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**QUARTERLY GROUNDWATER
MONITORING REPORT
JANUARY 2009 SAMPLING EVENT**

**CONOCOPHILLIPS COMPANY
FAYE BURDETTE NO. 1
API No. 30-045-09725
AZTEC, NEW MEXICO**

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Prepared for:



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April 2009

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Site History.....	1
1.2	Groundwater Monitoring Well Installation.....	1
2.0	METHODOLOGY AND RESULTS.....	1
2.1	Monitoring Summary.....	2
2.2	Groundwater Sampling Methodology.....	2
2.3	Groundwater Sampling Analytical Results.....	2
3.0	CONCLUSIONS.....	2

FIGURES

1. Site Location Map
2. Site Layout Map
- 3a. Geologic Cross Section
- 3b. Geologic Cross Section Plan View
4. Groundwater Contour Map

TABLES

1. Site History Timeline
2. Soil Laboratory Analytical Results Summary
3. Groundwater Laboratory Analytical Results Summary

APPENDICES

- Appendix A. Soil Laboratory Analytical Report
- Appendix B. Well Completion Diagrams and Boring Logs
- Appendix C. Groundwater Sampling Field Forms
- Appendix D. Groundwater Laboratory Analytical Report

QUARTERLY GROUNDWATER MONITORING REPORT CONOCOPHILLIPS FAYE BURDETTE NO. 1, AZTEC, NEW MEXICO

1.0 INTRODUCTION

This report presents the results of quarterly groundwater monitoring completed by Tetra Tech, Inc. (Tetra Tech) on January 29, 2009, at the ConocoPhillips Company Faye Burdette No. 1 Site in Aztec, New Mexico. This event represents the second quarter of groundwater sampling conducted by Tetra Tech at the site.

The site is located near the intersection of Highway 550 and Pioneer in Aztec, NM. The site can be reached by turning onto Pioneer from 550 and staying on Pioneer until reaching Long Lane. Once reaching Long Lane, turn left and proceed forward until reaching the site on the left. The site consists of a gas production well head and associated equipment and installations. The location and general features of the Faye Burdette No. 1 site are shown on **Figures 1** and **2**, respectively.

1.1 Site History

The history of the ConocoPhillips Faye Burdette No. 1 Site is outlined in **Table 1**. The existing monitor well network consists of monitor wells MW-1, MW-2, MW-3, and MW-4 which are sampled on a quarterly basis. Monitoring wells MW-2, MW-3, and MW-4 were installed at the site during January 2009.

1.2 Groundwater Monitoring Well Installation

Monitoring wells MW-2, MW-3, and MW-4 were drilled to 20 feet below ground surface (ft. bgs) in the shallow groundwater unconfined aquifer using a hollow stem auger drilling rig operated by WDC Exploration and Wells of Peralta, New Mexico. Each well was daylighted for utilities to approximately seven feet by Riley Industrial of Farmington, New Mexico prior to drilling. MW-2 was installed upgradient of MW-1 and monitoring wells MW-3 and MW-4 were installed downgradient of MW-1. The locations of the monitoring wells are shown on the attached **Figure 2**, Site Layout Map.

Split spoon samples were collected every five feet to be analyzed with a photo ionization detector (PID) for the presence of volatile organic vapors. No samples contained PID readings above 100 ppm. One soil sample was collected from each monitoring well to be analyzed for ions by Environmental Protection Agency (EPA) Method E300.0, total metals including mercury by EPA Methods SW7471A and SW6010B, semi-volatile organic compounds (SVOCs) by EPA Method 8270C, volatile organic compounds (VOCs) by EPA Method 8260B, total petroleum hydrocarbons by EPA Method E418.1, and general chemistry by EPA Methods D2216, SW9045, and SW9050. A geologic cross section of these well borings can be seen in **Figure 3a**, and a cross section plan view is provided in **Figure 3b**. A summary of soil sample analytical results and the corresponding soil laboratory report is provided in **Table 2** and **Appendix A**, respectively.

The monitoring wells were constructed by installing 20 feet of 2-inch inside-diameter (I.D.) PVC pipe. The groundwater interval and vadose zones were screened with 0.010-slot PVC from approximately 5 to 20 feet. 2-inch I.D. PVC riser pipe was then installed from the top of the screen to approximately 3 feet above ground surface. Silica sand filter pack was placed in the boring surrounding the PVC at least two feet above the well screen. A two foot bentonite chip annular seal was then placed on top of the sand filter pack. A fiber-reinforced concrete annular seal was placed from the top of the bentonite to the ground surface. A steel stick-up protective well cover from ground surface to approximately 3 feet above ground and concrete pads were installed at each well. The wells were developed by purging with a GeoSquirt purge pump until relatively sediment-free water was produced. Boring logs and well diagrams for each well are provided in **Appendix B**.

2.0 METHODOLOGY AND RESULTS

The following subsections describe the groundwater monitoring methodology and sampling analytical results.

2.1 Monitoring Summary

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, and MW-4 during the January 2009 sampling event. Prior to sampling, depth to groundwater measurements were taken. A groundwater contour map showing a general flow direction to the northwest is provided in **Figure 4**.

2.2 Groundwater Sampling Methodology

Approximately 3 gallons of water, or greater than three well volumes, were purged from each monitoring well before sampling was performed. The purged water was disposed of in the waste water tank located on site. A 1.5-inch dedicated bailer was used to purge each well and collect groundwater samples. The samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain of custody documentation to Southern Petroleum Laboratory located in Houston, Texas. The samples were analyzed for presence of volatile organic compounds (VOCs) including but not limited to benzene, toluene, ethyl-benzene, and xylenes (BTEX) by EPA Method 8260B, SVOCs by EPA Method 8270C, total petroleum hydrocarbons (TPH) by EPA Method SW8015B, ion chromatography by EPA Method E300.0, metals including mercury by EPA Methods SW7470A, 6010B, 6020A, and nitrogen by EPA Method E353.2. Groundwater sampling field forms are provided in **Appendix C**.

2.3 Groundwater Sampling Analytical Results

Samples collected during the January 2009 monitoring period indicate the following results:

- BTEX concentrations were below laboratory detection limits for all monitoring wells;
- Groundwater concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard for iron and manganese in all monitoring wells (including background well MW-2);

- Groundwater concentrations exceeded the NMWQCC standard for aluminum (5 mg/L) in MW-4.

Table 3 summarizes the laboratory analytical results for the January 2009 groundwater sampling event. The corresponding laboratory analysis report including quality control summaries are included in **Appendix D**.

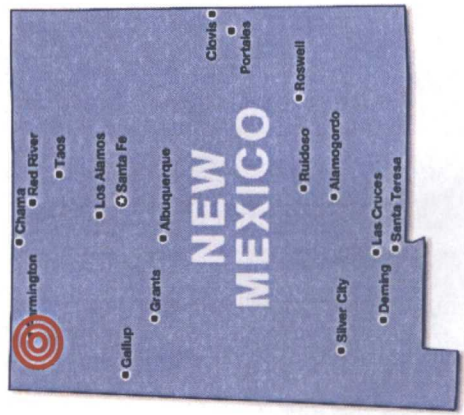
3.0 CONCLUSIONS

Tetra Tech recommends continued quarterly groundwater sampling at Faye Burdette No. 1 in order to provide sufficient data for site closure. Groundwater monitoring will be discontinued and site closure will be requested when results indicate all constituents of concern are below NMWQCC standards. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetrattech.com if you have any questions or require additional information.

FIGURES



FIGURE 1.
Site Location Map
CONOCOPhillips
FAYE BURDETTE NO.1
Sec 9, T30N, R11W
Aztec, New Mexico



Directions from HW 550 to
ConocoPhillips
Faye Burdette No.1 site
location

Approximate ConocoPhillips
Faye Burdette No.1 Site
location



TETRA TECH, INC.

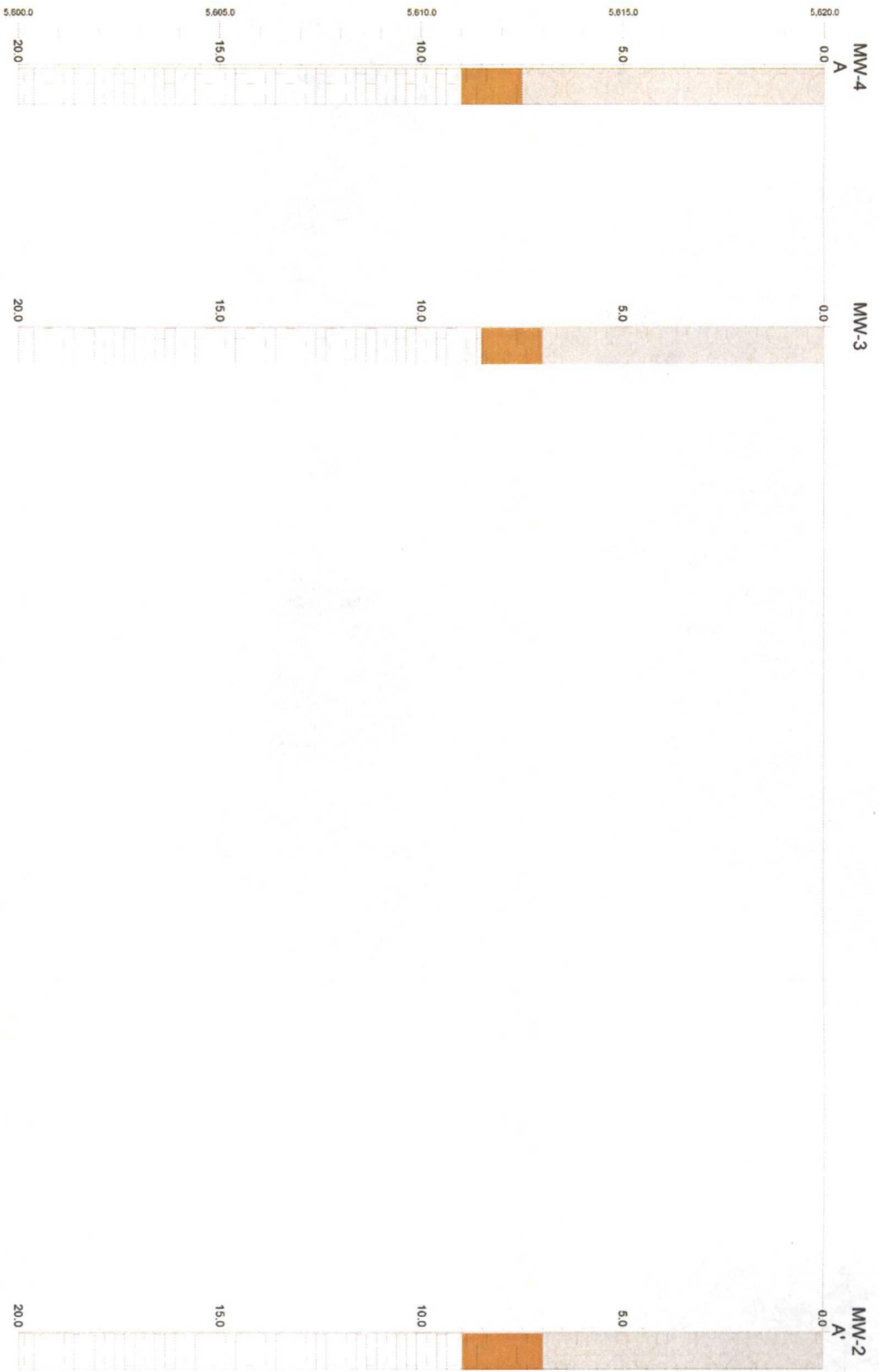


FIGURE 3a:

Geologic Cross Section

CONOCOPHILLIPS COMPANY

Faye Burdette No. 1

Sec 9, T30N, R11W

Aztec, New Mexico

LEGEND



Medium grained sand

Silty Sand

Undefined



TETRA TECH, INC.

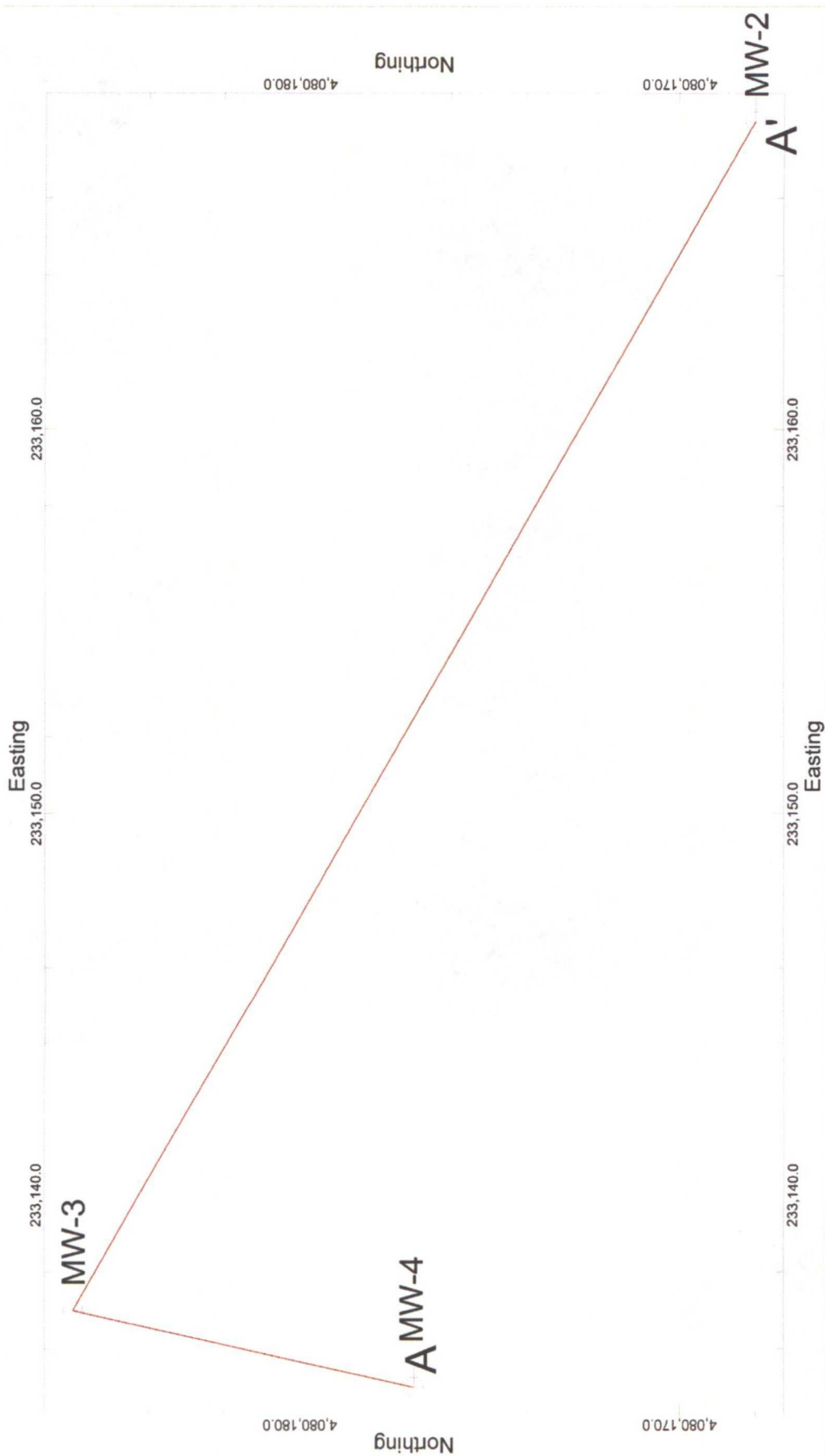


FIGURE 3b:
Cross Section Plan View
 CONOCOPHILLIPS COMPANY
 Faye Burdette No. 1
 Sec 9, T30N, R11W
 Aztec, New Mexico



TETRA TECH, INC.

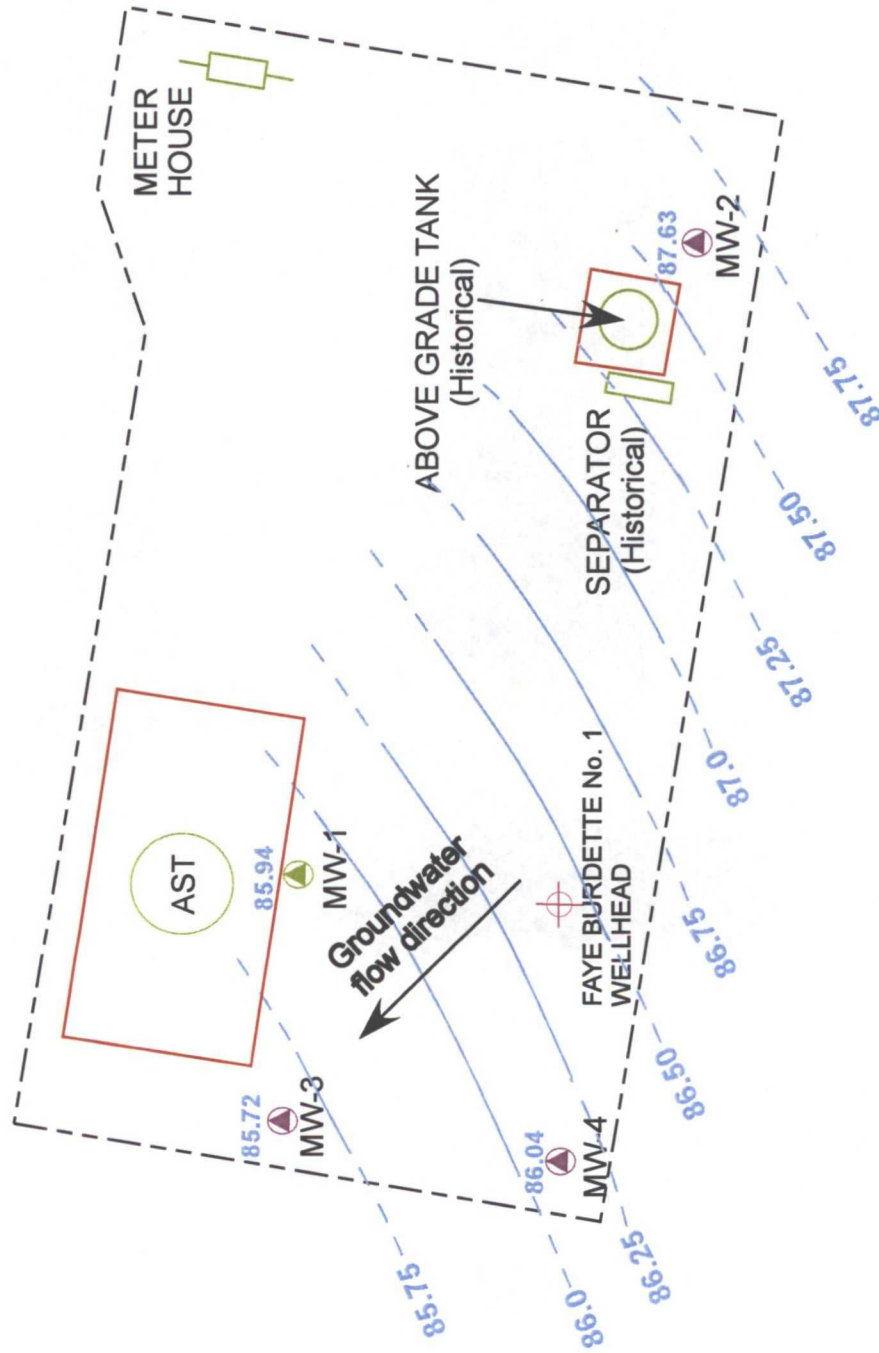


Figure 4.
Groundwater Contour Map
 CONOCOPHILLIPS
 FAYE BURDETTE No. 1
 Sec 9, T30N, R11W
 Aztec, New Mexico

LEGEND

- TEMPORARY MONITORING WELL (Green circle with crosshair)
- MONITORING WELL (Purple circle with crosshair)
- BERM (Red line)
- FENCE LINE (Black dashed line)
- EQUIPMENT (Green rectangle)
- GROUNDWATER CONTOUR (Blue dashed line)
- INFERRED GROUNDWATER CONTOUR (Black dashed line)



TETRA TECH, INC.

TABLES

Table 1. Site History Timeline - ConocoPhillips Faye Burdette No. 1

DATE	ACTIVITY
29-Apr-1962	Well was spudded by Southwest Production Company.
1-Sep-1963	Ownership of well transferred to Beta Development Company.
21-Feb-1983	NMOCD inspection noted a leaky 2-inch valve on a storage tank.
15-Aug-1988	Ownership of well transferred to Mesa Operating Limited Partnership.
1-Jul-1991	Ownership of well transferred to Conoco Inc.
24-May-2007	A small (<25 gallons) release occurred from the produced water tank after a rusty spot was scraped off. Follow-up excavation encountered evidence of pre-existing hydrocarbon-impacted soil, apparently related to a former earthen pit beneath the tank.
Jul-07	Contaminated soil excavated from the Site. Two ground water samples were obtained at the time of this excavation, and one (1) of these samples was found to contain total xylenes above the State of New Mexico drinking water standard.
26-Sep-07	Ground water monitoring well installed to a depth of 15 feet below ground surface (bgs) by Envirotech Inc. of Farmington, NM (Envirotech). A soil sample obtained from the well boring was analyzed for benzene, BTEX and total petroleum hydrocarbons (TPH). Results were below NMOCD regulations of 10 parts per million (ppm), 50 ppm, and 100 ppm, respectively. A ground water sample was collected from the temporary monitoring well (MW-1) and analyzed for BTEX; results were below the State of New Mexico drinking water standard for this constituent. Depth to ground water recorded at 9.5 feet bgs.
Nov-07	Envirotech report recommends plugging and abandonment of the temporary ground water monitoring well and a no further action determination for the Site (Envirotech, 2007).
Apr-08	Oil Conservation Division of NM Energy, Minerals, and Resources Dept. indicates additional investigation and sampling is necessary for closure consideration during a meeting with Glenn Von Gonten.
22-Oct-08	1st quarter sampling of MW-1 by Tetra Tech.
Jan-09	Installed additional monitoring wells MW-2, MW-3 and MW-4.
29-Jan-09	2nd quarter sampling of MW-1 by Tetra Tech. Initial sampling of monitoring wells MW-2, MW-3, and MW-4.

Table 2. Soil Laboratory Analytical Results - ConocoPhillips Faye Burdette No. 1

Constituent			Sample ID			
Ions	Method	Units	MW-2 (8 - 9.5 feet)	MW-3 (7 - 8.5 feet)	MW-4 (7.5 - 9 feet)	NMOCD
Bromide	E300.0	mg/kg - dry	< 6.13	< 5.75	< 6.13	NE
Chloride	E300.0	mg/kg - dry	6.48	32.1	8.73	NE
Fluoride	E300.0	mg/kg - dry	< 6.13	< 5.75	< 6.13	NE
Orthophosphate (as P)	E300.0	mg/kg - dry	< 6.13	< 5.75	< 6.13	NE
Sulfate	E300.0	mg/kg - dry	45.9	607	656	NE
Nitrate (as N)	E300.0	mg/kg - dry	< 6.13	6.87	< 6.13	NE
Nitrite (as N)	E300.0	mg/kg - dry	< 6.13	< 5.75	< 6.13	NE
Metals, Total	Method	Units	MW-2 (8 - 9.5 feet)	MW-3 (7 - 8.5 feet)	MW-4 (7.5 - 9 feet)	NMOCD
Mercury	SW7471A	mg/kg - dry	< 0.0368	< 0.0345	< 0.0368	NE
Aluminum	SW6010B	mg/kg - dry	3,060	2,110	2,200	NE
Boron	SW6010B	mg/kg - dry	35.9	34.1	35.4	NE
Calcium	SW6010B	mg/kg - dry	1,400	1,110	1,190	NE
Iron	SW6010B	mg/kg - dry	4,590	3,790	3,900	NE
Magnesium	SW6010B	mg/kg - dry	810	575	614	NE
Potassium	SW6010B	mg/kg - dry	527	290	328	NE
Sodium	SW6010B	mg/kg - dry	293	181	174	NE
Strontium	SW6010B	mg/kg - dry	20.3	16.6	18.1	NE
Tin	SW6010B	mg/kg - dry	< 6.13	< 5.75	< 6.13	NE
Antimony	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Arsenic	SW6020A	mg/kg - dry	1.35	1.83	0.939	NE
Barium	SW6020A	mg/kg - dry	37.1	44.4	32	NE
Beryllium	SW6020A	mg/kg - dry	< 0.491	< 0.46	< 0.49	NE
Cadmium	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Chromium	SW6020A	mg/kg - dry	2.7	1.99	2.14	NE
Cobalt	SW6020A	mg/kg - dry	2.11	2.42	2.04	NE
Copper	SW6020A	mg/kg - dry	3.24	2.07	2.37	NE
Lead	SW6020A	mg/kg - dry	4.25	2.52	2.61	NE
Manganese	SW6020A	mg/kg - dry	59.7	169	57.2	NE
Molybdenum	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Nickel	SW6020A	mg/kg - dry	2.19	1.78	2.19	NE
Selenium	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Silver	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Thallium	SW6020A	mg/kg - dry	< 0.613	< 0.575	< 0.613	NE
Vanadium	SW6020A	mg/kg - dry	5.51	3.91	4.6	NE
Zinc	SW6020A	mg/kg - dry	10.3	6.9	7.82	NE
SVOCS (detections only)	Method	Units	MW-2 (8 - 9.5 feet)	MW-3 (7 - 8.5 feet)	MW-4 (7.5 - 9 feet)	NMOCD
As listed	8270C	µg/kg - dry	--	--	--	--
VOCs (detections and BTEX only)	Method	Units	MW-2 (8 - 9.5 feet)	MW-3 (7 - 8.5 feet)	MW-4 (7.5 - 9 feet)	NMOCD
Benzene	8260B	µg/kg - dry	< 6.1	< 5.8	< 6.1	10,000
Toluene	8260B	µg/kg - dry	< 6.1	< 5.8	< 6.1	NE
Ethylbenzene	8260B	µg/kg - dry	< 6.1	< 5.8	< 6.1	NE
Total Xylenes	8260B	µg/kg - dry	< 6.1	< 5.8	< 6.1	NE
Total BTEX	--	µg/kg - dry	< 6.1	< 5.8	< 6.1	50,000
Other	Method	Units	MW-2 (8 - 9.5 feet)	MW-3 (7 - 8.5 feet)	MW-4 (7.5 - 9 feet)	NMOCD
Percent Moisture	D2216	%	18.5	13.1	18.4	NE
pH	SW9045C	pH units	6.82	6.89	7.03	NE
Specific Conductance	SW9050	µmhos/cm	641	1,780	2,530	NE
Total Petroleum Hydrocarbons	E418.1	mg/kg - dry	37	35	100	100

Notes:

MW = monitoring well

NMOCD = New Mexico Oil Conservation Division recommended action level

SVOCS = semi-volatile organic compounds

VOCs = volatile organic compounds

mg/kg - dry = milligrams per kilogram, analyzed after residual water removed from the soil

µg/kg - dry = micrograms per kilogram

P = phosphate

N = nitrogen

NE = not established

µmhos/cm = micromhos per centimeter

Table 3. Groundwater Laboratory Analytical Results - ConocoPhillips Faye Burdette No. 1

Constituent			Sample ID					NMWQCC Groundwater Standard
Ions	Method	Units	MW-1	MW-2	MW-3	MW-4	Duplicate	
Bromide	E300.0	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	NA	NE
Chloride	E300.0	mg/L	18.4	17.7	19.2	18.2	NA	250
Fluoride	E300.0	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	NA	1.6
Orthophosphate (as P)	E300.0	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	NA	NE
Sulfate	E300.0	mg/L	340	271	337	407	NA	600
Nitrate (as N)	E300.0	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	NA	10
Nitrite (as N)	E300.0	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	NA	NE
Metals, Total	Method	Units	MW-1	MW-2	MW-3	MW-4	Duplicate	NMWQCC Groundwater Standard
Mercury	SW7470A	mg/L	0.000596	< 0.0002	< 0.0002	< 0.0002	NA	0.002
Aluminum	SW6010B	mg/L	2.14	4.15	1.82	6.92	NA	5
Boron	SW6010B	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	NA	0.75
Calcium	SW6010B	mg/L	207	204	212	363	NA	NE
Iron	SW6010B	mg/L	2.77	3.15	2.24	3.17	NA	1.0
Magnesium	SW6010B	mg/L	14	13.7	12.4	18.9	NA	NE
Manganese	SW6010B	mg/L	1.41	1.79	0.374	4.15	NA	0.2
Potassium	SW6010B	mg/L	2.36	2.66	< 2	4.09	NA	NE
Sodium	SW6010B	mg/L	62.5	58	61.9	70.5	NA	NE
Strontium	SW6010B	mg/L	3.14	2.93	3.31	5.15	NA	NE
Tin	SW6010B	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	NA	NE
Antimony	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	NA	NE
Arsenic	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	0.00682	NA	0.1
Barium	SW6020A	mg/L	0.0787	0.132	0.0716	0.275	NA	1.0
Beryllium	SW6020A	mg/L	< 0.004	< 0.004	< 0.004	0.00535	NA	NE
Cadmium	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	NA	0.01
Chromium	SW6020A	mg/L	< 0.005	0.00672	0.00594	0.00773	NA	0.05
Cobalt	SW6020A	mg/L	0.00502	0.0169	0.00503	0.0603	NA	0.05
Copper	SW6020A	mg/L	< 0.005	0.0206	0.0309	0.0633	NA	1.0
Lead	SW6020A	mg/L	< 0.005	0.0146	0.00691	0.0197	NA	0.05
Molybdenum	SW6020A	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	NA	1.0
Nickel	SW6020A	mg/L	0.00745	0.0157	0.00902	0.0288	NA	0.2
Selenium	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	NA	0.05
Silver	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	NA	0.05
Thallium	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	NA	NE
Vanadium	SW6020A	mg/L	0.00528	0.0128	0.00628	0.0192	NA	NE
Zinc	SW6020A	mg/L	0.0125	0.0504	0.0531	0.101	NA	10
SVOCS (detections only)	Method	Units	MW-1	MW-2	MW-3	MW-4	Duplicate	NMWQCC Groundwater Standard
As listed	8270C	µg/L	—	—	—	—	NA	—
VOCs (detections and BTEX only)	Method	Units	MW-1	MW-2	MW-3	MW-4	Duplicate	NMWQCC Groundwater Standard
Benzene	8260B	µg/L	< 5	< 5	< 5	< 5	< 5	10
Toluene	8260B	µg/L	< 5	< 5	< 5	< 5	< 5	750
Ethylbenzene	8260B	µg/L	< 5	< 5	< 5	< 5	< 5	750
Total Xylenes	8260B	µg/L	< 5	< 5	< 5	< 5	< 5	620
Other	Method	Units	MW-1	MW-2	MW-3	MW-4	Duplicate	NMWQCC Groundwater Standard
Alkalinity (as Calcium Carbonate)	SM2320B	mg/L	222	204	208	205	NA	NE
Diesel Range Organics	SW8015B	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	NA	NE
Gasoline Range Organics	SW8015B	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	NA	NE
Hardness (as Calcium Carbonate)	SM2340C	mg/L	720	540	560	640	NA	NE
pH	SM4500H-B	pH units	7.01	7.15	7.1	7.04	NA	NE
Specific Conductance @ 25 °C	SM2510B	µmhos/cm	1,040	903	1,410	1,290	NA	NE
Total Dissolved Solids	SM2540C	mg/L	732	640	852	834	NA	1000

Notes:

MW = monitoring well

NMWQCC = New Mexico Water Quality Control Commission

SVOCS = semi-volatile organic compounds

VOCs = volatile organic compounds

mg/L = milligrams per liter

µg/L = micrograms per liter

P = phosphate

N = nitrogen

µmhos/cm = micromhos per centimeter

NE = not established

NA = not analyzed

APPENDIX A



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

Conoco Phillips

Certificate of Analysis Number:

09010825

<u>Report To:</u> Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:	<u>Project Name:</u> COP Faye-Burdette <u>Site:</u> Aztec, NM <u>Site Address:</u> <u>PO Number:</u> 4510713617 <u>State:</u> New Mexico <u>State Cert. No.:</u> <u>Date Reported:</u> 2/6/2009
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This Report Contains A Total Of 57 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

2/7/2009

Date



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

Case Narrative for:
Conoco Phillips

Certificate of Analysis Number:

09010825

Report To: Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:	Project Name: COP Faye-Burdette Site: Aztec, NM Site Address: PO Number: 4510713617 State: New Mexico State Cert. No.: Date Reported: 2/6/2009
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Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

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.

Your sample ID "MW-4 (7.5-9ft)" (SPL ID:09010825-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6010B. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits for Sodium (Batch ID:87371) due to matrix interference. A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Your sample ID "MW-4 (7.5-9ft)" (SPL ID:09010825-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6020A. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits for Barium (Batch ID:87371A-I) due to matrix interference. A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Your sample ID "MW-4 (7.5-9ft)" (SPL ID:09010825-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6020A. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits for Antimony (Batch ID:87371B-I) due to matrix interference. A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

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.

