	0.0440	88.0	0.05	0.0430	86.0	2.30	50	20	170
2-Nitroaniline	ND	0.05	0.00800	16.0 *	0.05	0.00800	16.0 *	0	50	20	160
2-Nitrophenol	ND	0.05	0.0410	82.0	0.05	0.0410	82.0	0	50	29	182
3,3'-Dichlorobenzidine	ND	0.05	0	0 *	0.05	0	0 *	0	50	30	200
3-Nitroaniline	ND	0.05	0.00900	18.0 *	0.05	0.00900	18.0 *	0	50	20	160
4,6-Dinitro-2-methylphenol	ND	0.05	0.0380	76.0	0.05	0.0360	72.0	5.41	50	10	160
4-Bromophenyl phenyl ether	ND	0.05	0.0350	70.0	0.05	0.0350	70.0	0	50	30	150
4-Chloro-3-methylphenol	ND	0.05	0.0450	90.0	0.05	0.0450	90.0	0	42	25	160
4-Chloroaniline	ND	0.05	0.0290	58.0	0.05	0.0280	56.0	3.51	50	20	160
4-Chlorophenyl phenyl ether	ND	0.05	0.0420	84.0	0.05	0.0400	80.0	4.88	50	25	158
4-Nitroaniline	ND	0.05	0.00200	4.00 *	0.05	0.00200	4.00 *	0	50	20	160
4-Nitrophenol	ND	0.05	0.0310	62.0	0.05	0.0340	68.0	9.23	50	10	132
Acenaphthene	ND	0.05	0.0450	90.0	0.05	0.0420	84.0	6.90	31	30	150
Acenaphthylene	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	33	250
Aniline	ND	0.05	0.0270	54.0	0.05	0.0220	44.0	20.4	50	10	135
Anthracene	ND	0.05	0.0430	86.0	0.05	0.0410	82.0	4.76	50	27	133
Benz(a)anthracene	ND	0.05	0.0430	86.0	0.05	0.0430	86.0	0	50	33	143
Benzo(a)pyrene	ND	0.05	0.0490	98.0	0.05	0.0490	98.0	0	50	17	163
Benzo(b)fluoranthene	ND	0.05	0.0500	100	0.05	0.0480	96.0	4.08	50	24	159
Benzo(g,h,i)perylene	ND	0.05	0.0520	104	0.05	0.0540	108	3.77	50	30	160