Erica Cardenas
Project Manager

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

09010825 Page 1

2/7/2009

Date



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

Conoco Phillips

Certificate of Analysis Number:

09010825

Report To: Tetra Tech, Inc.
Kelly Blanchard
6121 Indian School Road, N.E.
Suite 200
Albuquerque
NM
87110-
ph: (505) 237-8440 fax: (505) 881-3283

Project Name: COP Faye-Burdette
Site: Aztec, NM
Site Address:

PO Number: 4510713617
State: New Mexico
State Cert. No.:
Date Reported: 2/6/2009

Fax To:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-2 (8-9.5ft.)	09010825-01	Soil	1/20/2009 1:15:00 PM	1/22/2009 10:00:00 AM		☐
MW-3 (7-8.5ft)	09010825-02	Soil	1/20/2009 2:35:00 PM	1/22/2009 10:00:00 AM		☐
MW-4 (7.5-9ft)	09010825-03	Soil	1/20/2009 3:58:00 PM	1/22/2009 10:00:00 AM		☐

2/7/2009

Erica Cardenas
Project Manager

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



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

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15 SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY			MCL	E300.0 MOD	Units: mg/kg-dry		
Bromide	ND		6.13	1	01/27/09 23:49	BDG	4886327
Chloride	6.48		6.13	1	01/27/09 23:49	BDG	4886327
Fluoride	ND		6.13	1	01/27/09 23:49	BDG	4886327
Ortho-phosphate (As P)	ND		6.13	1	01/27/09 23:49	BDG	4886327
Sulfate	45.9		6.13	1	01/27/09 23:49	BDG	4886327
Nitrogen,Nitrate (As N)	ND		6.13	1	01/27/09 23:49	BDG	4881239
Nitrogen,Nitrite (As N)	ND		6.13	1	01/27/09 23:49	BDG	4881239
MERCURY, TOTAL			MCL	SW7471A	Units: mg/kg-dry		
Mercury	ND		0.0368	1	01/31/09 18:01	F_S	4886743

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	01/30/2009 16:00	F_S	1.00

METALS BY METHOD 6010B, TOTAL			MCL	SW6010B	Units: mg/kg-dry		
Aluminum	3060		12.3	1	01/28/09 14:47	S_C	4881347
Boron	35.9		12.3	1	01/28/09 14:47	S_C	4881347
Calcium	1400		12.3	1	01/28/09 14:47	S_C	4881347
Iron	4590		2.45	1	01/28/09 14:47	S_C	4881347
Magnesium	810		12.3	1	01/28/09 14:47	S_C	4881347
Potassium	527		245	1	01/28/09 14:47	S_C	4881347
Sodium	293		61.3	1	01/28/09 14:47	S_C	4881347
Strontium	20.3		2.45	1	01/28/09 14:47	S_C	4881347
Tin	ND		6.13	1	01/28/09 14:47	S_C	4881347

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	1.00

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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
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MI - Matrix Interference



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

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15 SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
METALS BY METHOD 6020A, TOTAL				MCL	SW6020A	Units: mg/kg-dry	
Antimony	ND		0.613	1	01/31/09 1:22	AL_H	4886090
Arsenic	1.35		0.613	1	01/28/09 4:00	AL_H	4879839
Barium	37.1		0.613	1	01/28/09 4:00	AL_H	4879839
Beryllium	ND		0.491	1	01/28/09 4:00	AL_H	4879839
Cadmium	ND		0.613	1	01/28/09 4:00	AL_H	4879839
Chromium	2.7		0.613	1	01/31/09 1:22	AL_H	4886090
Cobalt	2.11		0.613	1	01/31/09 1:22	AL_H	4886090
Copper	3.24		0.613	1	01/31/09 1:22	AL_H	4886090
Lead	4.25		0.613	1	01/28/09 4:00	AL_H	4879839
Manganese	59.7		0.613	1	02/02/09 18:33	AL_H	4889334
Molybdenum	ND		0.613	1	01/28/09 4:00	AL_H	4879839
Nickel	2.19		0.613	1	01/28/09 4:00	AL_H	4879839
Selenium	ND		0.613	1	02/02/09 18:33	AL_H	4889334
Silver	ND		0.613	1	01/28/09 4:00	AL_H	4879839
Thallium	ND		0.613	1	01/28/09 4:00	AL_H	4879839
Vanadium	5.51		0.613	1	01/31/09 1:22	AL_H	4886090
Zinc	10.3		1.23	1	01/31/09 1:22	AL_H	4886090

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	1.00

PERCENT MOISTURE				MCL	D2216	Units: wt%	
Percent Moisture	18.5		0	1	01/24/09 15:33	CFS	4874007
PH				MCL	SW9045C	Units: pH Units	
pH	6.82		0.1	1	01/24/09 16:00	S_H	4874199

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TNTC - Too numerous to count

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MI - Matrix Interference



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

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15 SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C				MCL	SW8270C	Units: ug/kg-dry	
1,2,4-Trichlorobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
1,2-Dichlorobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
1,2-Diphenylhydrazine	ND		400	1	01/28/09 1:19	E_R	4880486
1,3-Dichlorobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
1,4-Dichlorobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
2,4,5-Trichlorophenol	ND		980	1	01/28/09 1:19	E_R	4880486
2,4,6-Trichlorophenol	ND		400	1	01/28/09 1:19	E_R	4880486
2,4-Dichlorophenol	ND		400	1	01/28/09 1:19	E_R	4880486
2,4-Dimethylphenol	ND		400	1	01/28/09 1:19	E_R	4880486
2,4-Dinitrophenol	ND		980	1	01/28/09 1:19	E_R	4880486
2,4-Dinitrotoluene	ND		980	1	01/28/09 1:19	E_R	4880486
2,6-Dinitrotoluene	ND		400	1	01/28/09 1:19	E_R	4880486
2-Chloronaphthalene	ND		400	1	01/28/09 1:19	E_R	4880486
2-Chlorophenol	ND		400	1	01/28/09 1:19	E_R	4880486
2-Methylnaphthalene	ND		400	1	01/28/09 1:19	E_R	4880486
2-Nitroaniline	ND		980	1	01/28/09 1:19	E_R	4880486
2-Nitrophenol	ND		400	1	01/28/09 1:19	E_R	4880486
3,3'-Dichlorobenzidine	ND		400	1	01/28/09 1:19	E_R	4880486
3-Nitroaniline	ND		980	1	01/28/09 1:19	E_R	4880486
4,6-Dinitro-2-methylphenol	ND		980	1	01/28/09 1:19	E_R	4880486
4-Bromophenyl phenyl ether	ND		400	1	01/28/09 1:19	E_R	4880486
4-Chloro-3-methylphenol	ND		400	1	01/28/09 1:19	E_R	4880486
4-Chloroaniline	ND		400	1	01/28/09 1:19	E_R	4880486
4-Chlorophenyl phenyl ether	ND		400	1	01/28/09 1:19	E_R	4880486
4-Nitroaniline	ND		980	1	01/28/09 1:19	E_R	4880486
4-Nitrophenol	ND		980	1	01/28/09 1:19	E_R	4880486
Acenaphthene	ND		400	1	01/28/09 1:19	E_R	4880486
Acenaphthylene	ND		400	1	01/28/09 1:19	E_R	4880486
Aniline	ND		400	1	01/28/09 1:19	E_R	4880486
Anthracene	ND		400	1	01/28/09 1:19	E_R	4880486
Benz(a)anthracene	ND		400	1	01/28/09 1:19	E_R	4880486
Benzo(a)pyrene	ND		400	1	01/28/09 1:19	E_R	4880486
Benzo(b)fluoranthene	ND		400	1	01/28/09 1:19	E_R	4880486
Benzo(g,h,i)perylene	ND		400	1	01/28/09 1:19	E_R	4880486
Benzo(k)fluoranthene	ND		400	1	01/28/09 1:19	E_R	4880486
Benzoic acid	ND		2000	1	01/28/09 1:19	E_R	4880486
Benzyl alcohol	ND		400	1	01/28/09 1:19	E_R	4880486
Bis(2-chloroethoxy)methane	ND		400	1	01/28/09 1:19	E_R	4880486
Bis(2-chloroethyl)ether	ND		400	1	01/28/09 1:19	E_R	4880486

Qualifiers:
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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15

SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		400	1	01/28/09 1:19	E_R	4880486
Bis(2-ethylhexyl)phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Butyl benzyl phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Carbazole	ND		400	1	01/28/09 1:19	E_R	4880486
Chrysene	ND		400	1	01/28/09 1:19	E_R	4880486
Dibenz(a,h)anthracene	ND		400	1	01/28/09 1:19	E_R	4880486
Dibenzofuran	ND		400	1	01/28/09 1:19	E_R	4880486
Diethyl phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Dimethyl phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Di-n-butyl phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Di-n-octyl phthalate	ND		400	1	01/28/09 1:19	E_R	4880486
Fluoranthene	ND		400	1	01/28/09 1:19	E_R	4880486
Fluorene	ND		400	1	01/28/09 1:19	E_R	4880486
Hexachlorobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
Hexachlorobutadiene	ND		400	1	01/28/09 1:19	E_R	4880486
Hexachlorocyclopentadiene	ND		400	1	01/28/09 1:19	E_R	4880486
Hexachloroethane	ND		400	1	01/28/09 1:19	E_R	4880486
Indeno(1,2,3-cd)pyrene	ND		400	1	01/28/09 1:19	E_R	4880486
Isophorone	ND		400	1	01/28/09 1:19	E_R	4880486
Naphthalene	ND		400	1	01/28/09 1:19	E_R	4880486
Nitrobenzene	ND		400	1	01/28/09 1:19	E_R	4880486
N-Nitrosodi-n-propylamine	ND		400	1	01/28/09 1:19	E_R	4880486
N-Nitrosodiphenylamine	ND		400	1	01/28/09 1:19	E_R	4880486
Pentachlorophenol	ND		980	1	01/28/09 1:19	E_R	4880486
Phenanthrene	ND		400	1	01/28/09 1:19	E_R	4880486
Phenol	ND		400	1	01/28/09 1:19	E_R	4880486
Pyrene	ND		400	1	01/28/09 1:19	E_R	4880486
Pyridine	ND		400	1	01/28/09 1:19	E_R	4880486
2-Methylphenol	ND		400	1	01/28/09 1:19	E_R	4880486
3 & 4-Methylphenol	ND		400	1	01/28/09 1:19	E_R	4880486
Surr: 2,4,6-Tribromophenol	60.0		% 19-135	1	01/28/09 1:19	E_R	4880486
Surr: 2-Fluorobiphenyl	55.9		% 15-140	1	01/28/09 1:19	E_R	4880486
Surr: 2-Fluorophenol	64.0		% 15-122	1	01/28/09 1:19	E_R	4880486
Surr: Nitrobenzene-d5	58.8		% 10-134	1	01/28/09 1:19	E_R	4880486
Surr: Phenol-d5	68.0		% 10-123	1	01/28/09 1:19	E_R	4880486
Surr: Terphenyl-d14	58.8		% 18-166	1	01/28/09 1:19	E_R	4880486

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/23/2009 13:06	LLL	1.00

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

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15 SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE				MCL	SW9050	Units: umhos/cm	
Specific Conductance	641		100	1	01/26/09 13:00	PAC	4875960
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons,TR	37		12	1	02/01/09 9:41	LLL	4886821

Prep Method	Prep Date	Prep Initials	Prep Factor
	01/31/2009 9:40		1.00

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

Client Sample ID: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15 SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/kg-dry	
1,1,1,2-Tetrachloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1,1-Trichloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1,2,2-Tetrachloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1,2-Trichloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1-Dichloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1-Dichloroethene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,1-Dichloropropene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2,3-Trichlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2,3-Trichloropropane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2,4-Trichlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2,4-Trimethylbenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2-Dibromo-3-chloropropane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2-Dibromoethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2-Dichlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2-Dichloroethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,2-Dichloropropane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,3,5-Trimethylbenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,3-Dichlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,3-Dichloropropane	ND		6.1	1	01/23/09 18:14 JWW		4882425
1,4-Dichlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
2,2-Dichloropropane	ND		6.1	1	01/23/09 18:14 JWW		4882425
2-Butanone	ND		25	1	01/23/09 18:14 JWW		4882425
2-Chloroethyl vinyl ether	ND		12	1	01/23/09 18:14 JWW		4882425
2-Chlorotoluene	ND		6.1	1	01/23/09 18:14 JWW		4882425
2-Hexanone	ND		12	1	01/23/09 18:14 JWW		4882425
4-Chlorotoluene	ND		6.1	1	01/23/09 18:14 JWW		4882425
4-Isopropyltoluene	ND		6.1	1	01/23/09 18:14 JWW		4882425
4-Methyl-2-pentanone	ND		12	1	01/23/09 18:14 JWW		4882425
Acetone	ND		120	1	01/23/09 18:14 JWW		4882425
Acrylonitrile	ND		61	1	01/23/09 18:14 JWW		4882425
Benzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
Bromobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425
Bromochloromethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
Bromodichloromethane	ND		6.1	1	01/23/09 18:14 JWW		4882425
Bromoform	ND		6.1	1	01/23/09 18:14 JWW		4882425
Bromomethane	ND		12	1	01/23/09 18:14 JWW		4882425
Carbon disulfide	ND		6.1	1	01/23/09 18:14 JWW		4882425
Carbon tetrachloride	ND		6.1	1	01/23/09 18:14 JWW		4882425
Chlorobenzene	ND		6.1	1	01/23/09 18:14 JWW		4882425

Qualifiers: ND/U - Not Detected at the Reporting Limit
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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: MW-2 (8-9.5ft.)

Collected: 01/20/2009 13:15

SPL Sample ID: 09010825-01

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		12	1	01/23/09 18:14	JWW	4882425
Chloroform	ND		6.1	1	01/23/09 18:14	JWW	4882425
Chloromethane	ND		12	1	01/23/09 18:14	JWW	4882425
Dibromochloromethane	ND		6.1	1	01/23/09 18:14	JWW	4882425
Dibromomethane	ND		6.1	1	01/23/09 18:14	JWW	4882425
Dichlorodifluoromethane	ND		12	1	01/23/09 18:14	JWW	4882425
Ethylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Hexachlorobutadiene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Isopropylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Methyl tert-butyl ether	ND		6.1	1	01/23/09 18:14	JWW	4882425
Methylene chloride	ND		6.1	1	01/23/09 18:14	JWW	4882425
Naphthalene	ND		6.1	1	01/23/09 18:14	JWW	4882425
n-Butylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
n-Propylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
sec-Butylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Styrene	ND		6.1	1	01/23/09 18:14	JWW	4882425
tert-Butylbenzene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Tetrachloroethene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Toluene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Trichloroethene	ND		6.1	1	01/23/09 18:14	JWW	4882425
Trichlorofluoromethane	ND		6.1	1	01/23/09 18:14	JWW	4882425
Vinyl acetate	ND		6.1	1	01/23/09 18:14	JWW	4882425
Vinyl chloride	ND		6.1	1	01/23/09 18:14	JWW	4882425
cis-1,2-Dichloroethene	ND		6.1	1	01/23/09 18:14	JWW	4882425
cis-1,3-Dichloropropene	ND		6.1	1	01/23/09 18:14	JWW	4882425
m,p-Xylene	ND		6.1	1	01/23/09 18:14	JWW	4882425
o-Xylene	ND		6.1	1	01/23/09 18:14	JWW	4882425
trans-1,2-Dichloroethene	ND		6.1	1	01/23/09 18:14	JWW	4882425
trans-1,3-Dichloropropene	ND		6.1	1	01/23/09 18:14	JWW	4882425
1,2-Dichloroethene (total)	ND		6.1	1	01/23/09 18:14	JWW	4882425
Xylenes, Total	ND		6.13	1	01/23/09 18:14	JWW	4882425
Surr: 1,2-Dichloroethane-d4	92.4		% 62-169	1	01/23/09 18:14	JWW	4882425
Surr: 4-Bromofluorobenzene	102		% 64-147	1	01/23/09 18:14	JWW	4882425
Surr: Toluene-d8	98.7		% 52-152	1	01/23/09 18:14	JWW	4882425

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/22/2009 15:17	TL	1.00

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E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

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

Client Sample ID: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35 SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY				MCL	E300.0 MOD	Units: mg/kg-dry	
Bromide	ND		5.75	1	01/28/09 0:41	BDG	4886330
Chloride	32.1		5.75	1	01/28/09 0:41	BDG	4886330
Fluoride	ND		5.75	1	01/28/09 0:41	BDG	4886330
Ortho-phosphate (As P)	ND		5.75	1	01/28/09 0:41	BDG	4886330
Sulfate	607		57.5	10	02/05/09 0:14	BDG	4894407
Nitrogen, Nitrate (As N)	6.87		5.75	1	01/28/09 0:41	BDG	4881242
Nitrogen, Nitrite (As N)	ND		5.75	1	01/28/09 0:41	BDG	4881242
MERCURY, TOTAL				MCL	SW7471A	Units: mg/kg-dry	
Mercury	ND		0.0345	1	01/31/09 18:03	F_S	4886744

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	01/30/2009 16:00	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/kg-dry	
Aluminum	2110		11.5	1	01/28/09 14:52	S_C	4881348
Boron	34.1		11.5	1	01/28/09 14:52	S_C	4881348
Calcium	1110		11.5	1	01/28/09 14:52	S_C	4881348
Iron	3790		2.3	1	01/28/09 14:52	S_C	4881348
Magnesium	575		11.5	1	01/28/09 14:52	S_C	4881348
Potassium	290		230	1	01/28/09 14:52	S_C	4881348
Sodium	181		57.5	1	01/28/09 14:52	S_C	4881348
Strontium	16.6		2.3	1	01/28/09 14:52	S_C	4881348
Tin	ND		5.75	1	01/28/09 14:52	S_C	4881348

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	1.00

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

Client Sample ID: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35

SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
METALS BY METHOD 6020A, TOTAL				MCL	SW6020A	Units: mg/kg-dry	
Antimony	ND		0.575	1	01/31/09 1:27	AL_H	4886091
Arsenic	1.83		0.575	1	01/28/09 4:05	AL_H	4879840
Barium	44.4		0.575	1	01/28/09 4:05	AL_H	4879840
Beryllium	ND		0.46	1	01/28/09 4:05	AL_H	4879840
Cadmium	ND		0.575	1	01/28/09 4:05	AL_H	4879840
Chromium	1.99		0.575	1	01/31/09 1:27	AL_H	4886091
Cobalt	2.42		0.575	1	01/31/09 1:27	AL_H	4886091
Copper	2.07		0.575	1	01/31/09 1:27	AL_H	4886091
Lead	2.52		0.575	1	01/28/09 4:05	AL_H	4879840
Manganese	169		0.575	1	02/02/09 18:39	AL_H	4889335
Molybdenum	ND		0.575	1	01/28/09 4:05	AL_H	4879840
Nickel	1.78		0.575	1	01/28/09 4:05	AL_H	4879840
Selenium	ND		0.575	1	02/02/09 18:39	AL_H	4889335
Silver	ND		0.575	1	01/28/09 4:05	AL_H	4879840
Thallium	ND		0.575	1	01/28/09 4:05	AL_H	4879840
Vanadium	3.91		0.575	1	01/31/09 1:27	AL_H	4886091
Zinc	6.9		1.15	1	01/31/09 1:27	AL_H	4886091

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	1.00

PERCENT MOISTURE			MCL	D2216	Units: wt%	
Percent Moisture	13.1	0	1	01/24/09 15:33	CFS	4874006
PH			MCL	SW9045C	Units: pH Units	
pH	6.89	0.1	1	01/24/09 16:00	S_H	4874200

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

Client Sample ID: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35 SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C				MCL	SW8270C	Units: ug/kg-dry	
1,2,4-Trichlorobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
1,2-Dichlorobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
1,2-Diphenylhydrazine	ND		380	1	01/28/09 1:53	E_R	4880487
1,3-Dichlorobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
1,4-Dichlorobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
2,4,5-Trichlorophenol	ND		920	1	01/28/09 1:53	E_R	4880487
2,4,6-Trichlorophenol	ND		380	1	01/28/09 1:53	E_R	4880487
2,4-Dichlorophenol	ND		380	1	01/28/09 1:53	E_R	4880487
2,4-Dimethylphenol	ND		380	1	01/28/09 1:53	E_R	4880487
2,4-Dinitrophenol	ND		920	1	01/28/09 1:53	E_R	4880487
2,4-Dinitrotoluene	ND		920	1	01/28/09 1:53	E_R	4880487
2,6-Dinitrotoluene	ND		380	1	01/28/09 1:53	E_R	4880487
2-Chloronaphthalene	ND		380	1	01/28/09 1:53	E_R	4880487
2-Chlorophenol	ND		380	1	01/28/09 1:53	E_R	4880487
2-Methylnaphthalene	ND		380	1	01/28/09 1:53	E_R	4880487
2-Nitroaniline	ND		920	1	01/28/09 1:53	E_R	4880487
2-Nitrophenol	ND		380	1	01/28/09 1:53	E_R	4880487
3,3'-Dichlorobenzidine	ND		380	1	01/28/09 1:53	E_R	4880487
3-Nitroaniline	ND		920	1	01/28/09 1:53	E_R	4880487
4,6-Dinitro-2-methylphenol	ND		920	1	01/28/09 1:53	E_R	4880487
4-Bromophenyl phenyl ether	ND		380	1	01/28/09 1:53	E_R	4880487
4-Chloro-3-methylphenol	ND		380	1	01/28/09 1:53	E_R	4880487
4-Chloroaniline	ND		380	1	01/28/09 1:53	E_R	4880487
4-Chlorophenyl phenyl ether	ND		380	1	01/28/09 1:53	E_R	4880487
4-Nitroaniline	ND		920	1	01/28/09 1:53	E_R	4880487
4-Nitrophenol	ND		920	1	01/28/09 1:53	E_R	4880487
Acenaphthene	ND		380	1	01/28/09 1:53	E_R	4880487
Acenaphthylene	ND		380	1	01/28/09 1:53	E_R	4880487
Aniline	ND		380	1	01/28/09 1:53	E_R	4880487
Anthracene	ND		380	1	01/28/09 1:53	E_R	4880487
Benz(a)anthracene	ND		380	1	01/28/09 1:53	E_R	4880487
Benzo(a)pyrene	ND		380	1	01/28/09 1:53	E_R	4880487
Benzo(b)fluoranthene	ND		380	1	01/28/09 1:53	E_R	4880487
Benzo(g,h,i)perylene	ND		380	1	01/28/09 1:53	E_R	4880487
Benzo(k)fluoranthene	ND		380	1	01/28/09 1:53	E_R	4880487
Benzoic acid	ND		1800	1	01/28/09 1:53	E_R	4880487
Benzyl alcohol	ND		380	1	01/28/09 1:53	E_R	4880487
Bis(2-chloroethoxy)methane	ND		380	1	01/28/09 1:53	E_R	4880487
Bis(2-chloroethyl)ether	ND		380	1	01/28/09 1:53	E_R	4880487

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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: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35 SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		380	1	01/28/09 1:53	E_R	4880487
Bis(2-ethylhexyl)phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Butyl benzyl phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Carbazole	ND		380	1	01/28/09 1:53	E_R	4880487
Chrysene	ND		380	1	01/28/09 1:53	E_R	4880487
Dibenz(a,h)anthracene	ND		380	1	01/28/09 1:53	E_R	4880487
Dibenzofuran	ND		380	1	01/28/09 1:53	E_R	4880487
Diethyl phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Dimethyl phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Di-n-butyl phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Di-n-octyl phthalate	ND		380	1	01/28/09 1:53	E_R	4880487
Fluoranthene	ND		380	1	01/28/09 1:53	E_R	4880487
Fluorene	ND		380	1	01/28/09 1:53	E_R	4880487
Hexachlorobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
Hexachlorobutadiene	ND		380	1	01/28/09 1:53	E_R	4880487
Hexachlorocyclopentadiene	ND		380	1	01/28/09 1:53	E_R	4880487
Hexachloroethane	ND		380	1	01/28/09 1:53	E_R	4880487
Indeno(1,2,3-cd)pyrene	ND		380	1	01/28/09 1:53	E_R	4880487
Isophorone	ND		380	1	01/28/09 1:53	E_R	4880487
Naphthalene	ND		380	1	01/28/09 1:53	E_R	4880487
Nitrobenzene	ND		380	1	01/28/09 1:53	E_R	4880487
N-Nitrosodi-n-propylamine	ND		380	1	01/28/09 1:53	E_R	4880487
N-Nitrosodiphenylamine	ND		380	1	01/28/09 1:53	E_R	4880487
Pentachlorophenol	ND		920	1	01/28/09 1:53	E_R	4880487
Phenanthrene	ND		380	1	01/28/09 1:53	E_R	4880487
Phenol	ND		380	1	01/28/09 1:53	E_R	4880487
Pyrene	ND		380	1	01/28/09 1:53	E_R	4880487
Pyridine	ND		380	1	01/28/09 1:53	E_R	4880487
2-Methylphenol	ND		380	1	01/28/09 1:53	E_R	4880487
3 & 4-Methylphenol	ND		380	1	01/28/09 1:53	E_R	4880487
Surr: 2,4,6-Tribromophenol	60.0		% 19-135	1	01/28/09 1:53	E_R	4880487
Surr: 2-Fluorobiphenyl	54.1		% 15-140	1	01/28/09 1:53	E_R	4880487
Surr: 2-Fluorophenol	60.0		% 15-122	1	01/28/09 1:53	E_R	4880487
Surr: Nitrobenzene-d5	56.5		% 10-134	1	01/28/09 1:53	E_R	4880487
Surr: Phenol-d5	64.0		% 10-123	1	01/28/09 1:53	E_R	4880487
Surr: Terphenyl-d14	58.8		% 18-166	1	01/28/09 1:53	E_R	4880487

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/23/2009 13:06	LLL	1.00

Qualifiers:

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

Client Sample ID: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35

SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE			MCL	SW9050	Units: umhos/cm		
Specific Conductance	1780		100	1	01/26/09 13:00	PAC	4875962
TOTAL PETROLEUM HYDROCARBONS			MCL	E418.1	Units: mg/kg-dry		
Petroleum Hydrocarbons,TR	35		12	1	02/01/09 9:41	LL	4886822

Prep Method	Prep Date	Prep Initials	Prep Factor
	01/31/2009 9:40		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: MW-3 (7-8.5ft)

Collected: 01/20/2009 14:35 SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/kg-dry	
1,1,1,2-Tetrachloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1,1-Trichloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1,2,2-Tetrachloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1,2-Trichloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1-Dichloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1-Dichloroethene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,1-Dichloropropene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2,3-Trichlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2,3-Trichloropropane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2,4-Trichlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2,4-Trimethylbenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2-Dibromo-3-chloropropane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2-Dibromoethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2-Dichlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2-Dichloroethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,2-Dichloropropane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,3,5-Trimethylbenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,3-Dichlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,3-Dichloropropane	ND		5.8	1	01/23/09 18:35 JWW		4882426
1,4-Dichlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
2,2-Dichloropropane	ND		5.8	1	01/23/09 18:35 JWW		4882426
2-Butanone	ND		23	1	01/23/09 18:35 JWW		4882426
2-Chloroethyl vinyl ether	ND		12	1	01/23/09 18:35 JWW		4882426
2-Chlorotoluene	ND		5.8	1	01/23/09 18:35 JWW		4882426
2-Hexanone	ND		12	1	01/23/09 18:35 JWW		4882426
4-Chlorotoluene	ND		5.8	1	01/23/09 18:35 JWW		4882426
4-Isopropyltoluene	ND		5.8	1	01/23/09 18:35 JWW		4882426
4-Methyl-2-pentanone	ND		12	1	01/23/09 18:35 JWW		4882426
Acetone	ND		120	1	01/23/09 18:35 JWW		4882426
Acrylonitrile	ND		58	1	01/23/09 18:35 JWW		4882426
Benzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
Bromobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426
Bromochloromethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
Bromodichloromethane	ND		5.8	1	01/23/09 18:35 JWW		4882426
Bromoform	ND		5.8	1	01/23/09 18:35 JWW		4882426
Bromomethane	ND		12	1	01/23/09 18:35 JWW		4882426
Carbon disulfide	ND		5.8	1	01/23/09 18:35 JWW		4882426
Carbon tetrachloride	ND		5.8	1	01/23/09 18:35 JWW		4882426
Chlorobenzene	ND		5.8	1	01/23/09 18:35 JWW		4882426

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 (7-8.5ft)

Collected: 01/20/2009 14:35

SPL Sample ID: 09010825-02

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		12	1	01/23/09 18:35	JWW	4882426
Chloroform	ND		5.8	1	01/23/09 18:35	JWW	4882426
Chloromethane	ND		12	1	01/23/09 18:35	JWW	4882426
Dibromochloromethane	ND		5.8	1	01/23/09 18:35	JWW	4882426
Dibromomethane	ND		5.8	1	01/23/09 18:35	JWW	4882426
Dichlorodifluoromethane	ND		12	1	01/23/09 18:35	JWW	4882426
Ethylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Hexachlorobutadiene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Isopropylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Methyl tert-butyl ether	ND		5.8	1	01/23/09 18:35	JWW	4882426
Methylene chloride	ND		5.8	1	01/23/09 18:35	JWW	4882426
Naphthalene	ND		5.8	1	01/23/09 18:35	JWW	4882426
n-Butylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
n-Propylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
sec-Butylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Styrene	ND		5.8	1	01/23/09 18:35	JWW	4882426
tert-Butylbenzene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Tetrachloroethene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Toluene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Trichloroethene	ND		5.8	1	01/23/09 18:35	JWW	4882426
Trichlorofluoromethane	ND		5.8	1	01/23/09 18:35	JWW	4882426
Vinyl acetate	ND		5.8	1	01/23/09 18:35	JWW	4882426
Vinyl chloride	ND		5.8	1	01/23/09 18:35	JWW	4882426
cis-1,2-Dichloroethene	ND		5.8	1	01/23/09 18:35	JWW	4882426
cis-1,3-Dichloropropene	ND		5.8	1	01/23/09 18:35	JWW	4882426
m,p-Xylene	ND		5.8	1	01/23/09 18:35	JWW	4882426
o-Xylene	ND		5.8	1	01/23/09 18:35	JWW	4882426
trans-1,2-Dichloroethene	ND		5.8	1	01/23/09 18:35	JWW	4882426
trans-1,3-Dichloropropene	ND		5.8	1	01/23/09 18:35	JWW	4882426
1,2-Dichloroethene (total)	ND		5.8	1	01/23/09 18:35	JWW	4882426
Xylenes, Total	ND		5.75	1	01/23/09 18:35	JWW	4882426
Surr: 1,2-Dichloroethane-d4	92.8		% 62-169	1	01/23/09 18:35	JWW	4882426
Surr: 4-Bromofluorobenzene	99.1		% 64-147	1	01/23/09 18:35	JWW	4882426
Surr: Toluene-d8	101		% 52-152	1	01/23/09 18:35	JWW	4882426

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/22/2009 15:24	TL	1.00

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B/V - Analyte detected in the associated Method Blank
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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

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



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

Client Sample ID: MW-4 (7.5-9ft)

Collected: 01/20/2009 15:58 SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ION CHROMATOGRAPHY				MCL	E300.0 MOD	Units: mg/kg-dry	
Bromide	ND		6.13	1	01/28/09 0:58	BDG	4886331
Chloride	8.73		6.13	1	01/28/09 0:58	BDG	4886331
Fluoride	ND		6.13	1	01/28/09 0:58	BDG	4886331
Ortho-phosphate (As P)	ND		6.13	1	01/28/09 0:58	BDG	4886331
Sulfate	656		30.6	5	01/30/09 17:56	BDG	4889772
Nitrogen, Nitrate (As N)	ND		6.13	1	01/28/09 0:58	BDG	4881243
Nitrogen, Nitrite (As N)	ND		6.13	1	01/28/09 0:58	BDG	4881243
MERCURY, TOTAL				MCL	SW7471A	Units: mg/kg-dry	
Mercury	ND		0.0368	1	01/31/09 18:06	F_S	4886745

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	01/30/2009 16:00	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/kg-dry	
Aluminum	2200		12.3	1	01/28/09 14:19	S_C	4881341
Boron	35.4		12.3	1	01/28/09 14:19	S_C	4881341
Calcium	1190		12.3	1	01/28/09 14:19	S_C	4881341
Iron	3900		2.45	1	01/28/09 14:19	S_C	4881341
Magnesium	614		12.3	1	01/28/09 14:19	S_C	4881341
Potassium	328		245	1	01/28/09 14:19	S_C	4881341
Sodium	174		61.3	1	01/28/09 14:19	S_C	4881341
Strontium	18.1		2.45	1	01/28/09 14:19	S_C	4881341
Tin	ND		6.13	1	01/28/09 14:19	S_C	4881341

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	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: MW-4 (7.5-9ft)