Qualifiers: ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell

BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder: 06021135

Lab Batch ID: 55541A

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021107-02

RunID: J_060306D-3190376

Units: mg/L

Analysis Date: 03/06/2006 15:32

Analyst: S_G

Preparation Date: 03/01/2006 17:48

Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzo(k)fluoranthene	ND	0.05	0.0500	100	0.05	0.0510	102	1.98	50	11	162
Benzoic acid	ND	0.05	0.0100	20.0	0.05	0.0190	38.0	62.1 *	50	10	400
Benzyl alcohol	ND	0.05	0.0410	82.0	0.05	0.0420	84.0	2.41	50	30	160
Bis(2-chloroethoxy)methane	ND	0.05	0.0470	94.0	0.05	0.0460	92.0	2.15	50	33	184
Bis(2-chloroethyl)ether	ND	0.05	0.0400	80.0	0.05	0.0390	78.0	2.53	50	12	158
Bis(2-chloroisopropyl)ether	ND	0.05	0.0430	86.0	0.05	0.0430	86.0	0	50	20	160
Bis(2-ethylhexyl)phthalate	ND	0.05	0.0480	96.0	0.05	0.0470	94.0	2.11	50	10	158
Butyl benzyl phthalate	ND	0.05	0.0480	96.0	0.05	0.0470	94.0	2.11	50	30	160
Carbazole	ND	0.05	0.0440	88.0	0.05	0.0420	84.0	4.65	50	30	150
Chrysene	ND	0.05	0.0430	86.0	0.05	0.0420	84.0	2.35	50	17	168
Dibenz(a,h)anthracene	ND	0.05	0.0500	100	0.05	0.0510	102	1.98	50	30	160
Dibenzofuran	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	30	150
Diethyl phthalate	ND	0.05	0.0470	92.0	0.05	0.0450	88.0	4.35	50	30	160
Dimethyl phthalate	ND	0.05	0.0450	90.0	0.05	0.0440	88.0	2.25	50	30	160
Di-n-butyl phthalate	ND	0.05	0.0460	92.0	0.05	0.0440	88.0	4.44	50	30	160
Di-n-octyl phthalate	ND	0.05	0.0450	90.0	0.05	0.0440	88.0	2.25	50	20	150
Fluoranthene	ND	0.05	0.0470	94.0	0.05	0.0430	86.0	8.89	50	26	137
Fluorene	ND	0.05	0.0440	88.0	0.05	0.0420	84.0	4.65	50	30	150
Hexachlorobenzene	ND	0.05	0.0410	82.0	0.05	0.0400	80.0	2.47	50	20	150
Hexachlorobutadiene	ND	0.05	0.0450	90.0	0.05	0.0430	86.0	4.55	50	20	140
Hexachlorocyclopentadiene	ND	0.05	0.0300	60.0	0.05	0.0280	56.0	6.90	50	10	150
Hexachloroethane	ND	0.05	0.0380	76.0	0.05	0.0380	76.0	0	50	10	140
Indeno(1,2,3-cd)pyrene	ND	0.05	0.0440	88.0	0.05	0.0440	88.0	0	50	30	160
Isophorone	ND	0.05	0.0530	106	0.05	0.0530	106	0	50	21	196
Naphthalene	ND	0.05	0.0620	124	0.05	0.0590	118	4.96	50	21	133
Nitrobenzene	ND	0.05	0.0540	108	0.05	0.0510	102	5.71	50	20	160
N-Nitrosodi-n-propylamine	ND	0.05	0.0450	90.0	0.05	0.0460	92.0	2.20	38	30	160
N-Nitrosodiphenylamine	ND	0.1	0.0810	81.0	0.1	0.0810	81.0	0	50	30	150
Pentachlorophenol	ND	0.05	0.0370	64.0	0.05	0.0400	70.0	7.79	50	14	176
Phenanthrene	ND	0.05	0.0410	82.0	0.05	0.0400	80.0	2.47	50	10	140
Phenol	ND	0.05	0.0250	50.0	0.05	0.0330	66.0	27.6	42	10	112
Pyrene	ND	0.05	0.0420	84.0	0.05	0.0430	86.0	2.35	31	30	150
Pyridine	ND	0.05	0.0140	28.0	0.05	0.00600	12.0	80.0 *	50	10	150

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 06021135
Lab Batch ID: 55541A

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021107-02
RunID: J_060306D-3190376 Units: mg/L
Analysis Date: 03/06/2006 15:32 Analyst: S_G
Preparation Date: 03/01/2006 17:48 Prep By: N_M Method SW3510C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
2-Methylphenol	ND	0.05	0.0410	82.0	0.05	0.0440	88.0	7.06	50	30	160
3 & 4-Methylphenol	ND	0.05	0.0370	74.0	0.05	0.0420	84.0	12.7	50	10	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021135
Lab Batch ID: R164107

Method Blank

Samples in Analytical Batch:

RunID: K_060301B-3187405 Units: ug/L
Analysis Date: 03/01/2006 13:01 Analyst: LU_L
Preparation Date: 03/01/2006 13:01 Prep By: Method

Lab Sample ID	Client Sample ID
06021135-01A	MW-2
06021135-02A	FB-3
06021135-03A	RB-3

Analyte	Result	Rep Limit
1,1,1,2-Tetrachloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloropropene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dibromoethane	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
2-Butanone	ND	20
2-Chloroethyl vinyl ether	ND	10
2-Chlorotoluene	ND	5.0
2-Hexanone	ND	10
4-Chlorotoluene	ND	5.0
4-Isopropyltoluene	ND	5.0
4-Methyl-2-pentanone	ND	10
Acetone	ND	100
Acrylonitrile	ND	50
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	5.0
Bromodichloromethane	ND	5.0
Bromoform	ND	5.0
Bromomethane	ND	10
Carbon disulfide	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	10
Chloroform	ND	5.0
Chloromethane	ND	10
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	10
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021135
Lab Batch ID: R164107

Method Blank

RunID: K_060301B-3187405 Units: ug/L
Analysis Date: 03/01/2006 13:01 Analyst: LU_L
Preparation Date: 03/01/2006 13:01 Prep By: Method

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	10
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	96.0	62-130
Surr: 4-Bromofluorobenzene	80.0	70-130
Surr: Toluene-d8	92.0	74-122

Laboratory Control Sample (LCS)

RunID: K_060301B-3187404 Units: ug/L
Analysis Date: 03/01/2006 11:01 Analyst: LU_L
Preparation Date: 03/01/2006 11:01 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50.0	47.0	94.0	71	146
Benzene	50.0	50.0	100	76	126
Chlorobenzene	50.0	53.0	106	78	125
Toluene	50.0	56.0	112	83	131
Trichloroethene	50.0	54.0	108	64	137

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 06021135
Lab Batch ID: R164107

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06020994-01
RunID: K_060301B-3187408 Units: ug/L
Analysis Date: 03/01/2006 18:46 Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	50	39.0	78.0	50	39.0	78.0	0	14	71	146
Benzene	ND	50	46.0	92.0	50	46.0	92.0	0	11	78	126
Chlorobenzene	ND	50	48.0	96.0	50	47.0	94.0	2.11	13	78	125
Toluene	ND	50	51.0	102	50	49.0	98.0	4.00	13	83	131
Trichloroethene	ND	50	50.0	100	50	50.0	100	0	14	77	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Brown & Caldwell
BJ Service Fracmaster 128125

Analysis: Chloride, Total
Method: E325.2

WorkOrder: 06021135
Lab Batch ID: R164251

Method Blank

Samples in Analytical Batch:

RunID: KONELAB_060306C-3189797 Units: mg/L
Analysis Date: 03/06/2006 17:31 Analyst: T_H

Lab Sample ID Client Sample ID
06021135-01E MW-2

Analyte	Result	Rep Limit
Chloride	ND	1.0

Laboratory Control Sample (LCS)

RunID: KONELAB_060306C-31897 Units: mg/L
Analysis Date: 03/06/2006 17:31 Analyst: T_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	50.00	52.77	105.5	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 06021136-01
RunID: KONELAB_060306C-31898 Units: mg/L
Analysis Date: 03/06/2006 18:29 Analyst: T_H

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	66.61	50	113.3	93.35	50	113.2	93.12	0.1016	20	76	131

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder: 06021135
Date and Time Received: 2/25/2006 10:00:00 AM
Temperature: 4.0°C

Received By: RE
Carrier name: Fedex-Priority
Chilled by: Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance
Issues:

Client Instructions:



SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No.

237452

page of

Client Name: Brown & Caldwell
Address: 1415 Louisiana Ste 2500
Phone/Fax: 713-759-0999
Client Contact: R. Rexroad Email:
Project Name/No.: 188125
Site Name: BS - FracMaster
Site Location: Hobbs, NM
Invoice To: R. Rexroad Ph: 713-759-0999

SAMPLE ID	DATE	TIME	comp	grab
MW-2	2/23/06	2020		X
FB-3	2/23/06	2030		X
RB-3	2/23/06	2050		X

matrix	bottle	size	pres.	Number of Containers
W=water S=soil O=oil SL=sediment X=other	P=plastic A=amber glass G=glass V=vial X=other	1=1 liter 4=4oz 40=vial 8=8oz 16=16oz X=other	1=HCl 2=HNO3 3=H2SO4 X=other	

Requested Analysis
VOCs 8200B
TPH-GRO
SVOCs
TPH-Dro
Chloride

Intact?	<input type="checkbox"/> Y <input type="checkbox"/> N
Ice?	<input type="checkbox"/> Y <input type="checkbox"/> N
Temp:	4.0°C
PM review (initial):	

Client/Consultant Remarks:

Requested TAT	Special Reporting Requirements	Results	Fax	Email	PDF	Special Detection Limits (specify):
Contract <input type="checkbox"/> 72hr <input type="checkbox"/>	Standard QC <input checked="" type="checkbox"/> Level 3 QC <input type="checkbox"/> Level 4 QC <input type="checkbox"/>					
24hr <input type="checkbox"/>	1. Relinquished by Sampler: Ben Camacho					
48hr <input type="checkbox"/>	3. Relinquished by:					
Other <input type="checkbox"/>	5. Relinquished by:					

8880 Interchange Drive
Houston, TX 77054 (713) 660-0901

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Scott, LA 70583 (337) 237-4775

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Traverse City, MI 49686 (231) 947-5777