Collected: 01/20/2009 15:58

SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
METALS BY METHOD 6020A, TOTAL				MCL	SW6020A	Units: mg/kg-dry	
Antimony	ND		0.613	1	01/31/09 0:52	AL_H	4886084
Arsenic	0.939		0.613	1	01/28/09 3:20	AL_H	4879831
Barium	32		0.613	1	01/28/09 3:20	AL_H	4879831
Beryllium	ND		0.49	1	01/28/09 3:20	AL_H	4879831
Cadmium	ND		0.613	1	01/28/09 3:20	AL_H	4879831
Chromium	2.14		0.613	1	01/31/09 0:52	AL_H	4886084
Cobalt	2.04		0.613	1	01/31/09 0:52	AL_H	4886084
Copper	2.37		0.613	1	01/31/09 0:52	AL_H	4886084
Lead	2.61		0.613	1	01/28/09 3:20	AL_H	4879831
Manganese	57.2		0.613	1	02/02/09 18:12	AL_H	4889330
Molybdenum	ND		0.613	1	01/28/09 3:20	AL_H	4879831
Nickel	2.19		0.613	1	01/28/09 3:20	AL_H	4879831
Selenium	ND		0.613	1	02/02/09 18:12	AL_H	4889330
Silver	ND		0.613	1	01/28/09 3:20	AL_H	4879831
Thallium	ND		0.613	1	01/28/09 3:20	AL_H	4879831
Vanadium	4.6		0.613	1	01/31/09 0:52	AL_H	4886084
Zinc	7.82		1.23	1	01/31/09 0:52	AL_H	4886084

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	01/26/2009 11:00	AB1	1.00

PERCENT MOISTURE			MCL	D2216	Units: wt%	
Percent Moisture	18.4		0	1	01/24/09 15:33	CFS 4874005
PH			MCL	SW9045C	Units: pH Units	
pH	7.03		0.1	1	01/24/09 16:00	S_H 4874201

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

Client Sample ID: MW-4 (7.5-9ft)

Collected: 01/20/2009 15:58 SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			MCL	SW8270C	Units: ug/kg-dry		
1,2,4-Trichlorobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
1,2-Dichlorobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
1,2-Diphenylhydrazine	ND		400	1	01/28/09 2:26	E_R	4880488
1,3-Dichlorobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
1,4-Dichlorobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
2,4,5-Trichlorophenol	ND		980	1	01/28/09 2:26	E_R	4880488
2,4,6-Trichlorophenol	ND		400	1	01/28/09 2:26	E_R	4880488
2,4-Dichlorophenol	ND		400	1	01/28/09 2:26	E_R	4880488
2,4-Dimethylphenol	ND		400	1	01/28/09 2:26	E_R	4880488
2,4-Dinitrophenol	ND		980	1	01/28/09 2:26	E_R	4880488
2,4-Dinitrotoluene	ND		980	1	01/28/09 2:26	E_R	4880488
2,6-Dinitrotoluene	ND		400	1	01/28/09 2:26	E_R	4880488
2-Chloronaphthalene	ND		400	1	01/28/09 2:26	E_R	4880488
2-Chlorophenol	ND		400	1	01/28/09 2:26	E_R	4880488
2-Methylnaphthalene	ND		400	1	01/28/09 2:26	E_R	4880488
2-Nitroaniline	ND		980	1	01/28/09 2:26	E_R	4880488
2-Nitrophenol	ND		400	1	01/28/09 2:26	E_R	4880488
3,3'-Dichlorobenzidine	ND		400	1	01/28/09 2:26	E_R	4880488
3-Nitroaniline	ND		980	1	01/28/09 2:26	E_R	4880488
4,6-Dinitro-2-methylphenol	ND		980	1	01/28/09 2:26	E_R	4880488
4-Bromophenyl phenyl ether	ND		400	1	01/28/09 2:26	E_R	4880488
4-Chloro-3-methylphenol	ND		400	1	01/28/09 2:26	E_R	4880488
4-Chloroaniline	ND		400	1	01/28/09 2:26	E_R	4880488
4-Chlorophenyl phenyl ether	ND		400	1	01/28/09 2:26	E_R	4880488
4-Nitroaniline	ND		980	1	01/28/09 2:26	E_R	4880488
4-Nitrophenol	ND		980	1	01/28/09 2:26	E_R	4880488
Acenaphthene	ND		400	1	01/28/09 2:26	E_R	4880488
Acenaphthylene	ND		400	1	01/28/09 2:26	E_R	4880488
Aniline	ND		400	1	01/28/09 2:26	E_R	4880488
Anthracene	ND		400	1	01/28/09 2:26	E_R	4880488
Benz(a)anthracene	ND		400	1	01/28/09 2:26	E_R	4880488
Benzo(a)pyrene	ND		400	1	01/28/09 2:26	E_R	4880488
Benzo(b)fluoranthene	ND		400	1	01/28/09 2:26	E_R	4880488
Benzo(g,h,i)perylene	ND		400	1	01/28/09 2:26	E_R	4880488
Benzo(k)fluoranthene	ND		400	1	01/28/09 2:26	E_R	4880488
Benzoic acid	ND		2000	1	01/28/09 2:26	E_R	4880488
Benzyl alcohol	ND		400	1	01/28/09 2:26	E_R	4880488
Bis(2-chloroethoxy)methane	ND		400	1	01/28/09 2:26	E_R	4880488
Bis(2-chloroethyl)ether	ND		400	1	01/28/09 2:26	E_R	4880488

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J - Estimated Value between MDL and PQL
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TNTC - Too numerous to count

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

Client Sample ID: MW-4 (7.5-9ft)

Collected: 01/20/2009 15:58

SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		400	1	01/28/09 2:26	E_R	4880488
Bis(2-ethylhexyl)phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Butyl benzyl phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Carbazole	ND		400	1	01/28/09 2:26	E_R	4880488
Chrysene	ND		400	1	01/28/09 2:26	E_R	4880488
Dibenz(a,h)anthracene	ND		400	1	01/28/09 2:26	E_R	4880488
Dibenzofuran	ND		400	1	01/28/09 2:26	E_R	4880488
Diethyl phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Dimethyl phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Di-n-butyl phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Di-n-octyl phthalate	ND		400	1	01/28/09 2:26	E_R	4880488
Fluoranthene	ND		400	1	01/28/09 2:26	E_R	4880488
Fluorene	ND		400	1	01/28/09 2:26	E_R	4880488
Hexachlorobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
Hexachlorobutadiene	ND		400	1	01/28/09 2:26	E_R	4880488
Hexachlorocyclopentadiene	ND		400	1	01/28/09 2:26	E_R	4880488
Hexachloroethane	ND		400	1	01/28/09 2:26	E_R	4880488
Indeno(1,2,3-cd)pyrene	ND		400	1	01/28/09 2:26	E_R	4880488
Isophorone	ND		400	1	01/28/09 2:26	E_R	4880488
Naphthalene	ND		400	1	01/28/09 2:26	E_R	4880488
Nitrobenzene	ND		400	1	01/28/09 2:26	E_R	4880488
N-Nitrosodi-n-propylamine	ND		400	1	01/28/09 2:26	E_R	4880488
N-Nitrosodiphenylamine	ND		400	1	01/28/09 2:26	E_R	4880488
Pentachlorophenol	ND		980	1	01/28/09 2:26	E_R	4880488
Phenanthrene	ND		400	1	01/28/09 2:26	E_R	4880488
Phenol	ND		400	1	01/28/09 2:26	E_R	4880488
Pyrene	ND		400	1	01/28/09 2:26	E_R	4880488
Pyridine	ND		400	1	01/28/09 2:26	E_R	4880488
2-Methylphenol	ND		400	1	01/28/09 2:26	E_R	4880488
3 & 4-Methylphenol	ND		400	1	01/28/09 2:26	E_R	4880488
Surr: 2,4,6-Tribromophenol	72.0		% 19-135	1	01/28/09 2:26	E_R	4880488
Surr: 2-Fluorobiphenyl	64.7		% 15-140	1	01/28/09 2:26	E_R	4880488
Surr: 2-Fluorophenol	72.0		% 15-122	1	01/28/09 2:26	E_R	4880488
Surr: Nitrobenzene-d5	70.6		% 10-134	1	01/28/09 2:26	E_R	4880488
Surr: Phenol-d5	80.0		% 10-123	1	01/28/09 2:26	E_R	4880488
Surr: Terphenyl-d14	70.6		% 18-166	1	01/28/09 2:26	E_R	4880488

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	01/23/2009 13:06	LLL	1.00

Qualifiers:

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

Client Sample ID: MW-4 (7.5-9ft) Collected: 01/20/2009 15:58 SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE				MCL	SW9050	Units: umhos/cm	
Specific Conductance	2530		100	1	01/26/09 13:00	PAC	4875963
TOTAL PETROLEUM HYDROCARBONS				MCL	E418.1	Units: mg/kg-dry	
Petroleum Hydrocarbons,TR	100		12	1	02/01/09 9:41	LLL	4886823

Prep Method	Prep Date	Prep Initials	Prep Factor
	01/31/2009 9:40		1.00

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

Client Sample ID: MW-4 (7.5-9ft)

Collected: 01/20/2009 15:58 SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/kg-dry	
1,1,1,2-Tetrachloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1,1-Trichloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1,2,2-Tetrachloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1,2-Trichloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1-Dichloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1-Dichloroethene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,1-Dichloropropene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2,3-Trichlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2,3-Trichloropropane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2,4-Trichlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2,4-Trimethylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dibromo-3-chloropropane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dibromoethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dichlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dichloroethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dichloropropane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,3,5-Trimethylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,3-Dichlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,3-Dichloropropane	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,4-Dichlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
2,2-Dichloropropane	ND		6.1	1	01/23/09 18:57	JWW	4882427
2-Butanone	ND		25	1	01/23/09 18:57	JWW	4882427
2-Chloroethyl vinyl ether	ND		12	1	01/23/09 18:57	JWW	4882427
2-Chlorotoluene	ND		6.1	1	01/23/09 18:57	JWW	4882427
2-Hexanone	ND		12	1	01/23/09 18:57	JWW	4882427
4-Chlorotoluene	ND		6.1	1	01/23/09 18:57	JWW	4882427
4-Isopropyltoluene	ND		6.1	1	01/23/09 18:57	JWW	4882427
4-Methyl-2-pentanone	ND		12	1	01/23/09 18:57	JWW	4882427
Acetone	ND		120	1	01/23/09 18:57	JWW	4882427
Acrylonitrile	ND		61	1	01/23/09 18:57	JWW	4882427
Benzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Bromobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Bromochloromethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
Bromodichloromethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
Bromoform	ND		6.1	1	01/23/09 18:57	JWW	4882427
Bromomethane	ND		12	1	01/23/09 18:57	JWW	4882427
Carbon disulfide	ND		6.1	1	01/23/09 18:57	JWW	4882427
Carbon tetrachloride	ND		6.1	1	01/23/09 18:57	JWW	4882427
Chlorobenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427

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-4 (7.5-9ft)

Collected: 01/20/2009 15:58

SPL Sample ID: 09010825-03

Site: Aztec, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		12	1	01/23/09 18:57	JWW	4882427
Chloroform	ND		6.1	1	01/23/09 18:57	JWW	4882427
Chloromethane	ND		12	1	01/23/09 18:57	JWW	4882427
Dibromochloromethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
Dibromomethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
Dichlorodifluoromethane	ND		12	1	01/23/09 18:57	JWW	4882427
Ethylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Hexachlorobutadiene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Isopropylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Methyl tert-butyl ether	ND		6.1	1	01/23/09 18:57	JWW	4882427
Methylene chloride	ND		6.1	1	01/23/09 18:57	JWW	4882427
Naphthalene	ND		6.1	1	01/23/09 18:57	JWW	4882427
n-Butylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
n-Propylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
sec-Butylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Styrene	ND		6.1	1	01/23/09 18:57	JWW	4882427
tert-Butylbenzene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Tetrachloroethene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Toluene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Trichloroethene	ND		6.1	1	01/23/09 18:57	JWW	4882427
Trichlorofluoromethane	ND		6.1	1	01/23/09 18:57	JWW	4882427
Vinyl acetate	ND		6.1	1	01/23/09 18:57	JWW	4882427
Vinyl chloride	ND		6.1	1	01/23/09 18:57	JWW	4882427
cis-1,2-Dichloroethene	ND		6.1	1	01/23/09 18:57	JWW	4882427
cis-1,3-Dichloropropene	ND		6.1	1	01/23/09 18:57	JWW	4882427
m,p-Xylene	ND		6.1	1	01/23/09 18:57	JWW	4882427
o-Xylene	ND		6.1	1	01/23/09 18:57	JWW	4882427
trans-1,2-Dichloroethene	ND		6.1	1	01/23/09 18:57	JWW	4882427
trans-1,3-Dichloropropene	ND		6.1	1	01/23/09 18:57	JWW	4882427
1,2-Dichloroethene (total)	ND		6.1	1	01/23/09 18:57	JWW	4882427
Xylenes, Total	ND		6.13	1	01/23/09 18:57	JWW	4882427
Surr: 1,2-Dichloroethane-d4	93.4		% 62-169	1	01/23/09 18:57	JWW	4882427
Surr: 4-Bromofluorobenzene	102		% 64-147	1	01/23/09 18:57	JWW	4882427
Surr: Toluene-d8	98.0		% 52-152	1	01/23/09 18:57	JWW	4882427

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	01/22/2009 15:25	TL	1.00

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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

Conoco Phillips

COP Faye-Burdette

Analysis: Total Petroleum Hydrocarbons
Method: E418.1

WorkOrder: 09010825
Lab Batch ID: R264019

Method Blank

RunID: EX_090131B-4886817 Units: mg/kg
Analysis Date: 02/01/2009 9:41 Analyst: LLL
Preparation Date: 01/31/2009 9:40 Prep By: Method:

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01C	MW-2 (8-9.5ft.)
09010825-02C	MW-3 (7-8.5ft)
09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Petroleum Hydrocarbons,TR	ND	10

Laboratory Control Sample (LCS)

RunID: EX_090131B-4886818 Units: mg/kg
Analysis Date: 02/01/2009 9:41 Analyst: LLL
Preparation Date: 01/31/2009 9:40 Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Petroleum Hydrocarbons,TR	200	190	95.0	80	120

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

Sample Spiked: 09010825-01
RunID: EX_090131B-4886825 Units: mg/kg-dry
Analysis Date: 02/01/2009 9:41 Analyst: LLL
Preparation Date: 01/31/2009 9:40 Prep By: Method:

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Petroleum Hydrocarbons,TR	36.8	245	270	95.0	245	276	97.5	2.25	20	75	125

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 25

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

Method Blank

RunID: MSDVOA4_090123A-4872933 Units: ug/kg
Analysis Date: 01/23/2009 12:49 Analyst: JWW
Preparation Date: 01/23/2009 12:49 Prep By: Method:

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01A	MW-2 (8-9.5ft.)
09010825-02A	MW-3 (7-8.5ft)
09010825-03A	MW-4 (7.5-9ft)

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

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 26

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

Method Blank

RunID: MSDVOA4_090123A-4872933 Units: ug/kg
Analysis Date: 01/23/2009 12:49 Analyst: JWW
Preparation Date: 01/23/2009 12:49 Prep By: Method:

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
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	5.0
Vinyl chloride	ND	5.0
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	86.3	62-169
Surr: 4-Bromofluorobenzene	100.4	64-147
Surr: Toluene-d8	100.3	52-152

Laboratory Control Sample (LCS)

RunID: MSDVOA4_090123A-48729 Units: ug/kg
Analysis Date: 01/23/2009 12:06 Analyst: JWW
Preparation Date: 01/23/2009 12:06 Prep By: Method: SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.1	101	77	126
1,1,1-Trichloroethane	20.0	19.9	99.6	70	130
1,1,2,2-Tetrachloroethane	20.0	20.2	101	71	130
1,1,2-Trichloroethane	20.0	21.7	108	75	126
1,1-Dichloroethane	20.0	21.5	107	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

Laboratory Control Sample (LCS)

RunID: MSDVOA4_090123A-48729 Units: ug/kg
Analysis Date: 01/23/2009 12:06 Analyst: JWW
Preparation Date: 01/23/2009 12:06 Prep By: Method: SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	22.3	112	70	130
1,1-Dichloropropene	20.0	22.4	112	70	130
1,2,3-Trichlorobenzene	20.0	21.5	108	67	114
1,2,3-Trichloropropane	20.0	22.1	111	77	128
1,2,4-Trichlorobenzene	20.0	22.4	112	50	123
1,2,4-Trimethylbenzene	20.0	21.4	107	67	128
1,2-Dibromo-3-chloropropane	20.0	19.2	96.0	66	135
1,2-Dibromoethane	20.0	21.2	106	70	130
1,2-Dichlorobenzene	20.0	20.7	104	70	130
1,2-Dichloroethane	20.0	19.6	98.1	70	130
1,2-Dichloropropane	20.0	20.9	105	76	122
1,3,5-Trimethylbenzene	20.0	20.9	105	62	129
1,3-Dichlorobenzene	20.0	22.2	111	70	130
1,3-Dichloropropane	20.0	20.7	104	70	125
1,4-Dichlorobenzene	20.0	20.1	100	70	130
2,2-Dichloropropane	20.0	21.0	105	70	130
2-Butanone	20.0	23.0	115	69	146
2-Chloroethyl vinyl ether	20.0	17.5	87.6	53	150
2-Chlorotoluene	20.0	21.9	110	70	130
2-Hexanone	20.0	20.9	105	74	139
4-Chlorotoluene	20.0	24.1	120	70	130
4-Isopropyltoluene	20.0	21.4	107	67	130
4-Methyl-2-pentanone	20.0	19.6	98.0	70	124
Acetone	20.0	21.8	109	64	158
Acrylonitrile	20.0	21.2	106	63	130
Benzene	20.0	21.7	108	65	132
Bromobenzene	20.0	21.2	106	70	130
Bromochloromethane	20.0	20.3	102	70	129
Bromodichloromethane	20.0	20.9	104	72	123
Bromoform	20.0	18.5	92.7	70	127
Bromomethane	20.0	20.5	103	65	150
Carbon disulfide	20.0	19.2	96.2	53	125
Carbon tetrachloride	20.0	20.3	102	70	130
Chlorobenzene	20.0	21.1	105	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09010825 Page 28

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

Laboratory Control Sample (LCS)

RunID: MSDVOA4_090123A-48729 Units: ug/kg
Analysis Date: 01/23/2009 12:06 Analyst: JWW
Preparation Date: 01/23/2009 12:06 Prep By: Method: SW5030B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	19.1	95.3	67	163
Chloroform	20.0	21.5	108	70	128
Chloromethane	20.0	16.8	84.2	53	131
Dibromochloromethane	20.0	18.7	93.5	72	122
Dibromomethane	20.0	20.7	103	70	130
Dichlorodifluoromethane	20.0	14.8	74.1	47	127
Ethylbenzene	20.0	22.2	111	71	140
Hexachlorobutadiene	20.0	19.7	98.4	78	121
Isopropylbenzene	20.0	23.1	115	62	139
Methyl tert-butyl ether	20.0	22.4	112	70	130
Methylene chloride	20.0	19.8	98.8	50	150
Naphthalene	20.0	19.8	99.2	63	130
n-Butylbenzene	20.0	21.1	106	62	132
n-Propylbenzene	20.0	21.8	109	62	124
sec-Butylbenzene	20.0	20.9	105	65	129
Styrene	20.0	23.4	117	70	130
tert-Butylbenzene	20.0	21.0	105	69	130
Tetrachloroethene	20.0	21.1	106	65	145
Toluene	20.0	20.5	103	65	140
Trichloroethene	20.0	23.0	115	70	130
Trichlorofluoromethane	20.0	20.0	100	58	119
Vinyl acetate	20.0	21.3	107	50	128
Vinyl chloride	20.0	17.4	87.0	50	175
cis-1,2-Dichloroethene	20.0	21.2	106	64	130
cis-1,3-Dichloropropene	20.0	20.6	103	76	120
m,p-Xylene	40.0	41.8	104	70	143
o-Xylene	20.0	23.0	115	75	140
trans-1,2-Dichloroethene	20.0	20.3	102	53	129
trans-1,3-Dichloropropene	20.0	19.9	99.3	74	119
1,2-Dichloroethene (total)	40.0	41.5	104	53	130
Xylenes, Total	60.0	64.8	108	70	143
Surr: 1,2-Dichloroethane-d4	50.0	43.6	87.3	62	169
Surr: 4-Bromofluorobenzene	50.0	51.4	103	64	147
Surr: Toluene-d8	50.0	51.8	104	52	152

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09010825 Page 29

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

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

Sample Spiked: 09010792-03
RunID: MSDVOA4_090123A-48729 Units: mg/kg-dry
Analysis Date: 01/23/2009 14:17 Analyst: JWW
Preparation Date: 01/23/2009 13:09 Prep By: TL 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
1,1,1,2-Tetrachloroethane	ND	0.0273	0.0202	71.4	0.0273	0.0209	74.0	3.48	30	41	144
1,1,1-Trichloroethane	ND	0.0273	0.0230	84.2	0.0273	0.0248	90.9	7.60	35	43	156
1,1,2,2-Tetrachloroethane	ND	0.0273	0.0189	69.0	0.0273	0.0201	73.6	6.38	27	52	140
1,1,2-Trichloroethane	ND	0.0273	0.0222	81.2	0.0273	0.0228	83.6	2.82	31	57	129
1,1-Dichloroethane	ND	0.0273	0.0241	88.2	0.0273	0.0254	92.9	5.22	35	46	161
1,1-Dichloroethene	ND	0.0273	0.0268	98.1	0.0273	0.0286	105	6.34	35	42	155
1,1-Dichloropropene	ND	0.0273	0.0257	94.2	0.0273	0.0274	100	6.42	34	46	154
1,2,3-Trichlorobenzene	ND	0.0273	0.0152	55.7	0.0273	0.0161	58.9	5.51	32	22	148
1,2,3-Trichloropropane	ND	0.0273	0.0214	78.4	0.0273	0.0228	83.5	6.28	27	55	135
1,2,4-Trichlorobenzene	ND	0.0273	0.0174	63.6	0.0273	0.0176	64.3	1.10	28	20	149
1,2,4-Trimethylbenzene	ND	0.0273	0.0204	72.9	0.0273	0.0223	79.7	8.63	27	46	151
1,2-Dibromo-3-chloropropane	ND	0.0273	0.0190	69.5	0.0273	0.0200	73.1	5.05	34	28	129
1,2-Dibromoethane	ND	0.0273	0.0208	76.0	0.0273	0.0209	76.5	0.582	17	64	139
1,2-Dichlorobenzene	ND	0.0273	0.0192	70.4	0.0273	0.0199	72.7	3.15	20	38	138
1,2-Dichloroethane	ND	0.0273	0.0203	74.2	0.0273	0.0209	76.7	3.25	16	62	130
1,2-Dichloropropane	ND	0.0273	0.0228	83.4	0.0273	0.0239	87.4	4.78	20	56	141
1,3,5-Trimethylbenzene	ND	0.0273	0.0214	77.0	0.0273	0.0225	81.0	4.98	37	46	153
1,3-Dichlorobenzene	ND	0.0273	0.0207	75.8	0.0273	0.0212	77.5	2.23	33	39	144
1,3-Dichloropropane	ND	0.0273	0.0210	76.9	0.0273	0.0213	78.1	1.54	16	49	135
1,4-Dichlorobenzene	ND	0.0273	0.0190	69.6	0.0273	0.0190	69.5	0.0827	27	39	137
2,2-Dichloropropane	ND	0.0273	0.0247	90.3	0.0273	0.0259	94.8	4.86	39	44	155
2-Butanone	ND	0.0273	0.0245	89.6	0.0273	0.0234	85.6	4.58	32	14	157
2-Chloroethyl vinyl ether	ND	0.0273	0.0177	64.8	0.0273	0.0174	63.8	1.51	43	23	150
2-Chlorotoluene	ND	0.0273	0.0220	80.5	0.0273	0.0233	85.3	5.84	46	50	143
2-Hexanone	ND	0.0273	0.0209	76.7	0.0273	0.0208	76.1	0.719	41	16	132
4-Chlorotoluene	ND	0.0273	0.0234	85.7	0.0273	0.0245	89.6	4.47	25	30	154
4-Isopropyltoluene	ND	0.0273	0.0233	85.1	0.0273	0.0243	89.1	4.56	41	22	167
4-Methyl-2-pentanone	ND	0.0273	0.0205	74.9	0.0273	0.0202	73.9	1.35	28	28	142
Acetone	ND	0.0273	0.0254	93.0	0.0273	0.0266	97.4	4.65	42	34	176
Acrylonitrile	ND	0.0273	0.0231	84.5	0.0273	0.0218	79.8	5.69	36	34	162

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 30

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

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

Sample Spiked: 09010792-03
RunID: MSDVOA4_090123A-48729 Units: mg/kg-dry
Analysis Date: 01/23/2009 14:17 Analyst: JWW
Preparation Date: 01/23/2009 13:09 Prep By: TL 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	0.0273	0.0243	89.0	0.0273	0.0257	94.1	5.64	33	41	154
Bromobenzene	ND	0.0273	0.0211	77.3	0.0273	0.0221	81.0	4.75	31	53	133
Bromochloromethane	ND	0.0273	0.0212	77.7	0.0273	0.0222	81.3	4.60	33	45	145
Bromodichloromethane	ND	0.0273	0.0208	76.3	0.0273	0.0212	77.5	1.57	33	39	140
Bromoform	ND	0.0273	0.0164	59.8	0.0273	0.0175	64.0	6.72	37	32	128
Bromomethane	ND	0.0273	0.0213	78.1	0.0273	0.0239	87.5	11.3	33	19	187
Carbon disulfide	ND	0.0273	0.0217	76.0	0.0273	0.0232	81.3	6.40	36	19	168
Carbon tetrachloride	ND	0.0273	0.0237	86.7	0.0273	0.0251	91.8	5.69	38	20	172
Chlorobenzene	ND	0.0273	0.0217	79.6	0.0273	0.0226	82.6	3.71	31	23	144
Chloroethane	ND	0.0273	0.0230	84.1	0.0273	0.0235	86.1	2.35	36	38	184
Chloroform	ND	0.0273	0.0225	82.3	0.0273	0.0238	86.9	5.45	33	51	152
Chloromethane	ND	0.0273	0.0193	70.8	0.0273	0.0214	78.4	10.3	36	31	180
Dibromochloromethane	ND	0.0273	0.0174	63.7	0.0273	0.0189	69.0	7.93	32	34	135
Dibromomethane	ND	0.0273	0.0202	74.0	0.0273	0.0211	77.3	4.41	30	61	132
Dichlorodifluoromethane	ND	0.0273	0.0185	67.7	0.0273	0.0197	72.3	6.56	37	37	179
Ethylbenzene	ND	0.0273	0.0242	88.8	0.0273	0.0255	93.2	4.91	35	32	160
Hexachlorobutadiene	ND	0.0273	0.0187	68.4	0.0273	0.0201	73.5	7.23	31	24	160
Isopropylbenzene	ND	0.0273	0.0252	92.2	0.0273	0.0268	98.1	6.21	38	12	180
Methyl tert-butyl ether	ND	0.0273	0.0221	80.8	0.0273	0.0240	87.8	8.32	35	55	138
Methylene chloride	ND	0.0273	0.0250	82.1	0.0273	0.0253	82.9	0.906	26	31	155
Naphthalene	ND	0.0273	0.0155	54.0	0.0273	0.0161	56.4	4.14	37	17	152
n-Butylbenzene	ND	0.0273	0.0222	80.2	0.0273	0.0229	82.6	2.87	33	27	163
n-Propylbenzene	ND	0.0273	0.0227	82.3	0.0273	0.0240	87.0	5.42	35	43	154
sec-Butylbenzene	ND	0.0273	0.0224	81.8	0.0273	0.0242	88.7	8.06	37	33	165
Styrene	ND	0.0273	0.0229	83.9	0.0273	0.0228	83.6	0.377	24	19	156
tert-Butylbenzene	ND	0.0273	0.0224	82.1	0.0273	0.0238	87.1	5.91	34	45	159
Tetrachloroethene	ND	0.0273	0.0246	90.0	0.0273	0.0247	90.5	0.530	38	32	172
Toluene	ND	0.0273	0.0224	81.2	0.0273	0.0234	84.9	4.42	36	50	151
Trichloroethene	ND	0.0273	0.0260	95.1	0.0273	0.0262	95.8	0.812	41	55	149
Trichlorofluoromethane	ND	0.0273	0.0256	93.9	0.0273	0.0263	96.2	2.48	34	29	186
Vinyl acetate	ND	0.0273	0.00559	20.4 *	0.0273	0.00562	20.6 *	0.622	30	50	200
Vinyl chloride	ND	0.0273	0.0155	56.8	0.0273	0.0171	62.5	9.63	39	20	200

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 31

2/7/2009 11:34:11 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09010825
Lab Batch ID: R263297

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

Sample Spiked: 09010792-03
RunID: MSDVOA4_090123A-48729 Units: mg/kg-dry
Analysis Date: 01/23/2009 14:17 Analyst: JWW
Preparation Date: 01/23/2009 13:09 Prep By: TL 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
cis-1,2-Dichloroethene	ND	0.0273	0.0231	84.6	0.0273	0.0240	88.0	4.00	30	58	141
cis-1,3-Dichloropropene	ND	0.0273	0.0200	73.3	0.0273	0.0202	74.0	0.984	27	45	132
m,p-Xylene	ND	0.0546	0.0445	79.8	0.0546	0.0462	83.0	3.86	35	49	155
o-Xylene	ND	0.0273	0.0239	86.7	0.0273	0.0252	91.6	5.47	35	62	143
trans-1,2-Dichloroethene	ND	0.0273	0.0238	87.0	0.0273	0.0247	90.5	3.95	35	40	168
trans-1,3-Dichloropropene	ND	0.0273	0.0186	67.9	0.0273	0.0185	67.8	0.176	24	47	124
1,2-Dichloroethene (total)	ND	0.0546	0.0469	85.8	0.0546	0.0487	89.3	3.97	35	40	168
Xylenes, Total	ND	0.082	0.0684	82.1	0.082	0.0714	85.9	4.43	35	49	155
Surr: 1,2-Dichloroethane-d4	ND	68.3	62.1	91.0	68.3	62.7	91.8	0.950	30	62	169
Surr: 4-Bromofluorobenzene	ND	68.3	69.2	101	68.3	68.9	101	0.333	30	64	147
Surr: Toluene-d8	ND	68.3	68.7	101	68.3	67.5	98.9	1.69	30	52	152

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 32

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

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

WorkOrder: 09010825
Lab Batch ID: 87371

Method Blank

Samples in Analytical Batch:

RunID: TJA_090128A-4881529

Units: mg/kg

Lab Sample ID

Client Sample ID

Analysis Date: 01/28/2009 16:17

Analyst: S_C

09010825-01C

MW-2 (8-9.5ft.)

Preparation Date: 01/26/2009 11:00

Prep By: AB1 Method: SW3050B

09010825-02C

MW-3 (7-8.5ft)

09010825-03C

MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Aluminum	ND	10
Boron	ND	10
Calcium	ND	10
Iron	ND	2
Magnesium	ND	10
Potassium	ND	200
Sodium	ND	50
Strontium	ND	2
Tin	ND	5

Laboratory Control Sample (LCS)

RunID: TJA_090128A-4881340

Units: mg/kg

Analysis Date: 01/28/2009 14:14

Analyst: S_C

Preparation Date: 01/26/2009 11:00

Prep By: AB1 Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Aluminum	7590	6408	84.43	58	142
Boron	96.60	114.1	118.1	56	144
Calcium	4320	4101	94.93	79	121
Iron	14400	12240	85.02	52	149
Magnesium	2220	2060	92.80	77	123
Potassium	2380	2162	90.82	71	129
Sodium	456.0	396.1	86.87	56	144
Strontium	113.0	109.2	96.64	80	120
Tin	175.0	175.5	100.3	70	130

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked: 09010825-03

RunID: TJA_090128A-4881345

Units: mg/kg-dry

Analysis Date: 01/28/2009 14:38

Analyst: S_C

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

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

WorkOrder: 09010825
Lab Batch ID: 87371

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDS Spike Added	PDS Result	PDS % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sodium	174	122.55	283.9	89.75	122.55	291.7	96.05	2.683	20	75	125

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

Sample Spiked: 09010825-03
RunID: TJA_090128A-4881342 Units: mg/kg-dry
Analysis Date: 01/28/2009 14:24 Analyst: S_C
Preparation Date: 01/26/2009 11:00 Prep By: AB1 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
Aluminum	2204	122.5	3967	N/C	122.5	3955	N/C	N/C	20	75	125
Boron	35.38	122.5	149.9	93.47	122.5	149.2	92.90	0.4686	20	75	125
Calcium	1194	122.5	1039	N/C	122.5	893.8	N/C	N/C	20	75	125
Iron	3901	122.5	3849	N/C	122.5	3861	N/C	N/C	20	75	125
Magnesium	614.5	122.5	819.1	N/C	122.5	837.5	N/C	N/C	20	75	125
Potassium	327.6	1225	1680	110.3	1225	1733	114.7	3.157	20	75	125
Sodium	173.9	122.5	264.3	73.75 *	122.5	283.9	89.73	7.147	20	75	125
Strontium	18.14	122.5	136.0	96.14	122.5	133.5	94.10	1.857	20	75	125
Tin	ND	122.5	128.6	105.0	122.5	126.0	102.8	2.073	20	75	125

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 34

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09010825
Lab Batch ID: 87371A-I

Method Blank

RunID: ICPMS_090127B-4879829 Units: mg/kg
Analysis Date: 01/28/2009 3:09 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01C	MW-2 (8-9.5ft.)
09010825-02C	MW-3 (7-8.5ft)
09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Arsenic	ND	0.5
Barium	ND	0.5
Beryllium	ND	0.4
Cadmium	ND	0.5
Lead	ND	0.5
Molybdenum	ND	0.5
Nickel	ND	0.5
Silver	ND	0.5
Thallium	ND	0.5

Laboratory Control Sample (LCS)

RunID: ICPMS_090127B-4879830 Units: mg/kg
Analysis Date: 01/28/2009 3:15 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	80.90	75.72	93.60	79	121
Barium	156.0	138.6	88.85	82	119
Beryllium	143.0	144.7	101.2	82	118
Cadmium	233.0	234.7	100.7	81	119
Lead	76.80	71.09	92.57	81	120
Molybdenum	58.40	55.35	94.78	79	121
Nickel	49.60	52.95	106.8	81	119
Silver	80.00	90.20	112.8	61	139
Thallium	158.0	151.4	95.82	76	125

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked: 09010825-03
RunID: ICPMS_090127B-4879835 Units: mg/kg-dry
Analysis Date: 01/28/2009 3:40 Analyst: AL_H

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09010825
Lab Batch ID: 87371A-I

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDS Spike Added	PDS Result	PDS % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	32	12.255	43.75	95.70	12.255	43.69	95.20	0.1402	20	75	125

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

Sample Spiked: 09010825-03
RunID: ICPMS_090127B-4879832 Units: mg/kg-dry
Analysis Date: 01/28/2009 3:25 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 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	0.9387	12.25	10.88	81.14	12.25	11.01	82.20	1.187	20	75	125
Barium	32.02	12.25	51.00	154.9 *	12.25	40.48	69.00 *	23.01 *	20	75	125
Beryllium	ND	12.25	12.41	98.99	12.25	12.25	97.69	1.292	20	75	125
Cadmium	ND	12.25	11.77	94.88	12.25	11.54	92.97	2.008	20	75	125
Lead	2.612	12.25	14.11	93.79	12.25	13.85	91.69	1.841	20	75	125
Molybdenum	ND	12.25	10.75	87.73	12.25	11.07	90.36	2.954	20	75	125
Nickel	2.191	12.25	14.18	97.82	12.25	14.01	96.42	1.217	20	75	125
Silver	ND	12.25	13.32	108.7	12.25	13.17	107.5	1.110	20	75	125
Thallium	ND	12.25	11.39	91.74	12.25	11.31	91.06	0.7341	20	75	125

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 36

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09010825
Lab Batch ID: 87371B-I

Method Blank

RunID: ICPMS_090130A-4886082 Units: mg/kg
Analysis Date: 01/31/2009 0:42 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 Method: SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01C	MW-2 (8-9.5ft.)
09010825-02C	MW-3 (7-8.5ft)
09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Antimony	ND	0.5
Chromium	ND	0.5
Cobalt	ND	0.5
Copper	ND	0.5
Vanadium	ND	0.5
Zinc	ND	1

Laboratory Control Sample (LCS)

RunID: ICPMS_090130A-4886083 Units: mg/kg
Analysis Date: 01/31/2009 0:47 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Antimony	77.50	53.00	68.39	30	223
Chromium	60.80	66.43	109.3	78	121
Cobalt	68.60	77.24	112.6	82	118
Copper	131.0	121.8	92.98	79	118
Vanadium	72.40	64.09	88.52	71	128
Zinc	116.0	106.7	91.98	78	122

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked: 09010825-03
RunID: ICPMS_090130A-4886088 Units: mg/kg-dry
Analysis Date: 01/31/2009 1:12 Analyst: AL_H

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	12.255	11.66	95.17	12.255	11.77	96.02	0.8892	20	75	125

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

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 37

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09010825
Lab Batch ID: 87371B-I

Sample Spiked: 09010825-03
RunID: ICPMS_090130A-4886085 Units: mg/kg-dry
Analysis Date: 01/31/2009 0:58 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 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
Antimony	ND	12.25	5.990	48.88 *	12.25	5.915	48.27 *	1.256	20	75	125
Chromium	2.138	12.25	15.48	108.9	12.25	14.91	104.2	3.710	20	75	125
Cobalt	2.042	12.25	14.88	104.7	12.25	14.79	104.0	0.5783	20	75	125
Copper	2.366	12.25	12.76	84.79	12.25	12.78	84.99	0.1919	20	75	125
Vanadium	4.598	12.25	16.10	93.88	12.25	15.71	90.68	2.465	20	75	125
Zinc	7.822	12.25	18.46	86.77	12.25	18.26	85.17	1.068	20	75	125

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 38

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09010825
Lab Batch ID: 87371D-I

Method Blank

Samples in Analytical Batch:

RunID: ICPMS_090202A-4889328	Units: mg/kg	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date: 02/02/2009 18:03	Analyst: AL_H	09010825-01C	MW-2 (8-9.5ft.)
Preparation Date: 01/26/2009 11:00	Prep By: AB1 Method: SW3050B	09010825-02C	MW-3 (7-8.5ft)
		09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Manganese	ND	0.5
Selenium	ND	0.5

Laboratory Control Sample (LCS)

RunID: ICPMS_090202A-4889329 Units: mg/kg
Analysis Date: 02/02/2009 18:08 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Manganese	304.0	296.3	97.47	80	120
Selenium	82.90	90.65	109.3	76	124

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

Sample Spiked: 09010825-03
RunID: ICPMS_090202A-4889331 Units: mg/kg-dry
Analysis Date: 02/02/2009 18:17 Analyst: AL_H
Preparation Date: 01/26/2009 11:00 Prep By: AB1 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
Manganese	57.23	12.25	57.08	N/C	12.25	56.63	N/C	N/C	20	75	125
Selenium	ND	12.25	10.96	87.86	12.25	10.72	85.93	2.182	20	75	125

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

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

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09010825 Page 39

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Mercury, Total
Method: SW7471A

WorkOrder: 09010825
Lab Batch ID: 87554

Method Blank

Samples in Analytical Batch:

RunID: HGLC_090131B-4886726	Units: mg/kg	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date: 01/31/2009 17:16	Analyst: F_S	09010825-01C	MW-2 (8-9.5ft.)
Preparation Date: 01/30/2009 16:00	Prep By: F_S Method: SW7471A	09010825-02C	MW-3 (7-8.5ft)
		09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Mercury	ND	0.03

Laboratory Control Sample (LCS)

RunID: HGLC_090131B-4886727 Units: mg/kg
Analysis Date: 01/31/2009 17:20 Analyst: F_S
Preparation Date: 01/30/2009 16:00 Prep By: F_S Method: SW7471A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	3.600	3.532	98.11	68	132

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

Sample Spiked: 09011029-01
RunID: HGLC_090131B-4886729 Units: mg/kg-dry
Analysis Date: 01/31/2009 17:26 Analyst: F_S
Preparation Date: 01/30/2009 16:00 Prep By: F_S 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	ND	0.3081	0.3229	104.8	0.3081	0.3208	104.1	0.6716	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count
MI - Matrix Interference
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09010825 Page 40

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

Method Blank

Samples in Analytical Batch:

RunID: R_090127C-4880482 Units: ug/kg
Analysis Date: 01/27/2009 23:06 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Lab Sample ID	Client Sample ID
09010825-01C	MW-2 (8-9.5ft.)
09010825-02C	MW-3 (7-8.5ft)
09010825-03C	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
1,2-Diphenylhydrazine	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
2,4,5-Trichlorophenol	ND	800
2,4,6-Trichlorophenol	ND	330
2,4-Dichlorophenol	ND	330
2,4-Dimethylphenol	ND	330
2,4-Dinitrophenol	ND	800
2,4-Dinitrotoluene	ND	800
2,6-Dinitrotoluene	ND	330
2-Chloronaphthalene	ND	330
2-Chlorophenol	ND	330
2-Methylnaphthalene	ND	330
2-Nitroaniline	ND	800
2-Nitrophenol	ND	330
3,3'-Dichlorobenzidine	ND	330
3-Nitroaniline	ND	800
4,6-Dinitro-2-methylphenol	ND	800
4-Bromophenyl phenyl ether	ND	330
4-Chloro-3-methylphenol	ND	330
4-Chloroaniline	ND	330
4-Chlorophenyl phenyl ether	ND	330
4-Nitroaniline	ND	800
4-Nitrophenol	ND	800
Acenaphthene	ND	330
Acenaphthylene	ND	330
Aniline	ND	330
Anthracene	ND	330
Benzo(a)anthracene	ND	330
Benzo(a)pyrene	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(g,h,i)perylene	ND	330
Benzo(k)fluoranthene	ND	330
Benzoic acid	ND	1600
Benzyl alcohol	ND	330
Bis(2-chloroethoxy)methane	ND	330
Bis(2-chloroethyl)ether	ND	330
Bis(2-chloroisopropyl)ether	ND	330
Bis(2-ethylhexyl)phthalate	ND	330
Butyl benzyl phthalate	ND	330
Carbazole	ND	330
Chrysene	ND	330
Dibenz(a,h)anthracene	ND	330
Dibenzofuran	ND	330

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

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

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09010825 Page 41

2/7/2009 11:34:12 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

Method Blank

RunID: R_090127C-4880482 Units: ug/kg
Analysis Date: 01/27/2009 23:06 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Analyte	Result	Rep Limit
Diethyl phthalate	ND	330
Dimethyl phthalate	ND	330
Di-n-butyl phthalate	ND	330
Di-n-octyl phthalate	ND	330
Fluoranthene	ND	330
Fluorene	ND	330
Hexachlorobenzene	ND	330
Hexachlorobutadiene	ND	330
Hexachlorocyclopentadiene	ND	330
Hexachloroethane	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Isophorone	ND	330
Naphthalene	ND	330
Nitrobenzene	ND	330
N-Nitrosodi-n-propylamine	ND	330
N-Nitrosodiphenylamine	ND	330
Pentachlorophenol	ND	800
Phenanthrene	ND	330
Phenol	ND	330
Pyrene	ND	330
Pyridine	ND	330
2-Methylphenol	ND	330
3 & 4-Methylphenol	ND	330
Surr: 2,4,6-Tribromophenol	76.0	19-135
Surr: 2-Fluorobiphenyl	70.6	15-140
Surr: 2-Fluorophenol	80.0	15-122
Surr: Nitrobenzene-d5	76.5	10-134
Surr: Phenol-d5	88.0	10-123
Surr: Terphenyl-d14	76.5	18-166

Laboratory Control Sample (LCS)

RunID: R_090127C-4880483 Units: ug/kg
Analysis Date: 01/27/2009 23:39 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	850	530	62.4	34	116
1,2-Dichlorobenzene	850	580	68.2	32	129
1,2-Diphenylhydrazine	850	600	70.6	10	256

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

Laboratory Control Sample (LCS)

RunID: R_090127C-4880483 Units: ug/kg
Analysis Date: 01/27/2009 23:39 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	850	550	64.7	10	172
1,4-Dichlorobenzene	850	560	65.9	20	124
2,4,5-Trichlorophenol	850	520	61.2	40	150
2,4,6-Trichlorophenol	850	540	63.5	37	144
2,4-Dichlorophenol	850	560	65.9	39	135
2,4-Dimethylphenol	850	580	68.2	32	119
2,4-Dinitrophenol	850	430	50.6	10	191
2,4-Dinitrotoluene	850	520	61.2	30	150
2,6-Dinitrotoluene	850	530	62.4	30	150
2-Chloronaphthalene	850	540	63.5	20	175
2-Chlorophenol	850	630	74.1	23	134
2-Methylnaphthalene	850	560	65.9	30	135
2-Nitroaniline	850	570	67.1	20	175
2-Nitrophenol	850	560	65.9	29	182
3,3'-Dichlorobenzidine	850	420	49.4	10	261
3-Nitroaniline	850	430	50.6	20	175
4,6-Dinitro-2-methylphenol	850	470	55.3	10	181
4-Bromophenyl phenyl ether	850	540	63.5	20	175
4-Chloro-3-methylphenol	850	600	70.6	22	147
4-Chloroaniline	850	580	68.2	20	175
4-Chlorophenyl phenyl ether	850	510	60.0	25	158
4-Nitroaniline	850	470	55.3	20	175
4-Nitrophenol	850	500	58.8	10	132
Acenaphthene	850	520	61.2	30	160
Acenaphthylene	850	540	63.5	10	150
Aniline	1700	1200	70.6	10	160
Anthracene	850	550	64.7	27	133
Benz(a)anthracene	850	520	61.2	33	143
Benzo(a)pyrene	850	450	52.9	17	163
Benzo(b)fluoranthene	850	550	64.7	24	159
Benzo(g,h,i)perylene	850	550	64.7	10	219
Benzo(k)fluoranthene	850	530	62.4	11	162
Benzoic acid	850	520	61.2	10	450
Benzyl alcohol	850	640	75.3	30	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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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09010825 Page 43

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

Laboratory Control Sample (LCS)

RunID: R_090127C-4880483 Units: ug/kg
Analysis Date: 01/27/2009 23:39 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	850	560	65.9	33	184
Bis(2-chloroethyl)ether	850	610	71.8	28	158
Bis(2-chloroisopropyl)ether	850	640	75.3	36	166
Bis(2-ethylhexyl)phthalate	850	450	52.9	10	158
Butyl benzyl phthalate	850	500	58.8	10	152
Carbazole	850	520	61.2	45	135
Chrysene	850	510	60.0	17	168
Dibenz(a,h)anthracene	850	550	64.7	10	227
Dibenzofuran	850	530	62.4	30	160
Diethyl phthalate	850	500	58.8	10	160
Dimethyl phthalate	850	520	61.2	10	112
Di-n-butyl phthalate	850	500	58.8	40	132
Di-n-octyl phthalate	850	480	56.5	10	146
Fluoranthene	850	540	63.5	26	137
Fluorene	850	510	60.0	35	135
Hexachlorobenzene	850	550	64.7	10	152
Hexachlorobutadiene	850	510	60.0	20	140
Hexachlorocyclopentadiene	850	340	40.0	10	152
Hexachloroethane	850	540	63.5	25	118
Indeno(1,2,3-cd)pyrene	850	540	63.5	10	171
Isophorone	850	600	70.6	21	196
Naphthalene	850	550	64.7	21	133
Nitrobenzene	850	560	65.9	35	180
N-Nitrosodi-n-propylamine	850	630	74.1	10	230
N-Nitrosodiphenylamine	1700	1300	76.5	30	160
Pentachlorophenol	850	440	51.8	14	176
Phenanthrene	850	530	62.4	35	135
Phenol	850	630	74.1	44	120
Pyrene	850	550	64.7	34	138
Pyridine	1700	880	51.8	10	150
2-Methylphenol	850	670	78.8	40	160
3 & 4-Methylphenol	850	720	84.7	40	160
Surr: 2,4,6-Tribromophenol	2500	1600	64.0	19	135
Surr: 2-Fluorobiphenyl	1700	1000	58.8	15	140

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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

Conoco Phillips COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

Laboratory Control Sample (LCS)

RunID: R_090127C-4880483 Units: ug/kg
Analysis Date: 01/27/2009 23:39 Analyst: E_R
Preparation Date: 01/23/2009 13:06 Prep By: LLL Method: SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 2-Fluorophenol	2500	1900	76.0	15	122
Surr: Nitrobenzene-d5	1700	1100	64.7	32	153
Surr: Phenol-d5	2500	2000	80.0	10	123
Surr: Terphenyl-d14	1700	1000	58.8	18	166

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

Sample Spiked: 09010420-44
RunID: R_090127C-4880484 Units: ug/kg
Analysis Date: 01/28/2009 0:12 Analyst: E_R
Preparation Date: 01/23/2009 13:06 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
1,2,4-Trichlorobenzene	ND	850	690	81.2	850	580	68.2	17.3	28	34	116
1,2-Dichlorobenzene	ND	850	720	84.7	850	620	72.9	14.9	60	32	129
1,2-Diphenylhydrazine	ND	850	780	91.8	850	660	77.6	16.7	60	10	256
1,3-Dichlorobenzene	ND	850	700	82.4	850	580	68.2	18.8	60	10	172
1,4-Dichlorobenzene	ND	850	700	82.4	850	590	69.4	17.1	28	20	124
2,4,5-Trichlorophenol	ND	850	680	80.0	850	560	65.9	19.4	60	40	150
2,4,6-Trichlorophenol	ND	850	720	84.7	850	590	69.4	19.8	60	37	144
2,4-Dichlorophenol	ND	850	750	88.2	850	620	72.9	19.0	60	39	135
2,4-Dimethylphenol	ND	850	750	88.2	850	630	74.1	17.4	60	32	119
2,4-Dinitrophenol	ND	850	560	65.9	850	400	47.1	33.3	60	10	191
2,4-Dinitrotoluene	ND	850	680	80.0	850	580	68.2	15.9	50	30	150
2,6-Dinitrotoluene	ND	850	700	82.4	850	580	68.2	18.8	60	30	150
2-Chloronaphthalene	ND	850	740	87.1	850	610	71.8	19.3	60	20	175
2-Chlorophenol	ND	850	790	92.9	850	660	77.6	17.9	40	23	134
2-Methylnaphthalene	ND	850	740	87.1	850	610	71.8	19.3	60	30	135
2-Nitroaniline	ND	850	760	89.4	850	630	74.1	18.7	60	20	175
2-Nitrophenol	ND	850	750	88.2	850	610	71.8	20.6	60	29	182
3,3'-Dichlorobenzidine	ND	850	510	60.0	850	490	57.6	4.00	60	10	261

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
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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09010825 Page 45

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

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

Sample Spiked: 09010420-44
RunID: R_090127C-4880484 Units: ug/kg
Analysis Date: 01/28/2009 0:12 Analyst: E_R
Preparation Date: 01/23/2009 13:06 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
3-Nitroaniline	ND	850	570	67.1	850	530	62.4	7.27	60	20	175
4,6-Dinitro-2-methylphenol	ND	850	600	70.6	850	520	61.2	14.3	60	10	181
4-Bromophenyl phenyl ether	ND	850	710	83.5	850	600	70.6	16.8	60	20	175
4-Chloro-3-methylphenol	ND	850	760	89.4	850	660	77.6	14.1	42	22	147
4-Chloroaniline	ND	850	720	84.7	850	630	74.1	13.3	60	20	175
4-Chlorophenyl phenyl ether	ND	850	670	78.8	850	580	68.2	14.4	60	25	158
4-Nitroaniline	ND	850	640	75.3	850	560	65.9	13.3	60	20	175
4-Nitrophenol	ND	850	620	72.9	850	540	63.5	13.8	50	10	132
Acenaphthene	ND	850	690	81.2	850	580	68.2	17.3	31	30	160
Acenaphthylene	ND	850	710	83.5	850	590	69.4	18.5	50	10	150
Aniline	ND	1700	1400	82.4	1700	1300	76.5	7.41	60	10	160
Anthracene	ND	850	730	85.9	850	620	72.9	16.3	50	27	133
Benz(a)anthracene	ND	850	680	74.1	850	580	62.4	15.9	50	33	143
Benzo(a)pyrene	ND	850	610	71.8	850	500	58.8	19.8	60	17	163
Benzo(b)fluoranthene	ND	850	740	87.1	850	610	71.8	19.3	60	24	159
Benzo(g,h,i)perylene	ND	850	710	83.5	850	600	70.6	16.8	60	10	219
Benzo(k)fluoranthene	ND	850	690	81.2	850	600	70.6	14.0	60	11	162
Benzoic acid	ND	850	770	90.6	850	680	80.0	12.4	60	10	450
Benzyl alcohol	ND	850	810	95.3	850	680	80.0	17.4	60	30	160
Bis(2-chloroethoxy)methane	ND	850	720	84.7	850	610	71.8	16.5	60	33	184
Bis(2-chloroethyl)ether	ND	850	750	88.2	850	630	74.1	17.4	60	28	158
Bis(2-chloroisopropyl)ether	ND	850	800	94.1	850	680	80.0	16.2	60	36	166
Bis(2-ethylhexyl)phthalate	ND	850	590	69.4	850	500	58.8	16.5	60	10	158
Butyl benzyl phthalate	ND	850	650	76.5	850	540	63.5	18.5	60	10	152
Carbazole	ND	850	680	80.0	850	580	68.2	15.9	60	45	135
Chrysene	ND	850	680	73.5	850	570	60.6	17.6	60	17	168
Dibenz(a,h)anthracene	ND	850	690	81.2	850	580	68.2	17.3	60	10	227
Dibenzofuran	ND	850	700	82.4	850	590	69.4	17.1	60	45	135
Diethyl phthalate	ND	850	650	76.5	850	550	64.7	16.7	60	10	160
Dimethyl phthalate	ND	850	680	80.0	850	570	67.1	17.6	60	10	112
Di-n-butyl phthalate	ND	850	680	80.0	850	560	65.9	19.4	60	40	132
Di-n-octyl phthalate	ND	850	620	72.9	850	480	56.5	25.5	60	10	146

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 46

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Semivolatiles Organics by Method 8270C
Method: SW8270C

WorkOrder: 09010825
Lab Batch ID: 87295

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

Sample Spiked: 09010420-44
RunID: R_090127C-4880484 Units: ug/kg
Analysis Date: 01/28/2009 0:12 Analyst: E_R
Preparation Date: 01/23/2009 13:06 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
Fluoranthene	ND	850	750	76.9	850	660	66.4	12.8	60	26	137
Fluorene	ND	850	680	80.0	850	580	68.2	15.9	60	45	135
Hexachlorobenzene	ND	850	740	87.1	850	620	72.9	17.6	60	10	152
Hexachlorobutadiene	ND	850	660	77.6	850	550	64.7	18.2	60	20	140
Hexachlorocyclopentadiene	ND	850	420	49.4	850	290	34.1	36.6	60	10	152
Hexachloroethane	ND	850	690	81.2	850	560	65.9	20.8	60	25	118
Indeno(1,2,3-cd)pyrene	ND	850	700	82.4	850	590	69.4	17.1	60	10	171
Isophorone	ND	850	790	92.9	850	660	77.6	17.9	60	21	196
Naphthalene	ND	850	720	84.7	850	590	69.4	19.8	60	21	133
Nitrobenzene	ND	850	750	88.2	850	620	72.9	19.0	60	35	180
N-Nitrosodi-n-propylamine	ND	850	780	91.8	850	670	78.8	15.2	38	10	230
N-Nitrosodiphenylamine	ND	1700	1700	100	1700	1500	88.2	12.5	60	30	160
Pentachlorophenol	ND	850	570	67.1	850	450	52.9	23.5	50	14	176
Phenanthrene	ND	850	720	80.1	850	640	70.7	11.8	60	45	135
Phenol	ND	850	790	92.9	850	680	80.0	15.0	42	44	120
Pyrene	ND	850	730	78.5	850	640	67.9	13.1	31	26	127
Pyridine	ND	1700	1200	70.6	1700	970	57.1	21.2	60	10	150
2-Methylphenol	ND	850	840	98.8	850	710	83.5	16.8	60	40	160
3 & 4-Methylphenol	ND	850	890	105	850	760	89.4	15.8	60	40	160
Surr: 2,4,6-Tribromophenol	ND	2500	2100	84.0	2500	1700	68.0	21.1	30	19	135
Surr: 2-Fluorobiphenyl	ND	1700	1300	76.5	1700	1100	64.7	16.7	30	15	140
Surr: 2-Fluorophenol	ND	2500	2300	92.0	2500	2000	80.0	14.0	30	15	122
Surr: Nitrobenzene-d5	ND	1700	1500	88.2	1700	1200	70.6	22.2	30	10	134
Surr: Phenol-d5	ND	2500	2400	96.0	2500	2000	80.0	18.2	30	10	123
Surr: Terphenyl-d14	ND	1700	1300	76.5	1700	1100	64.7	16.7	30	18	166

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

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.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 47

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: PERCENT MOISTURE
Method: D2216

WorkOrder: 09010825
Lab Batch ID: R263342A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01B	MW-2 (8-9.5ft.)
09010825-02B	MW-3 (7-8.5ft)
09010825-03B	MW-4 (7.5-9ft)

Sample Duplicate

Original Sample: 09010802-04
RunID: WET_090124E-4874009 Units: wt%
Analysis Date: 01/24/2009 15:33 Analyst: CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Percent Moisture	15.4	15.37	0.138	20

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 48

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: pH
Method: SW9045C

WorkOrder: 09010825
Lab Batch ID: R263350

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01B	MW-2 (8-9.5ft.)
09010825-02B	MW-3 (7-8.5ft)
09010825-03B	MW-4 (7.5-9ft)

Laboratory Control Sample (LCS)

RunID: WET_090124G-4874198 Units: pH Units
Analysis Date: 01/24/2009 16:00 Analyst: S_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.020	100.3	98	102

Sample Duplicate

Original Sample: 09010825-03
RunID: WET_090124G-4874201 Units: pH Units
Analysis Date: 01/24/2009 16:00 Analyst: S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	7.03	7.02	0.142	5

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 49

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Specific Conductance
Method: SW9050

WorkOrder: 09010825
Lab Batch ID: R263427

Method Blank

Samples in Analytical Batch:

RunID: WET_090126C-4875957 Units: umhos/cm
Analysis Date: 01/26/2009 13:00 Analyst: PAC

Lab Sample ID	Client Sample ID
09010825-01B	MW-2 (8-9.5ft.)
09010825-02B	MW-3 (7-8.5ft)
09010825-03B	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Specific Conductance	ND	100

Laboratory Control Sample (LCS)

RunID: WET_090126C-4875959 Units: umhos/cm
Analysis Date: 01/26/2009 13:00 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Specific Conductance	1413	1289	91.22	90	110

Sample Duplicate

Original Sample: 09010825-01
RunID: WET_090126C-4875960 Units: umhos/cm
Analysis Date: 01/26/2009 13:00 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Specific Conductance	641	640	0.156	10

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010825 Page 50

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09010825
Lab Batch ID: R263669

Method Blank

RunID: IC2_090127C-4881237 Units: mg/kg
Analysis Date: 01/27/2009 23:15 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09010825-01B	MW-2 (8-9.5ft.)
09010825-02B	MW-3 (7-8.5ft)
09010825-03B	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Nitrogen,Nitrate (As N)	ND	5.0
Nitrogen,Nitrite (As N)	ND	5.0

Laboratory Control Sample (LCS)

RunID: IC2_090127C-4881238 Units: mg/kg
Analysis Date: 01/27/2009 23:32 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	100.0	96.80	96.80	90	110
Nitrogen,Nitrite (As N)	100.0	100.1	100.1	90	110

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

Sample Spiked: 09010825-01
RunID: IC2_090127C-4881240 Units: mg/kg-dry
Analysis Date: 01/28/2009 0:07 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen,Nitrate (As N)	ND	122.7	121.3	98.90	122.7	123.2	100.4	1.535	20	80	120
Nitrogen,Nitrite (As N)	ND	122.7	125.2	102.1	122.7	127.0	103.5	1.430	20	80	120

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

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

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09010825 Page 51

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09010825
Lab Batch ID: R263985

Method Blank

Samples in Analytical Batch:

RunID: IC2_090127D-4886325 Units: mg/kg
Analysis Date: 01/27/2009 23:15 Analyst: BDG

Lab Sample ID	Client Sample ID
09010825-01B	MW-2 (8-9.5ft.)
09010825-02B	MW-3 (7-8.5ft)
09010825-03B	MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Bromide	ND	5.0
Chloride	ND	5.0
Fluoride	ND	5.0
Ortho-phosphate (As P)	ND	5.0
Sulfate	ND	5.0

Laboratory Control Sample (LCS)

RunID: IC2_090127D-4886326 Units: mg/kg
Analysis Date: 01/27/2009 23:32 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	100.0	100.2	100.2	80	120
Chloride	100.0	98.26	98.26	80	120
Fluoride	100.0	100.1	100.1	80	120
Ortho-phosphate (As P)	100.0	99.18	99.18	80	120
Sulfate	100.0	100.5	100.5	80	120

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

Sample Spiked: 09010825-01
RunID: IC2_090127D-4886328 Units: mg/kg-dry
Analysis Date: 01/28/2009 0:07 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Bromide	ND	122.7	125.3	102.1	122.7	127.5	103.9	1.747	20	75	125
Chloride	6.479	122.7	131.6	102.0	122.7	134.1	104.0	1.838	20	75	125
Fluoride	ND	122.7	126.3	101.7	122.7	128.2	103.2	1.485	20	75	125
Ortho-phosphate (As P)	ND	122.7	124.1	101.2	122.7	126.0	102.7	1.491	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09010825 Page 52

2/7/2009 11:34:13 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09010825
Lab Batch ID: R263985

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

Sample Spiked: 09010825-01
RunID: IC2_090127D-4886328 Units: mg/kg-dry
Analysis Date: 01/28/2009 0:07 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	45.87	122.7	173.4	103.9	122.7	175.4	105.6	1.196	20	75	125

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

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

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09010825 Page 53

2/7/2009 11:34:14 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09010825
Lab Batch ID: R263987

Method Blank

Samples in Analytical Batch:

RunID: IC2_090130A-4889768 Units: mg/kg
Analysis Date: 01/30/2009 11:20 Analyst: BDG

Lab Sample ID 09010825-03B
Client Sample ID MW-4 (7.5-9ft)

Analyte	Result	Rep Limit
Sulfate	ND	5.0

Laboratory Control Sample (LCS)

RunID: IC2_090130A-4889769 Units: mg/kg
Analysis Date: 01/30/2009 11:38 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfate	100.0	96.76	96.76	80	120

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

Sample Spiked: 09010825-03
RunID: IC2_090130A-4889773 Units: mg/kg-dry
Analysis Date: 01/30/2009 18:14 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	656.5	612.7	1267	99.65	612.7	1193	87.54	6.035	20	75	125

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

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

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09010825 Page 54

2/7/2009 11:34:14 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0 MOD

WorkOrder: 09010825
Lab Batch ID: R264459

Method Blank

Samples in Analytical Batch:

RunID: IC2_090204B-4894405 Units: mg/kg
Analysis Date: 02/04/2009 23:40 Analyst: BDG

Lab Sample ID Client Sample ID
09010825-02B MW-3 (7-8.5ft)

Analyte	Result	Rep Limit
Sulfate	ND	5.0

Laboratory Control Sample (LCS)

RunID: IC2_090204B-4894406 Units: mg/kg
Analysis Date: 02/04/2009 23:58 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfate	100.0	84.19	84.19	80	120

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

Sample Spiked: 09010825-02
RunID: IC2_090204B-4894408 Units: mg/kg-dry
Analysis Date: 02/05/2009 0:32 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	607.4	1151	1598	86.09	1151	1598	86.12	0.02160	20	75	125

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

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

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09010825 Page 55

2/7/2009 11:34:14 AM

*Sample Receipt Checklist
And
Chain of Custody*



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

Sample Receipt Checklist

Workorder:	09010825	Received By:	L_C
Date and Time Received:	1/22/2009 10:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	2.0°C	Chilled by:	Water Ice

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

*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:

Contact Date & Time:

Non Conformance Issues:
Client Instructions:



Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

Time:

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Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

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Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

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Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

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Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

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Time:

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Date:

Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

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Date:

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Time:

Date:

Time:

Date:

Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

Time:

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Date:

Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

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Date:

Time:

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number:

Sample ID:

Signature:

Date:

Time:

Matrix:

Water:

Soil:

Grab:

Comp:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

APPENDIX B

PROJECT NAME: Faye Burdette No. 1

LOCATION: Aztec, NM

DRILLED BY: Matt Cain, WDC

DATE: HOLE STARTED: 1/20/09

DATE: HOLE COMPLETED: 1/20/09

SOIL BORING/WELL No: MW-2

DRILL TYPE: Hollow Stem Auger

BOREHOLE DIAMETER: 8"

FIELD LOGGED BY: AM, GD

REMARKS: bgs = below ground surface
ppm = parts per million

DEPTH (feet bgs)	DEPTH TO WATER	USCS	DESCRIPTION	Photoionization Reading (ppm)	Sample ID
0			Brown, silty sand, loose. Observed soil after "daylighting" of soil boring		
5		SM		NA	
		SP	Brown, moist, poorly graded sand, loose and subangular. At 8.5 feet bgs, lense of gray sediment with slight hydrocarbon odor.	64.6	MW-2 (8-9.5 ft)
10	▽		Water table found at approximately 9.5 feet bgs. No samples were obtained below this depth		
15					
20			Total depth of boring = 20 feet bgs		

Tt PROJECT #:
1159690127

 TETRA TECH, INC.

BORING LOG

MW-2

PROJECT NAME: Faye Burdette No. 1

LOCATION: Aztec, NM

DRILLED BY: Matt Cain, WDC

DATE: HOLE STARTED: 1/20/09

DATE: HOLE COMPLETED: 1/20/09

SOIL BORING/WELL No: MW-3

DRILL TYPE: Hollow Stem Auger

BOREHOLE DIAMETER: 8"

FIELD LOGGED BY: AM, GD

REMARKS: bgs = below ground surface
ppm = parts per million

DEPTH (feet bgs)	DEPTH TO WATER	USCS	DESCRIPTION	Photoionization Reading (ppm)	Sample ID
0					
		SM	Brown, silty sand, loose. Observed soil after "daylighting" of soil boring	NA	
5					
		SP	Brown, moist, poorly graded sand, loose and subangular. At 8 feet bgs, lense of gray sediment with slight hydrocarbon odor.	7.2	MW-3 (7-8.5 ft)
10			Water table found at approximately 9 feet bgs. No samples were obtained below this depth		
15					
20			Total depth of boring = 20 feet bgs		

Tt PROJECT #:
1159690127

 TETRA TECH, INC.

BORING LOG

MW-3



TETRA TECH, INC.

Well Completion Diagram

Well ID MW-2

Stickup (feet): approx. 3 ft.

Job Name Faye Burdette No. 1

Job No. 1159690127 Date 1/20/2009

Project Manager Kelly Blanchard

Well I.D. MW-2

Field Geologist Ana Moreno/Gary Deselle

Driller Matt Cain - WDC

Equipment CME 85

Materials

250 Pounds Silica Sand Filter Pack

100 Pounds Bentonite Seal

Gallons Grout

75 Pounds Concrete

15 Feet of native fill/ slough

8 Feet of 2 inch pvc Blank Casing

15 Feet of 2 inch 010 pvc Slotted Screen

Feet of Outer Casing

Feet of Sump/ Silt Trap

Placement Method

Notes casing and screen joint type - flush thread

Development

Method purge pump

Date 1/21/2009

Amount Purged 38 gallons

Notes no sheen or odor detected in purge water

discharged on ground surface

Steel Casing

Other:

2" locking cap

Casing:

5 ft. to 0 ft.

8 inch diameter
Borehole:

25 ft. to 0 ft.

Outer Casing:

ft. to ft.

Concrete: approx. 4' well pads

ft. to ft.

Grout:

ft. to ft.

Bentonite Seal:

3 ft. to 0 ft.

Filter Pack:

10 ft. to 3 ft.

Slotted Screen:

20 ft. to 5 ft.

Native fill/ slough:

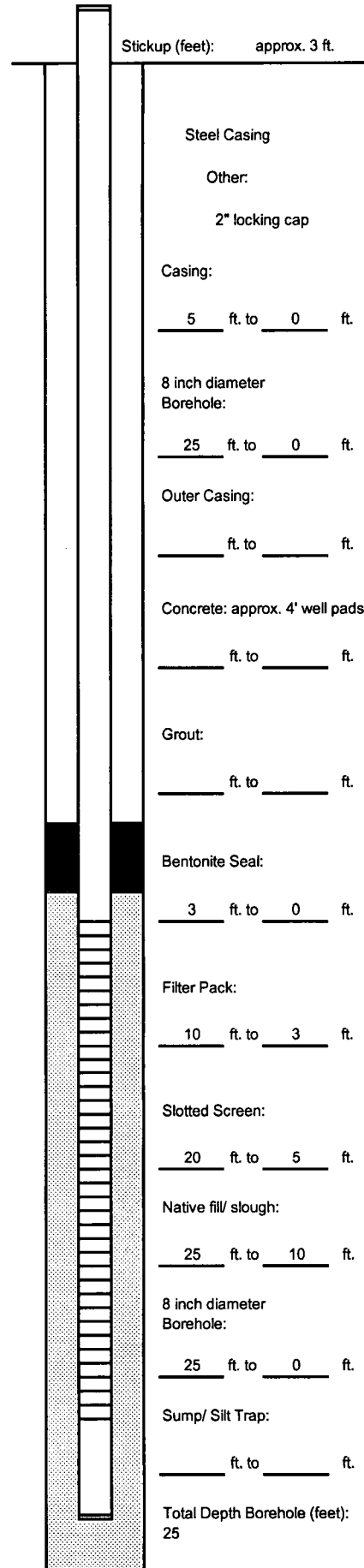
25 ft. to 10 ft.

8 inch diameter
Borehole:

25 ft. to 0 ft.

Sump/ Silt Trap:

ft. to ft.

Total Depth Borehole (feet):
25



TETRA TECH, INC.

Well Completion Diagram

Well ID MW-4

Stickup (feet): approx. 3 ft.

Job Name Faye Burdette No. 1

Job No. 1159690127 Date 1/21/2009

Project Manager Kelly Blanchard

Well I.D. MW-4

Field Geologist Ana Moreno/Gary Deselle

Driller Matt Cain - WDC

Equipment CME 85

Materials

300 Pounds Silica Sand Filter Pack

100 Pounds Bentonite Seal

Gallons Grout

75 Pounds Concrete

9 Feet of native fill/ slough

2 Feet of 2 inch pvc Blank Casing

15 Feet of 2 inch 010 pvc Slotted Screen

Feet of Outer Casing

Feet of Sump/ Silt Trap

Placement Method pour

Notes casing and screen joint type - flush thread

Development

Method purge pump

Date 1/21/2009

Amount Purged 57 gallons

Notes no sheen or odor detected in purge water

discharged on ground surface

Steel Casing

Other:

2" locking cap

Casing:

5 ft. to 0 ft.

8 inch diameter
Borehole:

25 ft. to 0 ft.

Outer Casing:

ft. to ft.

Concrete: approx. 4' well pads

ft. to ft.

Grout:

ft. to ft.

Bentonite Seal:

3 ft. to 0 ft.

Filter Pack:

12 ft. to 3 ft.

Slotted Screen:

20 ft. to 5 ft.

Native fill/ slough:

20 ft. to 12 ft.

8 inch diameter
Borehole:

25 ft. to 0 ft.

Sump/ Silt Trap:

ft. to ft.

Total Depth Borehole (feet):
25

APPENDIX C



WATER SAMPLING FIELD FORM

Project No.

Faye Burdett 1

of

4

Site Location

Aztec, NM

Site/Well No.

MW-2

Coded/

Replicate No.

-

Date

1-29-09

Weather

Sunny/cold

Time Sampling

Began

1330

Time Sampling

Completed

13:50

EVACUATION DATA

Description of Measuring Pt (MP)

TOL

Height of MP Above/Below Land Surface

MP Elevation

Total Sounded Depth of Well Below MP

19.39

Water-Level Elevation

Held

Depth to Water Below MP

10.91

Diameter of Casing

2 inch 4 inch

Wet

Water Column in Well

8.48

Gallons Pumped/Bailed
Prior to Sampling

10

Gallons per Foot

.16

Sampling Pump Intake

(feet below land surface)

Purging Equipment

dedicated
bailer

Gallons in Well

1.35 x 3 =
4.07

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
1330	13.39	7.25	838	0.700	3.32	33.2	159.7	
1335	13.41	7.28	839	0.711	2.62	24.2	158.8	
1338	13.47	7.24	821	0.693	2.24	21.8	166.5	

Sampling Equipment

Low Flow Pump / Disposable Bailer

Constituents Sampled

BTEX/VOLs
SVOLs

Container Description

VOAS, glass, plastic

Preservative

HCl, H2SO4, cold (ice)

Gen. Chem. Analyses

Metals

Remarks

TPA BRO, GRO water has silt and is light brown.

Sampling Personnel

CM, CB, KB

Well Casing Volumes

Gal./ft.

1 1/4" = 0.077

2" = 0.16

3" = 0.37

4" = 0.65

1 1/2" = 0.10

2 1/2" = 0.24

3 1/2" = 0.50

6" = 1.46



WATER SAMPLING FIELD FORM

Project No.

Camp Burdette 1

2 of 4

Site Location

Artesia NM

Site/Well No.

MW- 4

Coded/

Replicate No.

—

Date

1-29-09

Weather

Sunny, 50°

Time Sampling
Began

1430

Time Sampling
Completed

1500

EVACUATION DATA

Description of Measuring Pt (MP)

TOC

Height of MP Above/Below Land Surface

MP Elevation

Total Sounded Depth of Well Below MP

22.4

Water-Level Elevation

Held

Depth to Water Below MP

11.02

Diameter of Casing

2 inch / 4 inch

Wet

Water Column in Well

11.38

Gallons Pumped/Bailed
Prior to Sampling

10

Gallons per Foot

.10

Gallons in Well

1.82

Sampling Pump Intake
(feet below land surface)

Purging Equipment

dedicated polypropylene bailer.

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
15:18	12.74	6.99	0.987	0.8388	16.49	77.9	138.1	
15:19	12.91	7.12	0.999	0.844	5.24	49.0	137.9	
15:21	13.16	7.17	1.004	0.844	3.65	34.0	135.0	

Sampling Equipment

Low Flow Pump / Disposable Bailer

Constituents Sampled

Container Description

Preservative

BTEX/VOCs

VOCs (2)

162 HCl

SVOCs

Amber 2-12

None

Metals

Plastic

H2SO4

Turbidity, DO, pH, Conductivity, TDS, ORP

VOCs (3), Glass (1)

HCl, None

Remarks

water is silty/light brown

None

Sampling Personnel

CM, KB, CB

Well Casing Volumes

Gal./ft.

1 1/4" = 0.077

2" = 0.16

3" = 0.37

4" = 0.65

1 1/2" = 0.10

2 1/2" = 0.24

3 1/2" = 0.50

6" = 1.46



WATER SAMPLING FIELD FORM

Project No.

Site Location

Site/Well No. MW-

Weather

Coded/
Replicate No.Time Sampling
Began

Date

Time Sampling
Completed

3 of 4

Faye Burdette 1

3
Sunny/cold

—

1545

1-22-09

09

1625

EVACUATION DATA

Description of Measuring Pt (MP)

Height of MP Above/Below Land Surface

Total Sounded Depth of Well Below MP

Held

Depth to Water Below MP

Wet

Water Column in Well

Gallons per Foot

Gallons in Well

MP Elevation

Water-Level Elevation

Diameter of Casing

Gallons Pumped/Bailed
Prior to SamplingSampling Pump Intake
(feet below land surface)

Purging Equipment

TOC

22.9

11.44

11.46

.16

1.83

5.6

2 inch / 4 inch

5.5

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
1615 1545	14.36	7.16	0.947	0.772	1.78	17.5	147.6	4 gal
1619	14.37	7.13	0.947	0.773	1.51	14.8	146.2	4.5 gal
1628	14.29	7.21	0.947	0.774	1.86	18.2	132.6	5 gal

Sampling Equipment

Low Flow Pump / Disposable Bailer

Constituents Sampled

Container Description

Preservative

BTEX + VOCs

VOCs (2)

HCl

SVOCs

Amber Litter (2)

None

Metals, Gen Chem, Anions, Nitrate

plastic Litter (3)

HNO₃ / None

TPH, GRP, DRD

VOCs (2) Plastic (1) Amber (1) HCl / HNO₃

Remarks

Not as much silt as others, tan color

Sampling Personnel

CM, CB, KB

Well Casing Volumes

Gal./ft.

1 1/4" = 0.077

1 1/2" = 0.10

2" = 0.16

2 1/2" = 0.24

3" = 0.37

3 1/2" = 0.50

4" = 0.65

6" = 1.46



WATER SAMPLING FIELD FORM

Project No.

Faye Burdette

4

of

4

Site Location

Azee, NM

Site/Well No.

MW- 1

Coded/

Replicate No.

duplicate (1720)

Date

1-29-09

Weather

Sunny / cold

Time Sampling
Began

1640

Time Sampling
Completed

1700

EVACUATION DATA

Description of Measuring Pt (MP)

Height of MP Above/Below Land Surface

MP Elevation

Total Sounded Depth of Well Below MP

17.45

Water-Level Elevation

Held

Depth to Water Below MP

11.72

Diameter of Casing

2 inch 4 inch

Wet

Water Column in Well

5.73

Gallons Pumped/Bailed
Prior to Sampling

3 gallons

Gallons per Foot

.16

Gallons in Well

0.917

Sampling Pump Intake
(feet below land surface)

Purging Equipment

dedicated bailer

2.75

SAMPLING DATA/FIELD PARAMETERS

Time	Temperature	pH	Conductivity	TDS	DO	DO%	ORP	Other
16:45	12.41	7.11	0.991	0.803	1.73	16.3	26.6	1.5 gal
16:47	12.58	7.07	0.939	0.799	1.67	15.2	28.6	2
16:49	12.59	7.09	0.931	0.794	1.29	13.1	4.2	2.5

Sampling Equipment

Low Flow Pump / Disposable Bailor

Constituents Sampled

Container Description

Preservative

BTEX + VOCs

SVOCs

Metals, Gen. Chem., TPH - GPO + DRO

Remarks

Sampling Personnel

CM, CB, KB

Well Casing Volumes

Gal./ft.	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46



APPENDIX D



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

Conoco Phillips

Certificate of Analysis Number:

09011207

Report To: Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:	Project Name: COP Faye-Burdette Site: Albuquerque, NM Site Address: PO Number: 4510713617 State: New Mexico State Cert. No.: Date Reported: 2/17/2009
---	--

This Report Contains A Total Of 72 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

2/17/2009

Date



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

Case Narrative for:
Conoco Phillips

Certificate of Analysis Number:
09011207

Report To: Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200 Albuquerque NM 87110- ph: (505) 237-8440 fax:	Project Name: COP Faye-Burdette Site: Albuquerque, NM Site Address: PO Number: 4510713617 State: New Mexico State Cert. No.: Date Reported: 2/17/2009
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Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

For Volatile Organics analysis (8260B), the results for 2-chloroethyl vinyl ether are estimated due to sample preservation. The result for this compound is reported as "ND J" for all samples in the report.

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.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:87654 for the Diesel Range Organics analysis by Method 8015B. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:87647 for the Semivolatile Organics analysis by SW846 Method 8270C. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

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.

Erica Cardenas
Project Manager

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

09011207 Page 1

2/17/2009

Date



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

Conoco Phillips

Certificate of Analysis Number:

09011207

Report To: Tetra Tech, Inc.
Kelly Blanchard
6121 Indian School Road, N.E.
Suite 200
Albuquerque
NM
87110-
ph: (505) 237-8440 fax: (505) 881-3283

Fax To:

Project Name: COP Faye-Burdette
Site: Albuquerque, NM
Site Address:
PO Number: 4510713617
State: New Mexico
State Cert. No.:
Date Reported: 2/17/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-2	09011207-01	Water	1/29/2009 1:50:00 PM	1/31/2009 11:00:00 AM		☐
MW-4	09011207-02	Water	1/29/2009 3:00:00 PM	1/31/2009 11:00:00 AM		☐
MW-3	09011207-03	Water	1/29/2009 4:25:00 PM	1/31/2009 11:00:00 AM		☐
MW-1	09011207-04	Water	1/29/2009 5:00:00 PM	1/31/2009 11:00:00 AM		☐
Duplicate	09011207-05	Water	1/29/2009 5:20:00 PM	1/31/2009 11:00:00 AM		☐
Trip Blank	09011207-06	Water	1/30/2009	1/31/2009 11:00:00 AM		☐

Erica Cardenas
Project Manager

2/17/2009

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



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

Client Sample ID MW-2

Collected: 01/29/2009 13:50

SPL Sample ID: 09011207-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO3), TOTAL				MCL	SM2320B	Units: mg/L	
Alkalinity, Total (As CaCO3)	204		2	1	02/05/09 8:30	PAC	4894038

DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		0.1	1	02/04/09 19:52	NW	4895672
Surr: n-Pentacosane	96.8	%	20-150	1	02/04/09 19:52	NW	4895672

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 12:00	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	02/05/09 16:06	CLJ	4895538
Surr: 1,4-Difluorobenzene	98.4	%	60-155	1	02/05/09 16:06	CLJ	4895538
Surr: 4-Bromofluorobenzene	107	%	50-158	1	02/05/09 16:06	CLJ	4895538

HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO3)	540		50	10	02/03/09 11:30	PAC	4890721

ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	01/31/09 14:02	BDG	4901020
Chloride	17.7		0.5	1	01/31/09 14:02	BDG	4901020
Fluoride	ND		0.5	1	01/31/09 14:02	BDG	4901020
Ortho-phosphate (As P)	ND		0.5	1	01/31/09 14:02	BDG	4901020
Sulfate	271		25	50	02/09/09 19:48	BDG	4901065
Nitrogen,Nitrate (As N)	ND		0.5	1	01/31/09 14:02	BDG	4897190
Nitrogen,Nitrite (As N)	ND		0.5	1	01/31/09 14:02	BDG	4897190

MERCURY, TOTAL				MCL	SW7470A	Units: mg/L	
Mercury	ND		0.0002	1	02/13/09 13:01	EMB	4906741

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	02/13/2009 8:30	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/L	
Aluminum	4.15		0.1	1	02/11/09 15:19	S_C	4903753
Boron	ND		0.1	1	02/11/09 15:19	S_C	4903753
Calcium	204		0.1	1	02/11/09 15:19	S_C	4903753
Iron	3.15		0.02	1	02/11/09 15:19	S_C	4903753
Magnesium	13.7		0.1	1	02/11/09 15:19	S_C	4903753
Manganese	1.79		0.005	1	02/11/09 15:19	S_C	4903753
Potassium	2.66		2	1	02/11/09 15:19	S_C	4903753
Sodium	58		0.5	1	02/11/09 15:19	S_C	4903753
Strontium	2.93		0.02	1	02/11/09 15:19	S_C	4903753
Tin	ND		0.05	1	02/11/09 15:19	S_C	4903753

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 13:50 SPL Sample ID: 09011207-01

Site: Albuquerque, NM

Analyses/Method Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst Seq. #

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	02/05/2009 9:00	AB1	1.00

METALS BY METHOD 6020A, TOTAL

MCL

SW6020A

Units: mg/L

Antimony	ND	0.005	1	02/13/09 21:47	AL_H	4907552
Arsenic	ND	0.005	1	02/13/09 23:01	AL_H	4907312
Barium	0.132	0.005	1	02/12/09 19:10	AL_H	4905677
Beryllium	ND	0.004	1	02/13/09 23:01	AL_H	4907312
Cadmium	ND	0.005	1	02/12/09 19:10	AL_H	4905677
Chromium	0.00672	0.005	1	02/12/09 19:10	AL_H	4905677
Cobalt	0.0169	0.005	1	02/12/09 19:10	AL_H	4905677
Copper	0.0206	0.005	1	02/12/09 19:10	AL_H	4905677
Lead	0.0146	0.005	1	02/12/09 19:10	AL_H	4905677
Manganese	1.8	0.005	1	02/12/09 19:10	AL_H	4905677
Molybdenum	ND	0.01	1	02/13/09 23:01	AL_H	4907312
Nickel	0.0157	0.005	1	02/12/09 19:10	AL_H	4905677
Selenium	ND	0.005	1	02/14/09 15:15	AL_H	4908351
Silver	ND	0.005	1	02/12/09 19:10	AL_H	4905677
Thallium	ND	0.005	1	02/12/09 19:10	AL_H	4905677
Vanadium	0.0128	0.005	1	02/13/09 23:01	AL_H	4907312
Zinc	0.0504	0.01	1	02/12/09 19:10	AL_H	4905677

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	02/05/2009 9:00	AB1	1.00

PH

MCL

SM4500-H B

Units: pH Units

pH	7.15	0.1	1	01/31/09 14:45	PAC	4888679
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Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 13:50

SPL Sample ID: 09011207-01

Site: Albuquerque, 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	02/05/09 19:17	GQ	4896002
1,2-Dichlorobenzene	ND		5	1	02/05/09 19:17	GQ	4896002
1,2-Diphenylhydrazine	ND		10	1	02/05/09 19:17	GQ	4896002
1,3-Dichlorobenzene	ND		5	1	02/05/09 19:17	GQ	4896002
1,4-Dichlorobenzene	ND		5	1	02/05/09 19:17	GQ	4896002
2,4,5-Trichlorophenol	ND		10	1	02/05/09 19:17	GQ	4896002
2,4,6-Trichlorophenol	ND		5	1	02/05/09 19:17	GQ	4896002
2,4-Dichlorophenol	ND		5	1	02/05/09 19:17	GQ	4896002
2,4-Dimethylphenol	ND		5	1	02/05/09 19:17	GQ	4896002
2,4-Dinitrophenol	ND		25	1	02/05/09 19:17	GQ	4896002
2,4-Dinitrotoluene	ND		5	1	02/05/09 19:17	GQ	4896002
2,6-Dinitrotoluene	ND		5	1	02/05/09 19:17	GQ	4896002
2-Chloronaphthalene	ND		5	1	02/05/09 19:17	GQ	4896002
2-Chlorophenol	ND		5	1	02/05/09 19:17	GQ	4896002
2-Methylnaphthalene	ND		5	1	02/05/09 19:17	GQ	4896002
2-Nitroaniline	ND		25	1	02/05/09 19:17	GQ	4896002
2-Nitrophenol	ND		5	1	02/05/09 19:17	GQ	4896002
3,3'-Dichlorobenzidine	ND		10	1	02/05/09 19:17	GQ	4896002
3-Nitroaniline	ND		25	1	02/05/09 19:17	GQ	4896002
4,6-Dinitro-2-methylphenol	ND		25	1	02/05/09 19:17	GQ	4896002
4-Bromophenyl phenyl ether	ND		5	1	02/05/09 19:17	GQ	4896002
4-Chloro-3-methylphenol	ND		5	1	02/05/09 19:17	GQ	4896002
4-Chloroaniline	ND		5	1	02/05/09 19:17	GQ	4896002
4-Chlorophenyl phenyl ether	ND		5	1	02/05/09 19:17	GQ	4896002
4-Nitroaniline	ND		25	1	02/05/09 19:17	GQ	4896002
4-Nitrophenol	ND		25	1	02/05/09 19:17	GQ	4896002
Acenaphthene	ND		5	1	02/05/09 19:17	GQ	4896002
Acenaphthylene	ND		5	1	02/05/09 19:17	GQ	4896002
Aniline	ND		5	1	02/05/09 19:17	GQ	4896002
Anthracene	ND		5	1	02/05/09 19:17	GQ	4896002
Benz(a)anthracene	ND		5	1	02/05/09 19:17	GQ	4896002
Benzo(a)pyrene	ND		5	1	02/05/09 19:17	GQ	4896002
Benzo(b)fluoranthene	ND		5	1	02/05/09 19:17	GQ	4896002
Benzo(g,h,i)perylene	ND		5	1	02/05/09 19:17	GQ	4896002
Benzo(k)fluoranthene	ND		5	1	02/05/09 19:17	GQ	4896002
Benzoic acid	ND		25	1	02/05/09 19:17	GQ	4896002
Benzyl alcohol	ND		5	1	02/05/09 19:17	GQ	4896002
Bis(2-chloroethoxy)methane	ND		5	1	02/05/09 19:17	GQ	4896002
Bis(2-chloroethyl)ether	ND		5	1	02/05/09 19:17	GQ	4896002

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-2

Collected: 01/29/2009 13:50

SPL Sample ID: 09011207-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	02/05/09 19:17	GQ	4896002
Bis(2-ethylhexyl)phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Butyl benzyl phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Carbazole	ND		5	1	02/05/09 19:17	GQ	4896002
Chrysene	ND		5	1	02/05/09 19:17	GQ	4896002
Dibenz(a,h)anthracene	ND		5	1	02/05/09 19:17	GQ	4896002
Dibenzofuran	ND		5	1	02/05/09 19:17	GQ	4896002
Diethyl phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Dimethyl phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Di-n-butyl phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Di-n-octyl phthalate	ND		5	1	02/05/09 19:17	GQ	4896002
Fluoranthene	ND		5	1	02/05/09 19:17	GQ	4896002
Fluorene	ND		5	1	02/05/09 19:17	GQ	4896002
Hexachlorobenzene	ND		5	1	02/05/09 19:17	GQ	4896002
Hexachlorobutadiene	ND		5	1	02/05/09 19:17	GQ	4896002
Hexachlorocyclopentadiene	ND		5	1	02/05/09 19:17	GQ	4896002
Hexachloroethane	ND		5	1	02/05/09 19:17	GQ	4896002
Indeno(1,2,3-cd)pyrene	ND		5	1	02/05/09 19:17	GQ	4896002
Isophorone	ND		5	1	02/05/09 19:17	GQ	4896002
Naphthalene	ND		5	1	02/05/09 19:17	GQ	4896002
Nitrobenzene	ND		5	1	02/05/09 19:17	GQ	4896002
N-Nitrosodi-n-propylamine	ND		5	1	02/05/09 19:17	GQ	4896002
N-Nitrosodiphenylamine	ND		5	1	02/05/09 19:17	GQ	4896002
Pentachlorophenol	ND		25	1	02/05/09 19:17	GQ	4896002
Phenanthrene	ND		5	1	02/05/09 19:17	GQ	4896002
Phenol	ND		5	1	02/05/09 19:17	GQ	4896002
Pyrene	ND		5	1	02/05/09 19:17	GQ	4896002
Pyridine	ND		5	1	02/05/09 19:17	GQ	4896002
2-Methylphenol	ND		5	1	02/05/09 19:17	GQ	4896002
3 & 4-Methylphenol	ND		5	1	02/05/09 19:17	GQ	4896002
Surr: 2,4,6-Tribromophenol	89.3		% 10-123	1	02/05/09 19:17	GQ	4896002
Surr: 2-Fluorobiphenyl	76.0		% 23-116	1	02/05/09 19:17	GQ	4896002
Surr: 2-Fluorophenol	56.0		% 16-110	1	02/05/09 19:17	GQ	4896002
Surr: Nitrobenzene-d5	66.0		% 21-114	1	02/05/09 19:17	GQ	4896002
Surr: Phenol-d5	46.7		% 10-110	1	02/05/09 19:17	GQ	4896002
Surr: Terphenyl-d14	94.0		% 22-141	1	02/05/09 19:17	GQ	4896002

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 9:25	N_M	1.00

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-2

Collected: 01/29/2009 13:50 SPL Sample ID: 09011207-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	SM2510B	Units: umhos/cm	
Specific Conductance	903		10	1	02/02/09 10:55	PAC	4888711
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	640		20	2	02/02/09 16:00	CFS	4890125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

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E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 13:50

SPL Sample ID: 09011207-01

Site: Albuquerque, 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	02/02/09 22:26	JC	4889497
1,1,1-Trichloroethane	ND		5	1	02/02/09 22:26	JC	4889497
1,1,2,2-Tetrachloroethane	ND		5	1	02/02/09 22:26	JC	4889497
1,1,2-Trichloroethane	ND		5	1	02/02/09 22:26	JC	4889497
1,1-Dichloroethane	ND		5	1	02/02/09 22:26	JC	4889497
1,1-Dichloroethene	ND		5	1	02/02/09 22:26	JC	4889497
1,1-Dichloropropene	ND		5	1	02/02/09 22:26	JC	4889497
1,2,3-Trichlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,2,3-Trichloropropane	ND		5	1	02/02/09 22:26	JC	4889497
1,2,4-Trichlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,2,4-Trimethylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dibromo-3-chloropropane	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dibromoethane	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dichlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dichloroethane	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dichloropropane	ND		5	1	02/02/09 22:26	JC	4889497
1,3,5-Trimethylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,3-Dichlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497
1,3-Dichloropropane	ND		5	1	02/02/09 22:26	JC	4889497
1,4-Dichlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497
2,2-Dichloropropane	ND		5	1	02/02/09 22:26	JC	4889497
2-Butanone	ND		20	1	02/02/09 22:26	JC	4889497
2-Chloroethyl vinyl ether	ND J		10	1	02/02/09 22:26	JC	4889497
2-Chlorotoluene	ND		5	1	02/02/09 22:26	JC	4889497
2-Hexanone	ND		10	1	02/02/09 22:26	JC	4889497
4-Chlorotoluene	ND		5	1	02/02/09 22:26	JC	4889497
4-Isopropyltoluene	ND		5	1	02/02/09 22:26	JC	4889497
4-Methyl-2-pentanone	ND		10	1	02/02/09 22:26	JC	4889497
Acetone	ND		20	1	02/02/09 22:26	JC	4889497
Acrylonitrile	ND		50	1	02/02/09 22:26	JC	4889497
Benzene	ND		5	1	02/02/09 22:26	JC	4889497
Bromobenzene	ND		5	1	02/02/09 22:26	JC	4889497
Bromochloromethane	ND		5	1	02/02/09 22:26	JC	4889497
Bromodichloromethane	ND		5	1	02/02/09 22:26	JC	4889497
Bromoform	ND		5	1	02/02/09 22:26	JC	4889497
Bromomethane	ND		10	1	02/02/09 22:26	JC	4889497
Carbon disulfide	ND		5	1	02/02/09 22:26	JC	4889497
Carbon tetrachloride	ND		5	1	02/02/09 22:26	JC	4889497
Chlorobenzene	ND		5	1	02/02/09 22:26	JC	4889497

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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: 01/29/2009 13:50

SPL Sample ID: 09011207-01

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	02/02/09 22:26	JC	4889497
Chloroform	ND		5	1	02/02/09 22:26	JC	4889497
Chloromethane	ND		10	1	02/02/09 22:26	JC	4889497
Dibromochloromethane	ND		5	1	02/02/09 22:26	JC	4889497
Dibromomethane	ND		5	1	02/02/09 22:26	JC	4889497
Dichlorodifluoromethane	ND		10	1	02/02/09 22:26	JC	4889497
Ethylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
Hexachlorobutadiene	ND		5	1	02/02/09 22:26	JC	4889497
Isopropylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
Methyl tert-butyl ether	ND		5	1	02/02/09 22:26	JC	4889497
Methylene chloride	ND		5	1	02/02/09 22:26	JC	4889497
Naphthalene	ND		5	1	02/02/09 22:26	JC	4889497
n-Butylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
n-Propylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
sec-Butylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
Styrene	ND		5	1	02/02/09 22:26	JC	4889497
tert-Butylbenzene	ND		5	1	02/02/09 22:26	JC	4889497
Tetrachloroethene	ND		5	1	02/02/09 22:26	JC	4889497
Toluene	ND		5	1	02/02/09 22:26	JC	4889497
Trichloroethene	ND		5	1	02/02/09 22:26	JC	4889497
Trichlorofluoromethane	ND		5	1	02/02/09 22:26	JC	4889497
Vinyl acetate	ND		10	1	02/02/09 22:26	JC	4889497
Vinyl chloride	ND		2	1	02/02/09 22:26	JC	4889497
cis-1,2-Dichloroethene	ND		5	1	02/02/09 22:26	JC	4889497
cis-1,3-Dichloropropene	ND		5	1	02/02/09 22:26	JC	4889497
m,p-Xylene	ND		5	1	02/02/09 22:26	JC	4889497
o-Xylene	ND		5	1	02/02/09 22:26	JC	4889497
trans-1,2-Dichloroethene	ND		5	1	02/02/09 22:26	JC	4889497
trans-1,3-Dichloropropene	ND		5	1	02/02/09 22:26	JC	4889497
1,2-Dichloroethene (total)	ND		5	1	02/02/09 22:26	JC	4889497
Xylenes, Total	ND		5	1	02/02/09 22:26	JC	4889497
Surr: 1,2-Dichloroethane-d4	96.0		% 62-130	1	02/02/09 22:26	JC	4889497
Surr: 4-Bromofluorobenzene	102		% 70-130	1	02/02/09 22:26	JC	4889497
Surr: Toluene-d8	100		% 74-122	1	02/02/09 22:26	JC	4889497

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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-4

Collected: 01/29/2009 15:00 SPL Sample ID: 09011207-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO3), TOTAL				MCL	SM2320B	Units: mg/L	
Alkalinity, Total (As CaCO3)	205		2	1	02/05/09 8:30	PAC	4894041
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		0.1	1	02/04/09 20:12	NW	4895673
Surr: n-Pentacosane	51.2		% 20-150	1	02/04/09 20:12	NW	4895673

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 12:00	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	02/05/09 15:25	CLJ	4895537
Surr: 1,4-Difluorobenzene	98.8		% 60-155	1	02/05/09 15:25	CLJ	4895537
Surr: 4-Bromofluorobenzene	107		% 50-158	1	02/05/09 15:25	CLJ	4895537

HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO3)	640		50	10	02/03/09 11:30	PAC	4890722

ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	01/31/09 14:18	BDG	4901021
Chloride	18.2		1	2	02/09/09 20:05	BDG	4901066
Fluoride	ND		0.5	1	01/31/09 14:18	BDG	4901021
Ortho-phosphate (As P)	ND		0.5	1	01/31/09 14:18	BDG	4901021
Sulfate	407		25	50	02/09/09 20:22	BDG	4901068
Nitrogen,Nitrate (As N)	ND		0.5	1	01/31/09 14:18	BDG	4897191
Nitrogen,Nitrite (As N)	ND		0.5	1	01/31/09 14:18	BDG	4897191

MERCURY, TOTAL				MCL	SW7470A	Units: mg/L	
Mercury	ND		0.0002	1	02/13/09 13:03	EMB	4906742

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	02/13/2009 8:30	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/L	
Aluminum	6.92		0.1	1	02/11/09 15:24	S_C	4903754
Boron	ND		0.1	1	02/11/09 15:24	S_C	4903754
Calcium	363		0.1	1	02/11/09 15:24	S_C	4903754
Iron	3.17		0.02	1	02/11/09 15:24	S_C	4903754
Magnesium	18.9		0.1	1	02/11/09 15:24	S_C	4903754
Manganese	4.15		0.005	1	02/11/09 15:24	S_C	4903754
Potassium	4.09		2	1	02/11/09 15:24	S_C	4903754
Sodium	70.5		0.5	1	02/11/09 15:24	S_C	4903754
Strontium	5.15		0.02	1	02/11/09 15:24	S_C	4903754
Tin	ND		0.05	1	02/11/09 15:24	S_C	4903754

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3010A	02/05/2009 9:00	AB1	1.00				

METALS BY METHOD 6020A, TOTAL			MCL	SW6020A	Units: mg/L		
Antimony	ND	0.005	1	02/13/09 21:54	AL_H		4907553
Arsenic	0.00682	0.005	1	02/13/09 23:06	AL_H		4907313
Barium	0.275	0.005	1	02/12/09 19:16	AL_H		4905678
Beryllium	0.00535	0.004	1	02/13/09 23:06	AL_H		4907313
Cadmium	ND	0.005	1	02/12/09 19:16	AL_H		4905678
Chromium	0.00773	0.005	1	02/12/09 19:16	AL_H		4905678
Cobalt	0.0603	0.005	1	02/12/09 19:16	AL_H		4905678
Copper	0.0633	0.005	1	02/12/09 19:16	AL_H		4905678
Lead	0.0197	0.005	1	02/12/09 19:16	AL_H		4905678
Manganese	4.28	0.005	1	02/12/09 19:16	AL_H		4905678
Molybdenum	ND	0.01	1	02/13/09 23:06	AL_H		4907313
Nickel	0.0288	0.005	1	02/12/09 19:16	AL_H		4905678
Selenium	ND	0.005	1	02/14/09 15:20	AL_H		4908352
Silver	ND	0.005	1	02/12/09 19:16	AL_H		4905678
Thallium	ND	0.005	1	02/12/09 19:16	AL_H		4905678
Vanadium	0.0192	0.005	1	02/13/09 23:06	AL_H		4907313
Zinc	0.101	0.01	1	02/12/09 19:16	AL_H		4905678

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	02/05/2009 9:00	AB1	1.00

PH	MCL	SM4500-H B	Units: pH Units			
pH	7.04	0.1	1	01/31/09 14:45	PAC	4888681

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
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TNTC - Too numerous to count

09011207 Page 11

2/17/2009 9:16:03 AM



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

Client Sample ID MW-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, 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	02/05/09 19:48	GQ	4896003
1,2-Dichlorobenzene	ND		5	1	02/05/09 19:48	GQ	4896003
1,2-Diphenylhydrazine	ND		10	1	02/05/09 19:48	GQ	4896003
1,3-Dichlorobenzene	ND		5	1	02/05/09 19:48	GQ	4896003
1,4-Dichlorobenzene	ND		5	1	02/05/09 19:48	GQ	4896003
2,4,5-Trichlorophenol	ND		10	1	02/05/09 19:48	GQ	4896003
2,4,6-Trichlorophenol	ND		5	1	02/05/09 19:48	GQ	4896003
2,4-Dichlorophenol	ND		5	1	02/05/09 19:48	GQ	4896003
2,4-Dimethylphenol	ND		5	1	02/05/09 19:48	GQ	4896003
2,4-Dinitrophenol	ND		25	1	02/05/09 19:48	GQ	4896003
2,4-Dinitrotoluene	ND		5	1	02/05/09 19:48	GQ	4896003
2,6-Dinitrotoluene	ND		5	1	02/05/09 19:48	GQ	4896003
2-Chloronaphthalene	ND		5	1	02/05/09 19:48	GQ	4896003
2-Chlorophenol	ND		5	1	02/05/09 19:48	GQ	4896003
2-Methylnaphthalene	ND		5	1	02/05/09 19:48	GQ	4896003
2-Nitroaniline	ND		25	1	02/05/09 19:48	GQ	4896003
2-Nitrophenol	ND		5	1	02/05/09 19:48	GQ	4896003
3,3'-Dichlorobenzidine	ND		10	1	02/05/09 19:48	GQ	4896003
3-Nitroaniline	ND		25	1	02/05/09 19:48	GQ	4896003
4,6-Dinitro-2-methylphenol	ND		25	1	02/05/09 19:48	GQ	4896003
4-Bromophenyl phenyl ether	ND		5	1	02/05/09 19:48	GQ	4896003
4-Chloro-3-methylphenol	ND		5	1	02/05/09 19:48	GQ	4896003
4-Chloroaniline	ND		5	1	02/05/09 19:48	GQ	4896003
4-Chlorophenyl phenyl ether	ND		5	1	02/05/09 19:48	GQ	4896003
4-Nitroaniline	ND		25	1	02/05/09 19:48	GQ	4896003
4-Nitrophenol	ND		25	1	02/05/09 19:48	GQ	4896003
Acenaphthene	ND		5	1	02/05/09 19:48	GQ	4896003
Acenaphthylene	ND		5	1	02/05/09 19:48	GQ	4896003
Aniline	ND		5	1	02/05/09 19:48	GQ	4896003
Anthracene	ND		5	1	02/05/09 19:48	GQ	4896003
Benz(a)anthracene	ND		5	1	02/05/09 19:48	GQ	4896003
Benzo(a)pyrene	ND		5	1	02/05/09 19:48	GQ	4896003
Benzo(b)fluoranthene	ND		5	1	02/05/09 19:48	GQ	4896003
Benzo(g,h,i)perylene	ND		5	1	02/05/09 19:48	GQ	4896003
Benzo(k)fluoranthene	ND		5	1	02/05/09 19:48	GQ	4896003
Benzoic acid	ND		25	1	02/05/09 19:48	GQ	4896003
Benzyl alcohol	ND		5	1	02/05/09 19:48	GQ	4896003
Bis(2-chloroethoxy)methane	ND		5	1	02/05/09 19:48	GQ	4896003
Bis(2-chloroethyl)ether	ND		5	1	02/05/09 19:48	GQ	4896003

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	02/05/09 19:48	GQ	4896003
Bis(2-ethylhexyl)phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Butyl benzyl phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Carbazole	ND		5	1	02/05/09 19:48	GQ	4896003
Chrysene	ND		5	1	02/05/09 19:48	GQ	4896003
Dibenz(a,h)anthracene	ND		5	1	02/05/09 19:48	GQ	4896003
Dibenzofuran	ND		5	1	02/05/09 19:48	GQ	4896003
Diethyl phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Dimethyl phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Di-n-butyl phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Di-n-octyl phthalate	ND		5	1	02/05/09 19:48	GQ	4896003
Fluoranthene	ND		5	1	02/05/09 19:48	GQ	4896003
Fluorene	ND		5	1	02/05/09 19:48	GQ	4896003
Hexachlorobenzene	ND		5	1	02/05/09 19:48	GQ	4896003
Hexachlorobutadiene	ND		5	1	02/05/09 19:48	GQ	4896003
Hexachlorocyclopentadiene	ND		5	1	02/05/09 19:48	GQ	4896003
Hexachloroethane	ND		5	1	02/05/09 19:48	GQ	4896003
Indeno(1,2,3-cd)pyrene	ND		5	1	02/05/09 19:48	GQ	4896003
Isophorone	ND		5	1	02/05/09 19:48	GQ	4896003
Naphthalene	ND		5	1	02/05/09 19:48	GQ	4896003
Nitrobenzene	ND		5	1	02/05/09 19:48	GQ	4896003
N-Nitrosodi-n-propylamine	ND		5	1	02/05/09 19:48	GQ	4896003
N-Nitrosodiphenylamine	ND		5	1	02/05/09 19:48	GQ	4896003
Pentachlorophenol	ND		25	1	02/05/09 19:48	GQ	4896003
Phenanthrene	ND		5	1	02/05/09 19:48	GQ	4896003
Phenol	ND		5	1	02/05/09 19:48	GQ	4896003
Pyrene	ND		5	1	02/05/09 19:48	GQ	4896003
Pyridine	ND		5	1	02/05/09 19:48	GQ	4896003
2-Methylphenol	ND		5	1	02/05/09 19:48	GQ	4896003
3 & 4-Methylphenol	ND		5	1	02/05/09 19:48	GQ	4896003
Surr: 2,4,6-Tribromophenol	73.3		% 10-123	1	02/05/09 19:48	GQ	4896003
Surr: 2-Fluorobiphenyl	66.0		% 23-116	1	02/05/09 19:48	GQ	4896003
Surr: 2-Fluorophenol	53.3		% 16-110	1	02/05/09 19:48	GQ	4896003
Surr: Nitrobenzene-d5	64.0		% 21-114	1	02/05/09 19:48	GQ	4896003
Surr: Phenol-d5	44.0		% 10-110	1	02/05/09 19:48	GQ	4896003
Surr: Terphenyl-d14	76.0		% 22-141	1	02/05/09 19:48	GQ	4896003

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 9:25	N_M	1.00

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
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E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	SM2510B	Units: umhos/cm	
Specific Conductance	1290		10	1	02/02/09 10:55	PAC	4888713
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	834		20	2	02/02/09 16:00	CFS	4890129

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - 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 MW-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, 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	02/02/09 22:54	JC	4889498
1,1,1-Trichloroethane	ND		5	1	02/02/09 22:54	JC	4889498
1,1,2,2-Tetrachloroethane	ND		5	1	02/02/09 22:54	JC	4889498
1,1,2-Trichloroethane	ND		5	1	02/02/09 22:54	JC	4889498
1,1-Dichloroethane	ND		5	1	02/02/09 22:54	JC	4889498
1,1-Dichloroethene	ND		5	1	02/02/09 22:54	JC	4889498
1,1-Dichloropropene	ND		5	1	02/02/09 22:54	JC	4889498
1,2,3-Trichlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,2,3-Trichloropropane	ND		5	1	02/02/09 22:54	JC	4889498
1,2,4-Trichlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,2,4-Trimethylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dibromo-3-chloropropane	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dibromoethane	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dichlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dichloroethane	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dichloropropane	ND		5	1	02/02/09 22:54	JC	4889498
1,3,5-Trimethylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,3-Dichlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498
1,3-Dichloropropane	ND		5	1	02/02/09 22:54	JC	4889498
1,4-Dichlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498
2,2-Dichloropropane	ND		5	1	02/02/09 22:54	JC	4889498
2-Butanone	ND		20	1	02/02/09 22:54	JC	4889498
2-Chloroethyl vinyl ether	ND J		10	1	02/02/09 22:54	JC	4889498
2-Chlorotoluene	ND		5	1	02/02/09 22:54	JC	4889498
2-Hexanone	ND		10	1	02/02/09 22:54	JC	4889498
4-Chlorotoluene	ND		5	1	02/02/09 22:54	JC	4889498
4-Isopropyltoluene	ND		5	1	02/02/09 22:54	JC	4889498
4-Methyl-2-pentanone	ND		10	1	02/02/09 22:54	JC	4889498
Acetone	ND		20	1	02/02/09 22:54	JC	4889498
Acrylonitrile	ND		50	1	02/02/09 22:54	JC	4889498
Benzene	ND		5	1	02/02/09 22:54	JC	4889498
Bromobenzene	ND		5	1	02/02/09 22:54	JC	4889498
Bromochloromethane	ND		5	1	02/02/09 22:54	JC	4889498
Bromodichloromethane	ND		5	1	02/02/09 22:54	JC	4889498
Bromoform	ND		5	1	02/02/09 22:54	JC	4889498
Bromomethane	ND		10	1	02/02/09 22:54	JC	4889498
Carbon disulfide	ND		5	1	02/02/09 22:54	JC	4889498
Carbon tetrachloride	ND		5	1	02/02/09 22:54	JC	4889498
Chlorobenzene	ND		5	1	02/02/09 22:54	JC	4889498

Qualifiers:
ND/U - Not Detected at the Reporting Limit
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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

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



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

Client Sample ID MW-4

Collected: 01/29/2009 15:00

SPL Sample ID: 09011207-02

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	02/02/09 22:54	JC	4889498
Chloroform	ND		5	1	02/02/09 22:54	JC	4889498
Chloromethane	ND		10	1	02/02/09 22:54	JC	4889498
Dibromochloromethane	ND		5	1	02/02/09 22:54	JC	4889498
Dibromomethane	ND		5	1	02/02/09 22:54	JC	4889498
Dichlorodifluoromethane	ND		10	1	02/02/09 22:54	JC	4889498
Ethylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
Hexachlorobutadiene	ND		5	1	02/02/09 22:54	JC	4889498
Isopropylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
Methyl tert-butyl ether	ND		5	1	02/02/09 22:54	JC	4889498
Methylene chloride	ND		5	1	02/02/09 22:54	JC	4889498
Naphthalene	ND		5	1	02/02/09 22:54	JC	4889498
n-Butylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
n-Propylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
sec-Butylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
Styrene	ND		5	1	02/02/09 22:54	JC	4889498
tert-Butylbenzene	ND		5	1	02/02/09 22:54	JC	4889498
Tetrachloroethene	ND		5	1	02/02/09 22:54	JC	4889498
Toluene	ND		5	1	02/02/09 22:54	JC	4889498
Trichloroethene	ND		5	1	02/02/09 22:54	JC	4889498
Trichlorofluoromethane	ND		5	1	02/02/09 22:54	JC	4889498
Vinyl acetate	ND		10	1	02/02/09 22:54	JC	4889498
Vinyl chloride	ND		2	1	02/02/09 22:54	JC	4889498
cis-1,2-Dichloroethene	ND		5	1	02/02/09 22:54	JC	4889498
cis-1,3-Dichloropropene	ND		5	1	02/02/09 22:54	JC	4889498
m,p-Xylene	ND		5	1	02/02/09 22:54	JC	4889498
o-Xylene	ND		5	1	02/02/09 22:54	JC	4889498
trans-1,2-Dichloroethene	ND		5	1	02/02/09 22:54	JC	4889498
trans-1,3-Dichloropropene	ND		5	1	02/02/09 22:54	JC	4889498
1,2-Dichloroethene (total)	ND		5	1	02/02/09 22:54	JC	4889498
Xylenes, Total	ND		5	1	02/02/09 22:54	JC	4889498
Surr: 1,2-Dichloroethane-d4	98.0		% 62-130	1	02/02/09 22:54	JC	4889498
Surr: 4-Bromofluorobenzene	102		% 70-130	1	02/02/09 22:54	JC	4889498
Surr: Toluene-d8	98.0		% 74-122	1	02/02/09 22:54	JC	4889498

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 16:25 SPL Sample ID: 09011207-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO₃), TOTAL				MCL	SM2320B	Units: mg/L	
Alkalinity, Total (As CaCO ₃)	208		2	1	02/05/09 8:30	PAC	4894042

DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		0.1	1	02/04/09 20:32	NW	4895674
Surr: n-Pentacosane	83.4	%	20-150	1	02/04/09 20:32	NW	4895674

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 12:00	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	02/05/09 16:35	CLJ	4895541
Surr: 1,4-Difluorobenzene	98.3	%	60-155	1	02/05/09 16:35	CLJ	4895541
Surr: 4-Bromofluorobenzene	106	%	50-158	1	02/05/09 16:35	CLJ	4895541

HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO ₃)	560		50	10	02/03/09 11:30	PAC	4890723

ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	01/31/09 14:36	BDG	4901022
Chloride	19.2		0.5	1	01/31/09 14:36	BDG	4901022
Fluoride	ND		0.5	1	01/31/09 14:36	BDG	4901022
Ortho-phosphate (As P)	ND		0.5	1	01/31/09 14:36	BDG	4901022
Sulfate	337		25	50	02/09/09 20:39	BDG	4901070
Nitrogen,Nitrate (As N)	ND		0.5	1	01/31/09 14:36	BDG	4897192
Nitrogen,Nitrite (As N)	ND		0.5	1	01/31/09 14:36	BDG	4897192

MERCURY, TOTAL				MCL	SW7470A	Units: mg/L	
Mercury	ND		0.0002	1	02/13/09 13:11	EMB	4906743

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	02/13/2009 8:30	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/L	
Aluminum	1.82		0.1	1	02/11/09 15:28	S_C	4903755
Boron	ND		0.1	1	02/11/09 15:28	S_C	4903755
Calcium	212		0.1	1	02/11/09 15:28	S_C	4903755
Iron	2.24		0.02	1	02/11/09 15:28	S_C	4903755
Magnesium	12.4		0.1	1	02/11/09 15:28	S_C	4903755
Manganese	0.374		0.005	1	02/11/09 15:28	S_C	4903755
Potassium	ND		2	1	02/11/09 15:28	S_C	4903755
Sodium	61.9		0.5	1	02/11/09 15:28	S_C	4903755
Strontium	3.31		0.02	1	02/11/09 15:28	S_C	4903755
Tin	ND		0.05	1	02/11/09 15:28	S_C	4903755

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-3

Collected: 01/29/2009 16:25 SPL Sample ID: 09011207-03

Site: Albuquerque, 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
SW3010A	02/05/2009 9:00	AB1	1.00

METALS BY METHOD 6020A, TOTAL

MCL

SW6020A

Units: mg/L

Antimony	ND	0.005	1	02/13/09 22:01	AL_H	4907554
Arsenic	ND	0.005	1	02/13/09 23:11	AL_H	4907314
Barium	0.0716	0.005	1	02/12/09 19:23	AL_H	4905679
Beryllium	ND	0.004	1	02/13/09 23:11	AL_H	4907314
Cadmium	ND	0.005	1	02/12/09 19:23	AL_H	4905679
Chromium	0.00594	0.005	1	02/12/09 19:23	AL_H	4905679
Cobalt	0.00503	0.005	1	02/12/09 19:23	AL_H	4905679
Copper	0.0309	0.005	1	02/12/09 19:23	AL_H	4905679
Lead	0.00691	0.005	1	02/12/09 19:23	AL_H	4905679
Manganese	0.373	0.005	1	02/12/09 19:23	AL_H	4905679
Molybdenum	ND	0.01	1	02/13/09 23:11	AL_H	4907314
Nickel	0.00902	0.005	1	02/12/09 19:23	AL_H	4905679
Selenium	ND	0.005	1	02/14/09 15:25	AL_H	4908354
Silver	ND	0.005	1	02/12/09 19:23	AL_H	4905679
Thallium	ND	0.005	1	02/12/09 19:23	AL_H	4905679
Vanadium	0.00628	0.005	1	02/13/09 23:11	AL_H	4907314
Zinc	0.0531	0.01	1	02/12/09 19:23	AL_H	4905679

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	02/05/2009 9:00	AB1	1.00

PH

MCL

SM4500-H B

Units: pH Units

pH	7.1	0.1	1	01/31/09 14:45	PAC	4888682
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Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 16:25

SPL Sample ID: 09011207-03

Site: Albuquerque, 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	02/05/09 20:20	GQ	4896004
1,2-Dichlorobenzene	ND		5	1	02/05/09 20:20	GQ	4896004
1,2-Diphenylhydrazine	ND		10	1	02/05/09 20:20	GQ	4896004
1,3-Dichlorobenzene	ND		5	1	02/05/09 20:20	GQ	4896004
1,4-Dichlorobenzene	ND		5	1	02/05/09 20:20	GQ	4896004
2,4,5-Trichlorophenol	ND		10	1	02/05/09 20:20	GQ	4896004
2,4,6-Trichlorophenol	ND		5	1	02/05/09 20:20	GQ	4896004
2,4-Dichlorophenol	ND		5	1	02/05/09 20:20	GQ	4896004
2,4-Dimethylphenol	ND		5	1	02/05/09 20:20	GQ	4896004
2,4-Dinitrophenol	ND		25	1	02/05/09 20:20	GQ	4896004
2,4-Dinitrotoluene	ND		5	1	02/05/09 20:20	GQ	4896004
2,6-Dinitrotoluene	ND		5	1	02/05/09 20:20	GQ	4896004
2-Chloronaphthalene	ND		5	1	02/05/09 20:20	GQ	4896004
2-Chlorophenol	ND		5	1	02/05/09 20:20	GQ	4896004
2-Methylnaphthalene	ND		5	1	02/05/09 20:20	GQ	4896004
2-Nitroaniline	ND		25	1	02/05/09 20:20	GQ	4896004
2-Nitrophenol	ND		5	1	02/05/09 20:20	GQ	4896004
3,3'-Dichlorobenzidine	ND		10	1	02/05/09 20:20	GQ	4896004
3-Nitroaniline	ND		25	1	02/05/09 20:20	GQ	4896004
4,6-Dinitro-2-methylphenol	ND		25	1	02/05/09 20:20	GQ	4896004
4-Bromophenyl phenyl ether	ND		5	1	02/05/09 20:20	GQ	4896004
4-Chloro-3-methylphenol	ND		5	1	02/05/09 20:20	GQ	4896004
4-Chloroaniline	ND		5	1	02/05/09 20:20	GQ	4896004
4-Chlorophenyl phenyl ether	ND		5	1	02/05/09 20:20	GQ	4896004
4-Nitroaniline	ND		25	1	02/05/09 20:20	GQ	4896004
4-Nitrophenol	ND		25	1	02/05/09 20:20	GQ	4896004
Acenaphthene	ND		5	1	02/05/09 20:20	GQ	4896004
Acenaphthylene	ND		5	1	02/05/09 20:20	GQ	4896004
Aniline	ND		5	1	02/05/09 20:20	GQ	4896004
Anthracene	ND		5	1	02/05/09 20:20	GQ	4896004
Benz(a)anthracene	ND		5	1	02/05/09 20:20	GQ	4896004
Benzo(a)pyrene	ND		5	1	02/05/09 20:20	GQ	4896004
Benzo(b)fluoranthene	ND		5	1	02/05/09 20:20	GQ	4896004
Benzo(g,h,i)perylene	ND		5	1	02/05/09 20:20	GQ	4896004
Benzo(k)fluoranthene	ND		5	1	02/05/09 20:20	GQ	4896004
Benzoic acid	ND		25	1	02/05/09 20:20	GQ	4896004
Benzyl alcohol	ND		5	1	02/05/09 20:20	GQ	4896004
Bis(2-chloroethoxy)methane	ND		5	1	02/05/09 20:20	GQ	4896004
Bis(2-chloroethyl)ether	ND		5	1	02/05/09 20:20	GQ	4896004

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
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

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MI - Matrix Interference



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

Client Sample ID MW-3

Collected: 01/29/2009 16:25

SPL Sample ID: 09011207-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	02/05/09 20:20	GQ	4896004
Bis(2-ethylhexyl)phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Butyl benzyl phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Carbazole	ND		5	1	02/05/09 20:20	GQ	4896004
Chrysene	ND		5	1	02/05/09 20:20	GQ	4896004
Dibenz(a,h)anthracene	ND		5	1	02/05/09 20:20	GQ	4896004
Dibenzofuran	ND		5	1	02/05/09 20:20	GQ	4896004
Diethyl phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Dimethyl phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Di-n-butyl phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Di-n-octyl phthalate	ND		5	1	02/05/09 20:20	GQ	4896004
Fluoranthene	ND		5	1	02/05/09 20:20	GQ	4896004
Fluorene	ND		5	1	02/05/09 20:20	GQ	4896004
Hexachlorobenzene	ND		5	1	02/05/09 20:20	GQ	4896004
Hexachlorobutadiene	ND		5	1	02/05/09 20:20	GQ	4896004
Hexachlorocyclopentadiene	ND		5	1	02/05/09 20:20	GQ	4896004
Hexachloroethane	ND		5	1	02/05/09 20:20	GQ	4896004
Indeno(1,2,3-cd)pyrene	ND		5	1	02/05/09 20:20	GQ	4896004
Isophorone	ND		5	1	02/05/09 20:20	GQ	4896004
Naphthalene	ND		5	1	02/05/09 20:20	GQ	4896004
Nitrobenzene	ND		5	1	02/05/09 20:20	GQ	4896004
N-Nitrosodi-n-propylamine	ND		5	1	02/05/09 20:20	GQ	4896004
N-Nitrosodiphenylamine	ND		5	1	02/05/09 20:20	GQ	4896004
Pentachlorophenol	ND		25	1	02/05/09 20:20	GQ	4896004
Phenanthrene	ND		5	1	02/05/09 20:20	GQ	4896004
Phenol	ND		5	1	02/05/09 20:20	GQ	4896004
Pyrene	ND		5	1	02/05/09 20:20	GQ	4896004
Pyridine	ND		5	1	02/05/09 20:20	GQ	4896004
2-Methylphenol	ND		5	1	02/05/09 20:20	GQ	4896004
3 & 4-Methylphenol	ND		5	1	02/05/09 20:20	GQ	4896004
Surr: 2,4,6-Tribromophenol	77.3		% 10-123	1	02/05/09 20:20	GQ	4896004
Surr: 2-Fluorobiphenyl	60.0		% 23-116	1	02/05/09 20:20	GQ	4896004
Surr: 2-Fluorophenol	42.7		% 16-110	1	02/05/09 20:20	GQ	4896004
Surr: Nitrobenzene-d5	52.0		% 21-114	1	02/05/09 20:20	GQ	4896004
Surr: Phenol-d5	37.3		% 10-110	1	02/05/09 20:20	GQ	4896004
Surr: Terphenyl-d14	76.0		% 22-141	1	02/05/09 20:20	GQ	4896004

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 9:25	N_M	1.00

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

Client Sample ID MW-3

Collected: 01/29/2009 16:25 SPL Sample ID: 09011207-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	SM2510B	Units: umhos/cm	
Specific Conductance	1410		10	1	02/02/09 10:55	PAC	4888714
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	852		20	2	02/02/09 16:00	CFS	4890130

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: 01/29/2009 16:25

SPL Sample ID: 09011207-03

Site: Albuquerque, 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	02/02/09 23:21	JC	4889499
1,1,1-Trichloroethane	ND		5	1	02/02/09 23:21	JC	4889499
1,1,2,2-Tetrachloroethane	ND		5	1	02/02/09 23:21	JC	4889499
1,1,2-Trichloroethane	ND		5	1	02/02/09 23:21	JC	4889499
1,1-Dichloroethane	ND		5	1	02/02/09 23:21	JC	4889499
1,1-Dichloroethene	ND		5	1	02/02/09 23:21	JC	4889499
1,1-Dichloropropene	ND		5	1	02/02/09 23:21	JC	4889499
1,2,3-Trichlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,2,3-Trichloropropane	ND		5	1	02/02/09 23:21	JC	4889499
1,2,4-Trichlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,2,4-Trimethylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dibromo-3-chloropropane	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dibromoethane	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dichlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dichloroethane	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dichloropropane	ND		5	1	02/02/09 23:21	JC	4889499
1,3,5-Trimethylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,3-Dichlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499
1,3-Dichloropropane	ND		5	1	02/02/09 23:21	JC	4889499
1,4-Dichlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499
2,2-Dichloropropane	ND		5	1	02/02/09 23:21	JC	4889499
2-Butanone	ND		20	1	02/02/09 23:21	JC	4889499
2-Chloroethyl vinyl ether	ND J		10	1	02/02/09 23:21	JC	4889499
2-Chlorotoluene	ND		5	1	02/02/09 23:21	JC	4889499
2-Hexanone	ND		10	1	02/02/09 23:21	JC	4889499
4-Chlorotoluene	ND		5	1	02/02/09 23:21	JC	4889499
4-Isopropyltoluene	ND		5	1	02/02/09 23:21	JC	4889499
4-Methyl-2-pentanone	ND		10	1	02/02/09 23:21	JC	4889499
Acetone	ND		20	1	02/02/09 23:21	JC	4889499
Acrylonitrile	ND		50	1	02/02/09 23:21	JC	4889499
Benzene	ND		5	1	02/02/09 23:21	JC	4889499
Bromobenzene	ND		5	1	02/02/09 23:21	JC	4889499
Bromochloromethane	ND		5	1	02/02/09 23:21	JC	4889499
Bromodichloromethane	ND		5	1	02/02/09 23:21	JC	4889499
Bromoform	ND		5	1	02/02/09 23:21	JC	4889499
Bromomethane	ND		10	1	02/02/09 23:21	JC	4889499
Carbon disulfide	ND		5	1	02/02/09 23:21	JC	4889499
Carbon tetrachloride	ND		5	1	02/02/09 23:21	JC	4889499
Chlorobenzene	ND		5	1	02/02/09 23:21	JC	4889499

Qualifiers:
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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

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

Client Sample ID MW-3

Collected: 01/29/2009 16:25

SPL Sample ID: 09011207-03

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	02/02/09 23:21	JC	4889499
Chloroform	ND		5	1	02/02/09 23:21	JC	4889499
Chloromethane	ND		10	1	02/02/09 23:21	JC	4889499
Dibromochloromethane	ND		5	1	02/02/09 23:21	JC	4889499
Dibromomethane	ND		5	1	02/02/09 23:21	JC	4889499
Dichlorodifluoromethane	ND		10	1	02/02/09 23:21	JC	4889499
Ethylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
Hexachlorobutadiene	ND		5	1	02/02/09 23:21	JC	4889499
Isopropylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
Methyl tert-butyl ether	ND		5	1	02/02/09 23:21	JC	4889499
Methylene chloride	ND		5	1	02/02/09 23:21	JC	4889499
Naphthalene	ND		5	1	02/02/09 23:21	JC	4889499
n-Butylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
n-Propylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
sec-Butylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
Styrene	ND		5	1	02/02/09 23:21	JC	4889499
tert-Butylbenzene	ND		5	1	02/02/09 23:21	JC	4889499
Tetrachloroethene	ND		5	1	02/02/09 23:21	JC	4889499
Toluene	ND		5	1	02/02/09 23:21	JC	4889499
Trichloroethene	ND		5	1	02/02/09 23:21	JC	4889499
Trichlorofluoromethane	ND		5	1	02/02/09 23:21	JC	4889499
Vinyl acetate	ND		10	1	02/02/09 23:21	JC	4889499
Vinyl chloride	ND		2	1	02/02/09 23:21	JC	4889499
cis-1,2-Dichloroethene	ND		5	1	02/02/09 23:21	JC	4889499
cis-1,3-Dichloropropene	ND		5	1	02/02/09 23:21	JC	4889499
m,p-Xylene	ND		5	1	02/02/09 23:21	JC	4889499
o-Xylene	ND		5	1	02/02/09 23:21	JC	4889499
trans-1,2-Dichloroethene	ND		5	1	02/02/09 23:21	JC	4889499
trans-1,3-Dichloropropene	ND		5	1	02/02/09 23:21	JC	4889499
1,2-Dichloroethene (total)	ND		5	1	02/02/09 23:21	JC	4889499
Xylenes, Total	ND		5	1	02/02/09 23:21	JC	4889499
Surr: 1,2-Dichloroethane-d4	100		% 62-130	1	02/02/09 23:21	JC	4889499
Surr: 4-Bromofluorobenzene	98.0		% 70-130	1	02/02/09 23:21	JC	4889499
Surr: Toluene-d8	100		% 74-122	1	02/02/09 23:21	JC	4889499

Qualifiers:

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B/V - Analyte detected in the associated Method Blank

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E - Estimated Value exceeds calibration curve

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MI - Matrix Interference



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

Client Sample ID MW-1

Collected: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
ALKALINITY (AS CaCO3), TOTAL				MCL	SM2320B	Units: mg/L	
Alkalinity, Total (As CaCO3)	222		2	1	02/05/09 8:30	PAC	4894043
DIESEL RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Diesel Range Organics (C10-C28)	ND		0.1	1	02/04/09 20:52	NW	4895675
Surr: n-Pentacosane	77.8		% 20-150	1	02/04/09 20:52	NW	4895675

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 12:00	N_M	1.00

GASOLINE RANGE ORGANICS				MCL	SW8015B	Units: mg/L	
Gasoline Range Organics	ND		0.1	1	02/05/09 17:04	CLJ	4895539
Surr: 1,4-Difluorobenzene	98.6		% 60-155	1	02/05/09 17:04	CLJ	4895539
Surr: 4-Bromofluorobenzene	107		% 50-158	1	02/05/09 17:04	CLJ	4895539

HARDNESS, TOTAL (TITRIMETRIC, EDTA)				MCL	SM2340C	Units: mg/L	
Hardness (As CaCO3)	720		50	10	02/03/09 11:30	PAC	4890724

ION CHROMATOGRAPHY				MCL	E300.0	Units: mg/L	
Bromide	ND		0.5	1	01/31/09 14:53	BDG	4901023
Chloride	18.4		1	2	02/09/09 20:56	BDG	4901071
Fluoride	ND		0.5	1	01/31/09 14:53	BDG	4901023
Ortho-phosphate (As P)	ND		0.5	1	01/31/09 14:53	BDG	4901023
Sulfate	340		25	50	02/09/09 21:13	BDG	4901073
Nitrogen,Nitrate (As N)	ND		0.5	1	01/31/09 14:53	BDG	4897193
Nitrogen,Nitrite (As N)	ND		0.5	1	01/31/09 14:53	BDG	4897193

MERCURY, TOTAL				MCL	SW7470A	Units: mg/L	
Mercury	0.000596		0.0002	1	02/13/09 13:14	EMB	4906744

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	02/13/2009 8:30	F_S	1.00

METALS BY METHOD 6010B, TOTAL				MCL	SW6010B	Units: mg/L	
Aluminum	2.14		0.1	1	02/11/09 15:33	S_C	4903756
Boron	ND		0.1	1	02/11/09 15:33	S_C	4903756
Calcium	207		0.1	1	02/11/09 15:33	S_C	4903756
Iron	2.77		0.02	1	02/11/09 15:33	S_C	4903756
Magnesium	14		0.1	1	02/11/09 15:33	S_C	4903756
Manganese	1.41		0.005	1	02/11/09 15:33	S_C	4903756
Potassium	2.36		2	1	02/11/09 15:33	S_C	4903756
Sodium	62.5		0.5	1	02/11/09 15:33	S_C	4903756
Strontium	3.14		0.02	1	02/11/09 15:33	S_C	4903756
Tin	ND		0.05	1	02/11/09 15:33	S_C	4903756

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count



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

Client Sample ID MW-1

Collected: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3010A	02/05/2009 9:00	AB1	1.00				
METALS BY METHOD 6020A, TOTAL				MCL	SW6020A	Units: mg/L	
Antimony	ND		0.005	1	02/13/09 22:07	AL_H	4907555
Arsenic	ND		0.005	1	02/13/09 23:16	AL_H	4907315
Barium	0.0787		0.005	1	02/12/09 19:30	AL_H	4905680
Beryllium	ND		0.004	1	02/13/09 23:16	AL_H	4907315
Cadmium	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Chromium	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Cobalt	0.00502		0.005	1	02/12/09 19:30	AL_H	4905680
Copper	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Lead	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Manganese	1.41		0.005	1	02/12/09 19:30	AL_H	4905680
Molybdenum	ND		0.01	1	02/13/09 23:16	AL_H	4907315
Nickel	0.00745		0.005	1	02/12/09 19:30	AL_H	4905680
Selenium	ND		0.005	1	02/14/09 15:29	AL_H	4908355
Silver	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Thallium	ND		0.005	1	02/12/09 19:30	AL_H	4905680
Vanadium	0.00528		0.005	1	02/13/09 23:16	AL_H	4907315
Zinc	0.0125		0.01	1	02/12/09 19:30	AL_H	4905680
Prep Method	Prep Date	Prep Initials	Prep Factor				
SW3010A	02/05/2009 9:00	AB1	1.00				
PH				MCL	SM4500-H B	Units: pH Units	
pH	7.01		0.1	1	01/31/09 14:45	PAC	4888683

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, 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	02/05/09 20:51	GQ	4896005
1,2-Dichlorobenzene	ND		5	1	02/05/09 20:51	GQ	4896005
1,2-Diphenylhydrazine	ND		10	1	02/05/09 20:51	GQ	4896005
1,3-Dichlorobenzene	ND		5	1	02/05/09 20:51	GQ	4896005
1,4-Dichlorobenzene	ND		5	1	02/05/09 20:51	GQ	4896005
2,4,5-Trichlorophenol	ND		10	1	02/05/09 20:51	GQ	4896005
2,4,6-Trichlorophenol	ND		5	1	02/05/09 20:51	GQ	4896005
2,4-Dichlorophenol	ND		5	1	02/05/09 20:51	GQ	4896005
2,4-Dimethylphenol	ND		5	1	02/05/09 20:51	GQ	4896005
2,4-Dinitrophenol	ND		25	1	02/05/09 20:51	GQ	4896005
2,4-Dinitrotoluene	ND		5	1	02/05/09 20:51	GQ	4896005
2,6-Dinitrotoluene	ND		5	1	02/05/09 20:51	GQ	4896005
2-Chloronaphthalene	ND		5	1	02/05/09 20:51	GQ	4896005
2-Chlorophenol	ND		5	1	02/05/09 20:51	GQ	4896005
2-Methylnaphthalene	ND		5	1	02/05/09 20:51	GQ	4896005
2-Nitroaniline	ND		25	1	02/05/09 20:51	GQ	4896005
2-Nitrophenol	ND		5	1	02/05/09 20:51	GQ	4896005
3,3'-Dichlorobenzidine	ND		10	1	02/05/09 20:51	GQ	4896005
3-Nitroaniline	ND		25	1	02/05/09 20:51	GQ	4896005
4,6-Dinitro-2-methylphenol	ND		25	1	02/05/09 20:51	GQ	4896005
4-Bromophenyl phenyl ether	ND		5	1	02/05/09 20:51	GQ	4896005
4-Chloro-3-methylphenol	ND		5	1	02/05/09 20:51	GQ	4896005
4-Chloroaniline	ND		5	1	02/05/09 20:51	GQ	4896005
4-Chlorophenyl phenyl ether	ND		5	1	02/05/09 20:51	GQ	4896005
4-Nitroaniline	ND		25	1	02/05/09 20:51	GQ	4896005
4-Nitrophenol	ND		25	1	02/05/09 20:51	GQ	4896005
Acenaphthene	ND		5	1	02/05/09 20:51	GQ	4896005
Acenaphthylene	ND		5	1	02/05/09 20:51	GQ	4896005
Aniline	ND		5	1	02/05/09 20:51	GQ	4896005
Anthracene	ND		5	1	02/05/09 20:51	GQ	4896005
Benz(a)anthracene	ND		5	1	02/05/09 20:51	GQ	4896005
Benzo(a)pyrene	ND		5	1	02/05/09 20:51	GQ	4896005
Benzo(b)fluoranthene	ND		5	1	02/05/09 20:51	GQ	4896005
Benzo(g,h,i)perylene	ND		5	1	02/05/09 20:51	GQ	4896005
Benzo(k)fluoranthene	ND		5	1	02/05/09 20:51	GQ	4896005
Benzoic acid	ND		25	1	02/05/09 20:51	GQ	4896005
Benzyl alcohol	ND		5	1	02/05/09 20:51	GQ	4896005
Bis(2-chloroethoxy)methane	ND		5	1	02/05/09 20:51	GQ	4896005
Bis(2-chloroethyl)ether	ND		5	1	02/05/09 20:51	GQ	4896005

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	02/05/09 20:51	GQ	4896005
Bis(2-ethylhexyl)phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Butyl benzyl phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Carbazole	ND		5	1	02/05/09 20:51	GQ	4896005
Chrysene	ND		5	1	02/05/09 20:51	GQ	4896005
Dibenz(a,h)anthracene	ND		5	1	02/05/09 20:51	GQ	4896005
Dibenzofuran	ND		5	1	02/05/09 20:51	GQ	4896005
Diethyl phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Dimethyl phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Di-n-butyl phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Di-n-octyl phthalate	ND		5	1	02/05/09 20:51	GQ	4896005
Fluoranthene	ND		5	1	02/05/09 20:51	GQ	4896005
Fluorene	ND		5	1	02/05/09 20:51	GQ	4896005
Hexachlorobenzene	ND		5	1	02/05/09 20:51	GQ	4896005
Hexachlorobutadiene	ND		5	1	02/05/09 20:51	GQ	4896005
Hexachlorocyclopentadiene	ND		5	1	02/05/09 20:51	GQ	4896005
Hexachloroethane	ND		5	1	02/05/09 20:51	GQ	4896005
Indeno(1,2,3-cd)pyrene	ND		5	1	02/05/09 20:51	GQ	4896005
Isophorone	ND		5	1	02/05/09 20:51	GQ	4896005
Naphthalene	ND		5	1	02/05/09 20:51	GQ	4896005
Nitrobenzene	ND		5	1	02/05/09 20:51	GQ	4896005
N-Nitrosodi-n-propylamine	ND		5	1	02/05/09 20:51	GQ	4896005
N-Nitrosodiphenylamine	ND		5	1	02/05/09 20:51	GQ	4896005
Pentachlorophenol	ND		25	1	02/05/09 20:51	GQ	4896005
Phenanthrene	ND		5	1	02/05/09 20:51	GQ	4896005
Phenol	ND		5	1	02/05/09 20:51	GQ	4896005
Pyrene	ND		5	1	02/05/09 20:51	GQ	4896005
Pyridine	ND		5	1	02/05/09 20:51	GQ	4896005
2-Methylphenol	ND		5	1	02/05/09 20:51	GQ	4896005
3 & 4-Methylphenol	ND		5	1	02/05/09 20:51	GQ	4896005
Surr: 2,4,6-Tribromophenol	85.3		% 10-123	1	02/05/09 20:51	GQ	4896005
Surr: 2-Fluorobiphenyl	66.0		% 23-116	1	02/05/09 20:51	GQ	4896005
Surr: 2-Fluorophenol	46.7		% 16-110	1	02/05/09 20:51	GQ	4896005
Surr: Nitrobenzene-d5	60.0		% 21-114	1	02/05/09 20:51	GQ	4896005
Surr: Phenol-d5	37.3		% 10-110	1	02/05/09 20:51	GQ	4896005
Surr: Terphenyl-d14	92.0		% 22-141	1	02/05/09 20:51	GQ	4896005

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	02/04/2009 9:25	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

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MI - Matrix Interference



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

Client Sample ID MW-1

Collected: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SPECIFIC CONDUCTANCE @ 25 C				MCL	SM2510B	Units: umhos/cm	
Specific Conductance	1040		10	1	02/02/09 10:55	PAC	4888715
TOTAL DISSOLVED SOLIDS				MCL	SM2540 C	Units: mg/L	
Total Dissolved Solids (Residue, Filterable)	732		100	10	02/02/09 16:00	CFS	4890131

Qualifiers:

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

Client Sample ID MW-1

Collected: 01/29/2009 17:00

SPL Sample ID: 09011207-04

Site: Albuquerque, 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	02/02/09 23:49	JC	4889500
1,1,1-Trichloroethane	ND		5	1	02/02/09 23:49	JC	4889500
1,1,2,2-Tetrachloroethane	ND		5	1	02/02/09 23:49	JC	4889500
1,1,2-Trichloroethane	ND		5	1	02/02/09 23:49	JC	4889500
1,1-Dichloroethane	ND		5	1	02/02/09 23:49	JC	4889500
1,1-Dichloroethene	ND		5	1	02/02/09 23:49	JC	4889500
1,1-Dichloropropene	ND		5	1	02/02/09 23:49	JC	4889500
1,2,3-Trichlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,2,3-Trichloropropane	ND		5	1	02/02/09 23:49	JC	4889500
1,2,4-Trichlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,2,4-Trimethylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dibromo-3-chloropropane	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dibromoethane	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dichlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dichloroethane	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dichloropropane	ND		5	1	02/02/09 23:49	JC	4889500
1,3,5-Trimethylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,3-Dichlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500
1,3-Dichloropropane	ND		5	1	02/02/09 23:49	JC	4889500
1,4-Dichlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500
2,2-Dichloropropane	ND		5	1	02/02/09 23:49	JC	4889500
2-Butanone	ND		20	1	02/02/09 23:49	JC	4889500
2-Chloroethyl vinyl ether	ND J		10	1	02/02/09 23:49	JC	4889500
2-Chlorotoluene	ND		5	1	02/02/09 23:49	JC	4889500
2-Hexanone	ND		10	1	02/02/09 23:49	JC	4889500
4-Chlorotoluene	ND		5	1	02/02/09 23:49	JC	4889500
4-Isopropyltoluene	ND		5	1	02/02/09 23:49	JC	4889500
4-Methyl-2-pentanone	ND		10	1	02/02/09 23:49	JC	4889500
Acetone	ND		20	1	02/02/09 23:49	JC	4889500
Acrylonitrile	ND		50	1	02/02/09 23:49	JC	4889500
Benzene	ND		5	1	02/02/09 23:49	JC	4889500
Bromobenzene	ND		5	1	02/02/09 23:49	JC	4889500
Bromochloromethane	ND		5	1	02/02/09 23:49	JC	4889500
Bromodichloromethane	ND		5	1	02/02/09 23:49	JC	4889500
Bromoform	ND		5	1	02/02/09 23:49	JC	4889500
Bromomethane	ND		10	1	02/02/09 23:49	JC	4889500
Carbon disulfide	ND		5	1	02/02/09 23:49	JC	4889500
Carbon tetrachloride	ND		5	1	02/02/09 23:49	JC	4889500
Chlorobenzene	ND		5	1	02/02/09 23:49	JC	4889500

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

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J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

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

Client Sample ID MW-1

Collected: 01/29/2009 17:00 SPL Sample ID: 09011207-04

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND		10	1	02/02/09 23:49	JC	4889500
Chloroform	ND		5	1	02/02/09 23:49	JC	4889500
Chloromethane	ND		10	1	02/02/09 23:49	JC	4889500
Dibromochloromethane	ND		5	1	02/02/09 23:49	JC	4889500
Dibromomethane	ND		5	1	02/02/09 23:49	JC	4889500
Dichlorodifluoromethane	ND		10	1	02/02/09 23:49	JC	4889500
Ethylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
Hexachlorobutadiene	ND		5	1	02/02/09 23:49	JC	4889500
Isopropylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
Methyl tert-butyl ether	ND		5	1	02/02/09 23:49	JC	4889500
Methylene chloride	ND		5	1	02/02/09 23:49	JC	4889500
Naphthalene	ND		5	1	02/02/09 23:49	JC	4889500
n-Butylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
n-Propylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
sec-Butylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
Styrene	ND		5	1	02/02/09 23:49	JC	4889500
tert-Butylbenzene	ND		5	1	02/02/09 23:49	JC	4889500
Tetrachloroethene	ND		5	1	02/02/09 23:49	JC	4889500
Toluene	ND		5	1	02/02/09 23:49	JC	4889500
Trichloroethene	ND		5	1	02/02/09 23:49	JC	4889500
Trichlorofluoromethane	ND		5	1	02/02/09 23:49	JC	4889500
Vinyl acetate	ND		10	1	02/02/09 23:49	JC	4889500
Vinyl chloride	ND		2	1	02/02/09 23:49	JC	4889500
cis-1,2-Dichloroethene	ND		5	1	02/02/09 23:49	JC	4889500
cis-1,3-Dichloropropene	ND		5	1	02/02/09 23:49	JC	4889500
m,p-Xylene	ND		5	1	02/02/09 23:49	JC	4889500
o-Xylene	ND		5	1	02/02/09 23:49	JC	4889500
trans-1,2-Dichloroethene	ND		5	1	02/02/09 23:49	JC	4889500
trans-1,3-Dichloropropene	ND		5	1	02/02/09 23:49	JC	4889500
1,2-Dichloroethene (total)	ND		5	1	02/02/09 23:49	JC	4889500
Xylenes, Total	ND		5	1	02/02/09 23:49	JC	4889500
Surr: 1,2-Dichloroethane-d4	96.0		% 62-130	1	02/02/09 23:49	JC	4889500
Surr: 4-Bromofluorobenzene	102		% 70-130	1	02/02/09 23:49	JC	4889500
Surr: Toluene-d8	96.0		% 74-122	1	02/02/09 23:49	JC	4889500

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>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 Duplicate

Collected: 01/29/2009 17:20

SPL Sample ID: 09011207-05

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
Benzene	ND		5	1	02/03/09 18:33	JC	4891670
Ethylbenzene	ND		5	1	02/03/09 18:33	JC	4891670
Toluene	ND		5	1	02/03/09 18:33	JC	4891670
m,p-Xylene	ND		5	1	02/03/09 18:33	JC	4891670
o-Xylene	ND		5	1	02/03/09 18:33	JC	4891670
Xylenes, Total	ND		5	1	02/03/09 18:33	JC	4891670
Surr: 1,2-Dichloroethane-d4	98.0	%	62-130	1	02/03/09 18:33	JC	4891670
Surr: 4-Bromofluorobenzene	100	%	70-130	1	02/03/09 18:33	JC	4891670
Surr: Toluene-d8	96.0	%	74-122	1	02/03/09 18:33	JC	4891670

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

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J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

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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 Trip Blank

Collected: 01/30/2009 0:00

SPL Sample ID: 09011207-06

Site: Albuquerque, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B				MCL	SW8260B	Units: ug/L	
Benzene	ND		5	1	02/03/09 19:00	JC	4891671
Ethylbenzene	ND		5	1	02/03/09 19:00	JC	4891671
Toluene	ND		5	1	02/03/09 19:00	JC	4891671
m,p-Xylene	ND		5	1	02/03/09 19:00	JC	4891671
o-Xylene	ND		5	1	02/03/09 19:00	JC	4891671
Xylenes, Total	ND		5	1	02/03/09 19:00	JC	4891671
Surr: 1,2-Dichloroethane-d4	94.0		% 62-130	1	02/03/09 19:00	JC	4891671
Surr: 4-Bromofluorobenzene	100		% 70-130	1	02/03/09 19:00	JC	4891671
Surr: Toluene-d8	96.0		% 74-122	1	02/03/09 19:00	JC	4891671

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>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

Conoco Phillips
COP Faye-Burdette

Analysis: Diesel Range Organics
Method: SW8015B

WorkOrder: 09011207
Lab Batch ID: 87654

Method Blank

Samples in Analytical Batch:

RunID: HP_V_090204D-4895669 Units: mg/L
Analysis Date: 02/04/2009 18:31 Analyst: NW
Preparation Date: 02/04/2009 12:00 Prep By: N_M Method SW3510C

Lab Sample ID	Client Sample ID
09011207-01D	MW-2
09011207-02D	MW-4
09011207-03D	MW-3
09011207-04D	MW-1

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	0.10
Surr: n-Pentacosane	84.2	20-150

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP_V_090204D-4895670 Units: mg/L
Analysis Date: 02/04/2009 18:51 Analyst: NW
Preparation Date: 02/04/2009 12:00 Prep By: N_M Method SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	2.00	1.68	83.9	2.00	1.86	92.8	10.1	20	21	130
Surr: n-Pentacosane	0.0500	0.0378	75.6	0.0500	0.0411	82.2	8.4	30	20	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 34

2/17/2009 9:16:19 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Gasoline Range Organics
Method: SW8015B

WorkOrder: 09011207
Lab Batch ID: R264528

Method Blank

RunID: HP_P_090205C-4895531 Units: mg/L
Analysis Date: 02/05/2009 2:36 Analyst: CLJ

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.10
Surr: 1,4-Difluorobenzene	98.3	60-155
Surr: 4-Bromofluorobenzene	107.2	50-158

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01B	MW-2
09011207-02B	MW-4
09011207-03B	MW-3
09011207-04B	MW-1

Laboratory Control Sample (LCS)

RunID: HP_P_090205C-4895529 Units: mg/L
Analysis Date: 02/05/2009 1:38 Analyst: CLJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.858	85.8	42	136
Surr: 1,4-Difluorobenzene	0.100	0.1	100	60	155
Surr: 4-Bromofluorobenzene	0.100	0.106	106	50	158

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

Sample Spiked: 09011211-06
RunID: HP_P_090205C-4895533 Units: mg/L
Analysis Date: 02/05/2009 7:55 Analyst: CLJ

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	0.851	1	1.78	92.4	1	1.75	89.8	1.48	36	22	174
Surr: 1,4-Difluorobenzene	ND	0.1	0.102	102	0.1	0.101	101	0.394	30	60	155
Surr: 4-Bromofluorobenzene	ND	0.1	0.113	113	0.1	0.112	112	1.07	30	50	158

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 35

2/17/2009 9:16:20 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

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

WorkOrder: 09011207
Lab Batch ID: 87710

Method Blank

Samples in Analytical Batch:

RunID: TJA_090211A-4903743 Units: mg/L
Analysis Date: 02/11/2009 14:32 Analyst: S_C
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Aluminum	ND	0.1
Boron	ND	0.1
Calcium	ND	0.1
Iron	ND	0.02
Magnesium	ND	0.1
Manganese	ND	0.005
Potassium	ND	2
Sodium	ND	0.5
Strontium	ND	0.02
Tin	ND	0.05

Laboratory Control Sample (LCS)

RunID: TJA_090211A-4903744 Units: mg/L
Analysis Date: 02/11/2009 14:37 Analyst: S_C
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Aluminum	1.000	1.029	102.9	80	120
Boron	1.000	1.048	104.8	80	120
Calcium	1.000	1.083	108.3	80	120
Iron	1.000	1.066	106.6	80	120
Magnesium	1.000	1.026	102.6	80	120
Manganese	1.000	1.058	105.8	80	120
Potassium	10.00	9.331	93.31	80	120
Sodium	1.000	1.028	102.8	80	120
Strontium	1.000	0.9995	99.95	80	120
Tin	1.000	1.079	107.9	80	120

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

Sample Spiked: 09011215-02
RunID: TJA_090211A-4903746 Units: mg/L
Analysis Date: 02/11/2009 14:46 Analyst: S_C
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

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

WorkOrder: 09011207
Lab Batch ID: 87710

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Aluminum	ND	1	1.181	111.7	1	1.163	109.9	1.511	20	75	125
Boron	ND	1	1.051	105.1	1	1.055	105.5	0.4008	20	75	125
Calcium	39.12	1	39.55	N/C	1	39.16	N/C	N/C	20	75	125
Iron	27.16	1	27.78	N/C	1	27.53	N/C	N/C	20	75	125
Magnesium	10.72	1	11.58	N/C	1	11.51	N/C	N/C	20	75	125
Manganese	0.4507	1	1.494	104.4	1	1.476	102.6	1.211	20	75	125
Potassium	2.957	10	13.33	103.7	10	12.14	91.86	9.285	20	75	125
Sodium	18.16	1	18.88	N/C	1	18.55	N/C	N/C	20	75	125
Strontium	0.1666	1	1.168	100.1	1	1.148	98.18	1.691	20	75	125
Tin	ND	1	1.072	107.2	1	1.038	103.8	3.219	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

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

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 37

2/17/2009 9:16:20 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09011207
Lab Batch ID: 87710A-I

Method Blank

RunID: ICPMS_090213B-4907301 Units: mg/L
Analysis Date: 02/13/2009 22:07 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Arsenic	ND	0.005
Beryllium	ND	0.004
Molybdenum	ND	0.01
Vanadium	ND	0.005

Laboratory Control Sample (LCS)

RunID: ICPMS_090213B-4907302 Units: mg/L
Analysis Date: 02/13/2009 22:12 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.09181	91.81	80	120
Beryllium	0.1000	0.08278	82.78	80	120
Molybdenum	0.1000	0.09657	96.57	80	120
Vanadium	0.1000	0.09421	94.21	80	120

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

Sample Spiked: 09011215-02
RunID: ICPMS_090213B-4907304 Units: mg/L
Analysis Date: 02/13/2009 22:22 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

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	ND	0.1	0.09290	92.90	0.1	0.09484	94.84	2.067	20	75	125
Beryllium	ND	0.1	0.08673	86.73	0.1	0.08573	85.73	1.160	20	75	125
Molybdenum	ND	0.1	0.1026	102.6	0.1	0.1023	102.3	0.2928	20	75	125
Vanadium	ND	0.1	0.09461	93.09	0.1	0.09310	91.58	1.609	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 38

2/17/2009 9:16:20 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09011207
Lab Batch ID: 87710B-I

Method Blank

RunID: ICPMS2_090213A-4907541 Units: mg/L
Analysis Date: 02/13/2009 20:34 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Antimony	ND	0.005

Laboratory Control Sample (LCS)

RunID: ICPMS2_090213A-4907542 Units: mg/L
Analysis Date: 02/13/2009 20:41 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Antimony	0.1000	0.1027	102.7	80	120

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

Sample Spiked: 09011215-02
RunID: ICPMS2_090213A-4907544 Units: mg/L
Analysis Date: 02/13/2009 20:54 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	0.1	0.1055	105.5	0.1	0.1055	105.5	0	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 39

2/17/2009 9:16:21 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09011207
Lab Batch ID: 87710D-I

Method Blank

Samples in Analytical Batch:

RunID: ICPMS_090214A-4908337 Units: mg/L
Analysis Date: 02/14/2009 14:19 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Selenium	ND	0.005

Laboratory Control Sample (LCS)

RunID: ICPMS_090214A-4908338 Units: mg/L
Analysis Date: 02/14/2009 14:24 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Selenium	0.1000	0.08180	81.80	80	120

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

Sample Spiked: 09011215-02
RunID: ICPMS_090214A-4908341 Units: mg/L
Analysis Date: 02/14/2009 14:35 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Selenium	ND	0.1	0.08167	80.55	0.1	0.08122	80.10	0.5525	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 40

2/17/2009 9:16:21 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09011207
Lab Batch ID: 87710-I

Method Blank

RunID: ICPMS2_090212A-4905667 Units: mg/L
Analysis Date: 02/12/2009 17:57 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Barium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.005
Cobalt	ND	0.005
Copper	ND	0.005
Lead	ND	0.005
Manganese	ND	0.005
Nickel	ND	0.005
Silver	ND	0.005
Thallium	ND	0.005
Zinc	ND	0.01

Laboratory Control Sample (LCS)

RunID: ICPMS2_090212A-4905684 Units: mg/L
Analysis Date: 02/12/2009 19:56 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Barium	0.1000	0.09241	92.41	80	120
Cadmium	0.1000	0.1017	101.7	80	120
Chromium	0.1000	0.1052	105.2	80	120
Cobalt	0.1000	0.1045	104.5	80	120
Copper	0.1000	0.1045	104.5	80	120
Lead	0.1000	0.09293	92.93	80	120
Manganese	0.1000	0.1033	103.3	80	120
Nickel	0.1000	0.1077	107.7	80	120
Silver	0.1000	0.1035	103.5	80	120
Thallium	0.1000	0.09098	90.98	80	120
Zinc	0.1000	0.1017	101.7	80	120

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

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 41

2/17/2009 9:16:21 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Metals by Method 6020A, Total
Method: SW6020A

WorkOrder: 09011207
Lab Batch ID: 87710-I

Sample Spiked: 09011215-02
RunID: ICPMS2_090212A-4905669 Units: mg/L
Analysis Date: 02/12/2009 18:17 Analyst: AL_H
Preparation Date: 02/05/2009 9:00 Prep By: AB1 Method SW3010A

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	0.01175	0.1	0.1095	97.75	0.1	0.1111	99.35	1.451	20	75	125
Cadmium	ND	0.1	0.1016	101.6	0.1	0.1083	108.3	6.384	20	75	125
Chromium	0.01052	0.1	0.1163	105.8	0.1	0.1160	105.5	0.2583	20	75	125
Cobalt	0.05032	0.1	0.1552	104.9	0.1	0.1569	106.6	1.089	20	75	125
Copper	0.01112	0.1	0.1200	108.9	0.1	0.1192	108.1	0.6689	20	75	125
Lead	ND	0.1	0.09734	97.34	0.1	0.09904	99.04	1.731	20	75	125
Manganese	0.4144	0.1	0.5314	N/C	0.1	0.5331	N/C	N/C	20	75	125
Nickel	0.01160	0.1	0.1218	110.2	0.1	0.1202	108.6	1.322	20	75	125
Silver	ND	0.1	0.1067	106.7	0.1	0.1077	107.7	0.9328	20	75	125
Thallium	ND	0.1	0.09637	96.37	0.1	0.09718	97.18	0.8370	20	75	125
Zinc	0.04515	0.1	0.1623	117.2	0.1	0.1529	107.8	5.964	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 42

2/17/2009 9:16:21 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Mercury, Total
Method: SW7470A

WorkOrder: 09011207
Lab Batch ID: 87926

Method Blank

RunID: HGLD_090213A-4906735 Units: mg/L
Analysis Date: 02/13/2009 12:46 Analyst: EMB
Preparation Date: 02/13/2009 8:30 Prep By: F_S Method SW7470A

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01E	MW-2
09011207-02E	MW-4
09011207-03E	MW-3
09011207-04E	MW-1

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLD_090213A-4906736 Units: mg/L
Analysis Date: 02/13/2009 12:48 Analyst: EMB
Preparation Date: 02/13/2009 8:30 Prep By: F_S Method SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001932	96.62	80	120

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

Sample Spiked: H0902017800
RunID: HGLD_090213A-4906738 Units: mg/L
Analysis Date: 02/13/2009 12:53 Analyst: EMB
Preparation Date: 02/13/2009 8:30 Prep By: F_S Method SW7470A

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	ND	0.002	0.001935	96.77	0.002	0.001989	99.43	2.707	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 43

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09011207
Lab Batch ID: 87647

Method Blank

RunID: P_090205A-4895179 Units: ug/L
Analysis Date: 02/05/2009 14:29 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01C	MW-2
09011207-02C	MW-4
09011207-03C	MW-3
09011207-04C	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

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09011207 Page 44

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09011207
Lab Batch ID: 87647

Method Blank

RunID: P_090205A-4895179 Units: ug/L
Analysis Date: 02/05/2009 14:29 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	5.0
Dimethyl phthalate	ND	5.0
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	64.0	10-123
Surr: 2-Fluorobiphenyl	60.0	23-116
Surr: 2-Fluorophenol	57.3	16-110
Surr: Nitrobenzene-d5	58.0	21-114
Surr: Phenol-d5	64.0	10-110
Surr: Terphenyl-d14	78.0	22-141

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: P_090205A-4895180 Units: ug/L
Analysis Date: 02/05/2009 17:09 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	39	10	142
1,2-Dichlorobenzene	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	20	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

09011207 Page 45

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09011207
Lab Batch ID: 87647

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: P_090205A-4895180 Units: ug/L
Analysis Date: 02/05/2009 17:09 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	25.0	23.0	92.0	25.0	23.0	92.0	0.0	50	10	251
1,3-Dichlorobenzene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	20	150
1,4-Dichlorobenzene	25.0	21.0	84.0	25.0	20.0	80.0	4.9	45	20	150
2,4,5-Trichlorophenol	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	30	150
2,4,6-Trichlorophenol	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
2,4-Dichlorophenol	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
2,4-Dimethylphenol	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	32	140
2,4-Dinitrophenol	25.0	20.0	80.0	25.0	24.0	96.0	18.2	50	10	160
2,4-Dinitrotoluene	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	30	150
2,6-Dinitrotoluene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
2-Chloronaphthalene	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	30	150
2-Chlorophenol	25.0	21.0	84.0	25.0	21.0	84.0	0.0	40	23	134
2-Methylnaphthalene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	20	170
2-Nitroaniline	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	20	160
2-Nitrophenol	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	29	182
3,3'-Dichlorobenzidine	25.0	11.0	44.0	25.0	14.0	56.0	24.0	50	30	200
3-Nitroaniline	25.0	17.0	68.0	25.0	20.0	80.0	16.2	50	20	160
4,6-Dinitro-2-methylphenol	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	10	160
4-Bromophenyl phenyl ether	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
4-Chloro-3-methylphenol	25.0	23.0	92.0	25.0	23.0	92.0	0.0	42	25	160
4-Chloroaniline	25.0	15.0	60.0	25.0	20.0	80.0	28.6	50	20	160
4-Chlorophenyl phenyl ether	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	25	158
4-Nitroaniline	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	20	160
4-Nitrophenol	25.0	24.0	96.0	25.0	25.0	100	4.1	50	10	132
Acenaphthene	25.0	21.0	84.0	25.0	22.0	88.0	4.7	31	30	150
Acenaphthylene	25.0	23.0	92.0	25.0	23.0	92.0	0.0	50	33	250
Aniline	50.0	30.0	60.0	50.0	36.0	72.0	18.2	50	10	135
Anthracene	25.0	24.0	96.0	25.0	25.0	100	4.1	50	27	133
Benz(a)anthracene	25.0	20.0	80.0	25.0	21.0	84.0	4.9	50	33	143
Benzo(a)pyrene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	17	163
Benzo(b)fluoranthene	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	24	159
Benzo(g,h,i)perylene	25.0	24.0	96.0	25.0	23.0	92.0	4.3	50	30	160
Benzo(k)fluoranthene	25.0	25.0	100	25.0	25.0	100	0.0	50	11	162

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
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E - Estimated Value exceeds calibration curve
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09011207 Page 46

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09011207
Lab Batch ID: 87647

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: P_090205A-4895180 Units: ug/L
Analysis Date: 02/05/2009 17:09 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzoic acid	25.0	39.0	156	25.0	40.0	160	2.5	50	10	400
Benzyl alcohol	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	30	160
Bis(2-chloroethoxy)methane	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	33	184
Bis(2-chloroethyl)ether	25.0	21.0	84.0	25.0	20.0	80.0	4.9	50	12	158
Bis(2-chloroisopropyl)ether	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	20	160
Bis(2-ethylhexyl)phthalate	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	10	158
Butyl benzyl phthalate	25.0	21.0	84.0	25.0	21.0	84.0	0.0	50	30	160
Carbazole	25.0	24.0	96.0	25.0	26.0	104	8.0	50	30	150
Chrysene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	17	168
Dibenz(a,h)anthracene	25.0	23.0	92.0	25.0	23.0	92.0	0.0	50	30	160
Dibenzofuran	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	150
Diethyl phthalate	25.0	23.0	92.0	25.0	23.0	92.0	0.0	50	30	160
Dimethyl phthalate	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	30	160
Di-n-butyl phthalate	25.0	26.0	104	25.0	26.0	104	0.0	50	30	160
Di-n-octyl phthalate	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	20	150
Fluoranthene	25.0	26.0	104	25.0	27.0	108	3.8	50	26	137
Fluorene	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	30	150
Hexachlorobenzene	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	20	150
Hexachlorobutadiene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	20	140
Hexachlorocyclopentadiene	25.0	25.0	100	25.0	27.0	108	7.7	50	10	150
Hexachloroethane	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	10	140
Indeno(1,2,3-cd)pyrene	25.0	23.0	92.0	25.0	23.0	92.0	0.0	50	30	160
Isophorone	25.0	22.0	88.0	25.0	22.0	88.0	0.0	50	21	196
Naphthalene	25.0	22.0	88.0	25.0	23.0	92.0	4.4	50	21	133
Nitrobenzene	25.0	20.0	80.0	25.0	20.0	80.0	0.0	50	20	160
N-Nitrosodi-n-propylamine	25.0	21.0	84.0	25.0	21.0	84.0	0.0	38	30	160
N-Nitrosodiphenylamine	50.0	56.0	112	50.0	58.0	116	3.5	50	30	150
Pentachlorophenol	25.0	21.0	84.0	25.0	22.0	88.0	4.7	50	14	176
Phenanthrene	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	10	140
Phenol	25.0	21.0	84.0	25.0	21.0	84.0	0.0	42	40	132
Pyrene	25.0	18.0	72.0	25.0	18.0	72.0	0.0	38	30	150
Pyridine	50.0	31.0	62.0	50.0	34.0	68.0	9.2	50	10	150
2-Methylphenol	25.0	22.0	88.0	25.0	22.0	88.0	0.0	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
E - Estimated Value exceeds calibration curve
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TNTC - Too numerous to count

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09011207 Page 47

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C

WorkOrder: 09011207
Lab Batch ID: 87647

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: P_090205A-4895180 Units: ug/L
Analysis Date: 02/05/2009 17:09 Analyst: GQ
Preparation Date: 02/04/2009 9:25 Prep By: N_M Method SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
3 & 4-Methylphenol	25.0	23.0	92.0	25.0	24.0	96.0	4.3	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	73.0	97.3	75.0	75.0	100	2.7	30	10	123
Surr: 2-Fluorobiphenyl	50.0	40.0	80.0	50.0	40.0	80.0	0.0	30	23	116
Surr: 2-Fluorophenol	75.0	58.0	77.3	75.0	57.0	76.0	1.7	30	16	110
Surr: Nitrobenzene-d5	50.0	39.0	78.0	50.0	39.0	78.0	0.0	30	21	114
Surr: Phenol-d5	75.0	64.0	85.3	75.0	62.0	82.7	3.2	30	10	110
Surr: Terphenyl-d14	50.0	46.0	92.0	50.0	45.0	90.0	2.2	30	22	141

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09011207 Page 48

2/17/2009 9:16:22 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

Method Blank

RunID: Q_090202A-4889486 Units: ug/L
Analysis Date: 02/02/2009 14:16 Analyst: JC
Preparation Date: 02/02/2009 14:16 Prep By: Method

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01A	MW-2
09011207-02A	MW-4
09011207-03A	MW-3
09011207-04A	MW-1

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	20
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

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

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

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 49

2/17/2009 9:16:23 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

Method Blank

RunID: Q_090202A-4889486 Units: ug/L
Analysis Date: 02/02/2009 14:16 Analyst: JC
Preparation Date: 02/02/2009 14:16 Prep By: Method

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
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	2.0
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	102.0	70-130
Surr: Toluene-d8	104.0	74-122

Laboratory Control Sample (LCS)

RunID: Q_090202A-4889485 Units: ug/L
Analysis Date: 02/02/2009 13:22 Analyst: JC
Preparation Date: 02/02/2009 13:22 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.0	100	71	136
1,1,1-Trichloroethane	20.0	18.0	90.0	66	132
1,1,2,2-Tetrachloroethane	20.0	22.0	110	55	139
1,1,2-Trichloroethane	20.0	21.0	105	70	130
1,1-Dichloroethane	20.0	18.0	90.0	67	131

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 50

2/17/2009 9:16:23 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

Laboratory Control Sample (LCS)

RunID: Q_090202A-4889485 Units: ug/L
Analysis Date: 02/02/2009 13:22 Analyst: JC
Preparation Date: 02/02/2009 13:22 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	21.0	105	71	146
1,1-Dichloropropene	20.0	18.0	90.0	59	138
1,2,3-Trichlorobenzene	20.0	20.0	100	37	155
1,2,3-Trichloropropane	20.0	20.0	100	70	145
1,2,4-Trichlorobenzene	20.0	20.0	100	39	133
1,2,4-Trimethylbenzene	20.0	18.0	90.0	53	147
1,2-Dibromo-3-chloropropane	20.0	16.0	80.0	43	137
1,2-Dibromoethane	20.0	20.0	100	63	126
1,2-Dichlorobenzene	20.0	19.0	95.0	70	130
1,2-Dichloroethane	20.0	17.0	85.0	64	150
1,2-Dichloropropane	20.0	19.0	95.0	76	124
1,3,5-Trimethylbenzene	20.0	17.0	85.0	57	146
1,3-Dichlorobenzene	20.0	19.0	95.0	72	134
1,3-Dichloropropane	20.0	20.0	100	78	130
1,4-Dichlorobenzene	20.0	18.0	90.0	70	130
2,2-Dichloropropane	20.0	16.0	80.0	45	156
2-Butanone	20.0	18.0	90.0	20	235
2-Chloroethyl vinyl ether	20.0	20.0	100	13	179
2-Chlorotoluene	20.0	18.0	90.0	64	122
2-Hexanone	20.0	17.0	85.0	34	182
4-Chlorotoluene	20.0	18.0	90.0	64	142
4-Isopropyltoluene	20.0	18.0	90.0	60	134
4-Methyl-2-pentanone	20.0	18.0	90.0	11	145
Acetone	20.0	20.0	100	13	386
Acrylonitrile	20.0	18.0	90.0	43	194
Benzene	20.0	20.0	100	76	126
Bromobenzene	20.0	18.0	90.0	70	130
Bromochloromethane	20.0	20.0	100	63	131
Bromodichloromethane	20.0	19.0	95.0	77	138
Bromoform	20.0	17.0	85.0	55	129
Bromomethane	20.0	19.0	95.0	58	148
Carbon disulfide	20.0	14.0	70.0	46	146
Carbon tetrachloride	20.0	19.0	95.0	66	137
Chlorobenzene	20.0	20.0	100	67	136

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09011207 Page 51.

2/17/2009 9:16:23 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

Laboratory Control Sample (LCS)

RunID: Q_090202A-4889485 Units: ug/L
Analysis Date: 02/02/2009 13:22 Analyst: JC
Preparation Date: 02/02/2009 13:22 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	19.0	95.0	50	137
Chloroform	20.0	19.0	95.0	70	135
Chloromethane	20.0	17.0	85.0	51	140
Dibromochloromethane	20.0	19.0	95.0	69	127
Dibromomethane	20.0	21.0	105	74	130
Dichlorodifluoromethane	20.0	16.0	80.0	32	161
Ethylbenzene	20.0	21.0	105	67	122
Hexachlorobutadiene	20.0	20.0	100	43	144
Isopropylbenzene	20.0	18.0	90.0	60	135
Methyl tert-butyl ether	40.0	37.0	92.5	48	160
Methylene chloride	20.0	20.0	100	52	143
Naphthalene	20.0	19.0	95.0	24	150
n-Butylbenzene	20.0	19.0	95.0	50	140
n-Propylbenzene	20.0	17.0	85.0	62	137
sec-Butylbenzene	20.0	18.0	90.0	66	126
Styrene	20.0	20.0	100	60	139
tert-Butylbenzene	20.0	17.0	85.0	67	140
Tetrachloroethene	20.0	22.0	110	26	200
Toluene	20.0	20.0	100	70	131
Trichloroethene	20.0	21.0	105	64	137
Trichlorofluoromethane	20.0	21.0	105	46	167
Vinyl acetate	20.0	18.0	90.0	10	193
Vinyl chloride	20.0	18.0	90.0	31	147
cis-1,2-Dichloroethene	20.0	20.0	100	70	142
cis-1,3-Dichloropropene	20.0	18.0	90.0	61	134
m,p-Xylene	40.0	40.0	100	72	150
o-Xylene	20.0	21.0	105	78	141
trans-1,2-Dichloroethene	20.0	21.0	105	67	141
trans-1,3-Dichloropropene	20.0	17.0	85.0	56	136
1,2-Dichloroethene (total)	40	41	100	73	139
Xylenes, Total	60	61	100	72	150
Surr: 1,2-Dichloroethane-d4	50.0	48	96.0	62	130
Surr: 4-Bromofluorobenzene	50.0	52	104	70	130
Surr: Toluene-d8	50.0	51	102	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 52

2/17/2009 9:16:23 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

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

Sample Spiked: 09011139-02
RunID: Q_090202A-4889492 Units: ug/L
Analysis Date: 02/02/2009 16:59 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	500	510	102	500	500	100	1.98	20	35	175
1,1,1-Trichloroethane	ND	500	470	94.0	500	450	90.0	4.35	20	35	175
1,1,2,2-Tetrachloroethane	ND	500	550	110	500	520	104	5.61	20	35	175
1,1,2-Trichloroethane	ND	500	530	106	500	520	104	1.90	20	35	175
1,1-Dichloroethane	230	500	720	98.0	500	700	94.0	2.82	20	35	175
1,1-Dichloroethene	240	500	790	110	500	790	110	0	22	61	145
1,1-Dichloropropene	ND	500	470	94.0	500	460	92.0	2.15	20	35	175
1,2,3-Trichlorobenzene	ND	500	510	102	500	520	104	1.94	20	27	187
1,2,3-Trichloropropane	ND	500	530	106	500	510	102	3.85	20	35	175
1,2,4-Trichlorobenzene	ND	500	480	96.0	500	480	96.0	0	20	34	150
1,2,4-Trimethylbenzene	ND	500	460	92.0	500	460	92.0	0	20	35	175
1,2-Dibromo-3-chloropropane	ND	500	410	82.0	500	410	82.0	0	20	15	175
1,2-Dibromoethane	ND	500	510	102	500	510	102	0	20	35	175
1,2-Dichlorobenzene	ND	500	480	96.0	500	480	96.0	0	20	35	175
1,2-Dichloroethane	3200	500	3600	N/C	500	3500	N/C	N/C	20	35	175
1,2-Dichloropropane	ND	500	470	94.0	500	480	96.0	2.11	20	35	175
1,3,5-Trimethylbenzene	ND	500	440	88.0	500	440	88.0	0	20	35	175
1,3-Dichlorobenzene	ND	500	480	96.0	500	480	96.0	0	20	35	175
1,3-Dichloropropane	ND	500	510	102	500	500	100	1.98	20	35	175
1,4-Dichlorobenzene	ND	500	480	96.0	500	460	92.0	4.26	20	35	175
2,2-Dichloropropane	ND	500	410	82.0	500	410	82.0	0	20	35	175
2-Butanone	ND	1250	500	40.0	1250	460	36.8	8.33	20	10	230
2-Chloroethyl vinyl ether	ND	500	520	104	500	510	102	1.94	20	10	250
2-Chlorotoluene	ND	500	460	92.0	500	450	90.0	2.20	20	31	175
2-Hexanone	ND	1250	450	36.0	1250	440	35.2	2.25	20	10	250
4-Chlorotoluene	ND	500	460	92.0	500	450	90.0	2.20	20	31	175
4-Isopropyltoluene	ND	500	470	94.0	500	470	94.0	0	20	35	175
4-Methyl-2-pentanone	ND	1250	440	35.2	1250	440	35.2	0	20	10	175
Acetone	ND	1250	520	41.6	1250	490	39.2	5.94	20	10	400
Acrylonitrile	ND	500	470	94.0	500	440	88.0	6.59	20	15	250

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

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

Sample Spiked: 09011139-02
RunID: Q_090202A-4889492 Units: ug/L
Analysis Date: 02/02/2009 16:59 Analyst: JC

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	500	510	102	500	500	100	1.98	22	76	127
Bromobenzene	ND	500	480	96.0	500	480	96.0	0	20	35	175
Bromochloromethane	ND	500	510	102	500	500	100	1.98	20	35	175
Bromodichloromethane	ND	500	490	98.0	500	470	94.0	4.17	20	35	175
Bromoform	ND	500	420	84.0	500	410	82.0	2.41	20	35	175
Bromomethane	ND	500	480	96.0	500	470	94.0	2.11	20	35	175
Carbon disulfide	ND	500	390	78.0	500	380	76.0	2.60	20	30	225
Carbon tetrachloride	ND	500	480	96.0	500	480	96.0	0	20	35	175
Chlorobenzene	ND	500	520	104	500	520	104	0	21	70	130
Chloroethane	ND	500	460	92.0	500	440	88.0	4.44	20	35	175
Chloroform	ND	500	500	100	500	480	96.0	4.08	20	35	175
Chloromethane	ND	500	400	80.0	500	400	80.0	0	20	35	175
Dibromochloromethane	ND	500	470	94.0	500	460	92.0	2.15	20	35	175
Dibromomethane	ND	500	520	104	500	510	102	1.94	20	35	175
Dichlorodifluoromethane	ND	500	370	74.0	500	350	70.0	5.56	20	35	175
Ethylbenzene	ND	500	520	104	500	520	104	0	20	35	175
Hexachlorobutadiene	ND	500	490	98.0	500	500	100	2.02	20	43	144
Isopropylbenzene	ND	500	460	92.0	500	450	90.0	2.20	20	35	175
Methyl tert-butyl ether	ND	500	940	188 *	500	920	184 *	2.15	20	35	175
Methylene chloride	ND	500	520	104	500	500	100	3.92	20	35	175
Naphthalene	ND	500	480	96.0	500	480	96.0	0	20	20	210
n-Butylbenzene	ND	500	500	100	500	500	100	0	20	35	175
n-Propylbenzene	ND	500	430	86.0	500	440	88.0	2.30	20	35	175
sec-Butylbenzene	ND	500	450	90.0	500	460	92.0	2.20	20	35	175
Styrene	ND	500	500	100	500	490	98.0	2.02	20	35	175
tert-Butylbenzene	ND	500	440	88.0	500	430	86.0	2.30	20	35	175
Tetrachloroethene	ND	500	600	120	500	600	120	0	20	30	250
Toluene	ND	500	500	100	500	510	102	1.98	24	70	131
Trichloroethene	1100	500	1700	120	500	1700	120	0	21	60	140
Trichlorofluoromethane	ND	500	540	108	500	520	104	3.77	20	17	250
Vinyl acetate	ND	500	440	88.0	500	440	88.0	0	20	10	250
Vinyl chloride	1300	500	1700	80.0	500	1700	80.0	0	20	35	175

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

MI - Matrix Interference

B/V - 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

E - Estimated Value exceeds calibration curve

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

TNTC - Too numerous to count

09011207 Page 54

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2/17/2009 9:16:24 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264177

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

Sample Spiked: 09011139-02
RunID: Q_090202A-4889492 Units: ug/L
Analysis Date: 02/02/2009 16:59 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
cis-1,2-Dichloroethene	190	500	720	106	500	680	98.0	5.71	20	35	175
cis-1,3-Dichloropropene	ND	500	430	86.0	500	420	84.0	2.35	20	35	175
m,p-Xylene	ND	1000	1000	100	1000	1000	100	0	20	35	175
o-Xylene	ND	500	530	106	500	520	104	1.90	20	35	175
trans-1,2-Dichloroethene	ND	500	600	106	500	590	104	1.68	20	35	175
trans-1,3-Dichloropropene	ND	500	390	78.0	500	380	76.0	2.60	20	35	175
1,2-Dichloroethene (total)	261	1000	1320	106	1000	1270	101	3.86	20	35	175
Xylenes, Total	ND	1500	1530	102	1500	1520	101	0.656	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	1250	1200	96.0	1250	1200	96.0	0	30	62	130
Surr: 4-Bromofluorobenzene	ND	1250	1300	104	1250	1300	104	0	30	70	130
Surr: Toluene-d8	ND	1250	1200	96.0	1250	1300	104	8.00	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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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09011207 Page 55

2/17/2009 9:16:24 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

Method Blank

Samples in Analytical Batch:

RunID: Q_090203C-4891437 Units: ug/L
Analysis Date: 02/03/2009 9:57 Analyst: JC
Preparation Date: 02/03/2009 9:57 Prep By: Method

Lab Sample ID Client Sample ID
09011207-05A Duplicate
09011207-06A 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	20
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

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

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

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09011207 Page 56

2/17/2009 9:16:24 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

Method Blank

RunID: Q_090203C-4891437 Units: ug/L
Analysis Date: 02/03/2009 9:57 Analyst: JC
Preparation Date: 02/03/2009 9:57 Prep By: Method

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
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	2.0
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	94.0	62-130
Surr: 4-Bromofluorobenzene	98.0	70-130
Surr: Toluene-d8	100.0	74-122

Laboratory Control Sample (LCS)

RunID: Q_090203C-4891436 Units: ug/L
Analysis Date: 02/03/2009 9:29 Analyst: JC
Preparation Date: 02/03/2009 9:29 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	18.0	90.0	71	136
1,1,1-Trichloroethane	20.0	18.0	90.0	66	132
1,1,2,2-Tetrachloroethane	20.0	20.0	100	55	139
1,1,2-Trichloroethane	20.0	21.0	105	70	130
1,1-Dichloroethane	20.0	20.0	100	67	131

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

Laboratory Control Sample (LCS)

RunID: Q_090203C-4891436 Units: ug/L
Analysis Date: 02/03/2009 9:29 Analyst: JC
Preparation Date: 02/03/2009 9:29 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	23.0	115	71	146
1,1-Dichloropropene	20.0	18.0	90.0	59	138
1,2,3-Trichlorobenzene	20.0	19.0	95.0	37	155
1,2,3-Trichloropropane	20.0	19.0	95.0	70	145
1,2,4-Trichlorobenzene	20.0	18.0	90.0	39	133
1,2,4-Trimethylbenzene	20.0	17.0	85.0	53	147
1,2-Dibromo-3-chloropropane	20.0	15.0	75.0	43	137
1,2-Dibromoethane	20.0	19.0	95.0	63	126
1,2-Dichlorobenzene	20.0	18.0	90.0	70	130
1,2-Dichloroethane	20.0	18.0	90.0	64	150
1,2-Dichloropropane	20.0	18.0	90.0	76	124
1,3,5-Trimethylbenzene	20.0	17.0	85.0	57	146
1,3-Dichlorobenzene	20.0	17.0	85.0	72	134
1,3-Dichloropropane	20.0	20.0	100	78	130
1,4-Dichlorobenzene	20.0	18.0	90.0	70	130
2,2-Dichloropropane	20.0	16.0	80.0	45	156
2-Butanone	20.0	25.0	125	20	235
2-Chloroethyl vinyl ether	20.0	20.0	100	13	179
2-Chlorotoluene	20.0	17.0	85.0	64	122
2-Hexanone	20.0	24.0	120	34	182
4-Chlorotoluene	20.0	17.0	85.0	64	142
4-Isopropyltoluene	20.0	17.0	85.0	60	134
4-Methyl-2-pentanone	20.0	18.0	90.0	11	145
Acetone	20.0	25.0	125	13	386
Acrylonitrile	20.0	18.0	90.0	43	194
Benzene	20.0	20.0	100	76	126
Bromobenzene	20.0	18.0	90.0	70	130
Bromochloromethane	20.0	20.0	100	63	131
Bromodichloromethane	20.0	18.0	90.0	77	138
Bromoform	20.0	16.0	80.0	55	129
Bromomethane	20.0	22.0	110	58	148
Carbon disulfide	20.0	17.0	85.0	46	146
Carbon tetrachloride	20.0	18.0	90.0	66	137
Chlorobenzene	20.0	20.0	100	67	136

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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09011207 Page 58

2/17/2009 9:16:24 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

Laboratory Control Sample (LCS)

RunID: Q_090203C-4891436 Units: ug/L
Analysis Date: 02/03/2009 9:29 Analyst: JC
Preparation Date: 02/03/2009 9:29 Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	21.0	105	50	137
Chloroform	20.0	19.0	95.0	70	135
Chloromethane	20.0	20.0	100	51	140
Dibromochloromethane	20.0	18.0	90.0	69	127
Dibromomethane	20.0	20.0	100	74	130
Dichlorodifluoromethane	20.0	20.0	100	32	161
Ethylbenzene	20.0	19.0	95.0	67	122
Hexachlorobutadiene	20.0	18.0	90.0	43	144
Isopropylbenzene	20.0	17.0	85.0	60	135
Methyl tert-butyl ether	40.0	39.0	97.5	48	160
Methylene chloride	20.0	22.0	110	52	143
Naphthalene	20.0	18.0	90.0	24	150
n-Butylbenzene	20.0	18.0	90.0	50	140
n-Propylbenzene	20.0	16.0	80.0	62	137
sec-Butylbenzene	20.0	16.0	80.0	66	126
Styrene	20.0	19.0	95.0	60	139
tert-Butylbenzene	20.0	16.0	80.0	67	140
Tetrachloroethene	20.0	21.0	105	26	200
Toluene	20.0	19.0	95.0	70	131
Trichloroethene	20.0	20.0	100	64	137
Trichlorofluoromethane	20.0	22.0	110	46	167
Vinyl acetate	20.0	18.0	90.0	10	193
Vinyl chloride	20.0	20.0	100	31	147
cis-1,2-Dichloroethene	20.0	20.0	100	70	142
cis-1,3-Dichloropropene	20.0	17.0	85.0	61	134
m,p-Xylene	40.0	38.0	95.0	72	150
o-Xylene	20.0	20.0	100	78	141
trans-1,2-Dichloroethene	20.0	22.0	110	67	141
trans-1,3-Dichloropropene	20.0	16.0	80.0	56	136
1,2-Dichloroethene (total)	40	42	100	73	139
Xylenes, Total	60	58	97	72	150
Surr: 1,2-Dichloroethane-d4	50.0	47	94.0	62	130
Surr: 4-Bromofluorobenzene	50.0	51	102	70	130
Surr: Toluene-d8	50.0	51	102	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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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09011207 Page 59

2/17/2009 9:16:25 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

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

Sample Spiked: 09011126-02
RunID: Q_090203C-4893162 Units: ug/L
Analysis Date: 02/03/2009 11:47 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	20	19.0	95.0	20	18.0	90.0	5.41	20	35	175
1,1,1-Trichloroethane	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,1,2,2-Tetrachloroethane	ND	20	21.0	105	20	20.0	100	4.88	20	35	175
1,1,2-Trichloroethane	ND	20	21.0	105	20	20.0	100	4.88	20	35	175
1,1-Dichloroethane	ND	20	20.0	100	20	20.0	100	0	20	35	175
1,1-Dichloroethene	ND	20	22.0	110	20	22.0	110	0	22	61	145
1,1-Dichloropropene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,2,3-Trichlorobenzene	ND	20	19.0	95.0	20	18.0	90.0	5.41	20	27	187
1,2,3-Trichloropropane	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
1,2,4-Trichlorobenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	34	150
1,2,4-Trimethylbenzene	ND	20	10.0	50.0	20	10.0	50.0	0	20	35	175
1,2-Dibromo-3-chloropropane	ND	20	15.0	75.0	20	16.0	80.0	6.45	20	15	175
1,2-Dibromoethane	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
1,2-Dichlorobenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,2-Dichloroethane	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,2-Dichloropropane	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
1,3,5-Trimethylbenzene	ND	20	10.0	50.0	20	10.0	50.0	0	20	35	175
1,3-Dichlorobenzene	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	35	175
1,3-Dichloropropane	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
1,4-Dichlorobenzene	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	35	175
2,2-Dichloropropane	ND	20	17.0	85.0	20	16.0	80.0	6.06	20	35	175
2-Butanone	ND	50	16.0	32.0	50	16.0	32.0	0	20	10	230
2-Chloroethyl vinyl ether	ND	20	0	0 *	20	0	0 *	0	20	10	250
2-Chlorotoluene	ND	20	17.0	85.0	20	17.0	85.0	0	20	31	175
2-Hexanone	ND	50	15.0	30.0	50	15.0	30.0	0	20	10	250
4-Chlorotoluene	ND	20	17.0	85.0	20	17.0	85.0	0	20	31	175
4-Isopropyltoluene	ND	20	16.0	80.0	20	15.0	75.0	6.45	20	35	175
4-Methyl-2-pentanone	ND	50	17.0	34.0	50	17.0	34.0	0	20	10	175
Acetone	ND	50	15.0	30.0	50	15.0	30.0	0	20	10	400
Acrylonitrile	ND	20	18.0	90.0	20	19.0	95.0	5.41	20	15	250

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

09011207 Page 60

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

2/17/2009 9:16:25 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

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

Sample Spiked: 09011126-02
RunID: Q_090203C-4893162 Units: ug/L
Analysis Date: 02/03/2009 11:47 Analyst: JC

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	21.0	105	20	20.0	100	4.88	22	76	127
Bromobenzene	ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
Bromochloromethane	ND	20	21.0	105	20	21.0	105	0	20	35	175
Bromodichloromethane	ND	20	19.0	95.0	20	18.0	90.0	5.41	20	35	175
Bromoform	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
Bromomethane	ND	20	21.0	105	20	22.0	110	4.65	20	35	175
Carbon disulfide	ND	20	18.0	90.0	20	18.0	90.0	0	20	30	225
Carbon tetrachloride	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
Chlorobenzene	ND	20	20.0	100	20	19.0	95.0	5.13	21	70	130
Chloroethane	ND	20	21.0	105	20	21.0	105	0	20	35	175
Chloroform	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
Chloromethane	ND	20	20.0	100	20	22.0	110	9.52	20	35	175
Dibromochloromethane	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	35	175
Dibromomethane	ND	20	20.0	100	20	20.0	100	0	20	35	175
Dichlorodifluoromethane	ND	20	23.0	115	20	24.0	120	4.26	20	35	175
Ethylbenzene	ND	20	19.0	95.0	20	18.0	90.0	5.41	20	35	175
Hexachlorobutadiene	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	43	144
Isopropylbenzene	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
Methyl tert-butyl ether	ND	20	38.0	190 *	20	39.0	195 *	2.60	20	35	175
Methylene chloride	ND	20	21.0	105	20	22.0	110	4.65	20	35	175
Naphthalene	ND	20	17.0	85.0	20	17.0	85.0	0	20	20	210
n-Butylbenzene	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	35	175
n-Propylbenzene	ND	20	16.0	80.0	20	16.0	80.0	0	20	35	175
sec-Butylbenzene	ND	20	17.0	85.0	20	16.0	80.0	6.06	20	35	175
Styrene	ND	20	7.00	35.0	20	6.00	30.0 *	15.4	20	35	175
tert-Butylbenzene	ND	20	17.0	85.0	20	16.0	80.0	6.06	20	35	175
Tetrachloroethene	ND	20	20.0	100	20	20.0	100	0	20	30	250
Toluene	ND	20	19.0	95.0	20	18.0	90.0	5.41	24	70	131
Trichloroethene	ND	20	20.0	100	20	20.0	100	0	21	60	140
Trichlorofluoromethane	ND	20	24.0	120	20	23.0	115	4.26	20	17	250
Vinyl acetate	ND	20	15.0	75.0	20	16.0	80.0	6.45	20	10	250
Vinyl chloride	ND	20	20.0	100	20	21.0	105	4.88	20	35	175

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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09011207 Page 61

2/17/2009 9:16:25 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 09011207
Lab Batch ID: R264283

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

Sample Spiked: 09011126-02
RunID: Q_090203C-4893162 Units: ug/L
Analysis Date: 02/03/2009 11:47 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
cis-1,2-Dichloroethene	ND	20	21.0	105	20	21.0	105	0	20	35	175
cis-1,3-Dichloropropene	ND	20	18.0	90.0	20	17.0	85.0	5.71	20	35	175
m,p-Xylene	ND	40	33.0	82.5	40	31.0	77.5	6.25	20	35	175
o-Xylene	ND	20	17.0	85.0	20	17.0	85.0	0	20	35	175
trans-1,2-Dichloroethene	ND	20	21.0	105	20	21.0	105	0	20	35	175
trans-1,3-Dichloropropene	ND	20	15.0	75.0	20	15.0	75.0	0	20	35	175
1,2-Dichloroethene (total)	ND	40	42.0	105	40	42.0	105	0	20	35	175
Xylenes, Total	ND	60	50	83	60	48	80	4.1	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	50	48	96.0	50	46.0	92.0	4.26	30	62	130
Surr: 4-Bromofluorobenzene	ND	50	52	104	50	51.0	102	1.94	30	70	130
Surr: Toluene-d8	ND	50	49	98.0	50	48.0	96.0	2.06	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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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09011207 Page 62

2/17/2009 9:16:25 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: pH
Method: SM4500-H B

WorkOrder: 09011207
Lab Batch ID: R264115

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Laboratory Control Sample (LCS)

RunID: WET_090131W-4888678 Units: pH Units
Analysis Date: 01/31/2009 14:45 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.020	100.3	98	102

Sample Duplicate

Original Sample: 09011207-01
RunID: WET_090131W-4888679 Units: pH Units
Analysis Date: 01/31/2009 14:45 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	7.15	7.16	0.140	5

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09011207 Page 63

2/17/2009 9:16:25 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Specific Conductance @ 25 C
Method: SM2510B

WorkOrder: 09011207
Lab Batch ID: R264120

Method Blank

RunID: WET_090202G-4888708 Units: umhos/cm
Analysis Date: 02/02/2009 10:55 Analyst: PAC

Analyte	Result	Rep Limit
Specific Conductance	ND	10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Laboratory Control Sample (LCS)

RunID: WET_090202G-4888710 Units: umhos/cm
Analysis Date: 02/02/2009 10:55 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Specific Conductance	1413	1291	91.37	90	110

Sample Duplicate

Original Sample: 09011207-01
RunID: WET_090202G-4888711 Units: umhos/cm
Analysis Date: 02/02/2009 10:55 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Specific Conductance	903	901	0.222	10

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
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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09011207 Page 64

2/17/2009 9:16:26 AM



Quality Control Report

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

Conoco Phillips
COP Faye-Burdette

Analysis: Total Dissolved Solids
Method: SM2540 C

WorkOrder: 09011207
Lab Batch ID: R264215

Method Blank

RunID: WET_090202V-4890117 Units: mg/L
Analysis Date: 02/02/2009 16:00 Analyst: CFS

Analyte	Result	Rep Limit
Total Dissolved Solids (Residue, Filterable)	ND	10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: WET_090202V-4890120 Units: mg/L
Analysis Date: 02/02/2009 16:00 Analyst: CFS

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue, Filterable)	200.0	202.0	101.0	200.0	199.0	99.50	1.5	10	95	107

Sample Duplicate

Original Sample: 09011207-01
RunID: WET_090202V-4890125 Units: mg/L
Analysis Date: 02/02/2009 16:00 Analyst: CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterable)	640	638	0.313	10

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 65

2/17/2009 9:16:26 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Hardness, Total (Titrimetric, EDTA)
Method: SM2340C

WorkOrder: 09011207
Lab Batch ID: R264241

Method Blank

RunID: WET_090203B-4890718 Units: mg/L
Analysis Date: 02/03/2009 11:30 Analyst: PAC

Analyte	Result	Rep Limit
Hardness (As CaCO3)	ND	5.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Laboratory Control Sample (LCS)

RunID: WET_090203B-4890720 Units: mg/L
Analysis Date: 02/03/2009 11:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Hardness (As CaCO3)	176.0	175.0	99.43	85	115

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

Sample Spiked: 09011208-01
RunID: WET_090203B-4890727 Units: mg/L
Analysis Date: 02/03/2009 11:30 Analyst: PAC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Hardness (As CaCO3)	440.0	500	920.0	96.00	500	920.0	96.00	0	20	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 66

2/17/2009 9:16:26 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Alkalinity (as CaCO₃), Total
Method: SM2320B

WorkOrder: 09011207
Lab Batch ID: R264432

Method Blank

RunID: WET_090205B-4894034 Units: mg/L
Analysis Date: 02/05/2009 8:30 Analyst: PAC

Analyte	Result	Rep Limit
Alkalinity, Total (As CaCO ₃)	ND	2.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Laboratory Control Sample (LCS)

RunID: WET_090205B-4894036 Units: mg/L
Analysis Date: 02/05/2009 8:30 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Alkalinity, Total (As CaCO ₃)	38.70	39.00	100.8	90	110

Sample Duplicate

Original Sample: 09011207-01
RunID: WET_090205B-4894038 Units: mg/L
Analysis Date: 02/05/2009 8:30 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO ₃)	204	204	0	20

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 67

2/17/2009 9:16:26 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09011207
Lab Batch ID: R264634

Method Blank

RunID: IC2_090131A-4897194 Units: mg/L
Analysis Date: 01/31/2009 15:10 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Analyte	Result	Rep Limit
Nitrogen,Nitrate (As N)	ND	0.50
Nitrogen,Nitrite (As N)	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC2_090131A-4897195 Units: mg/L
Analysis Date: 01/31/2009 15:27 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	10.00	9.454	94.54	90	110
Nitrogen,Nitrite (As N)	10.00	9.830	98.30	90	110

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

Sample Spiked: 09011208-04
RunID: IC2_090131A-4897202 Units: mg/L
Analysis Date: 01/31/2009 17:27 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen,Nitrate (As N)	ND	10	8.872	88.72	10	9.372	93.72	5.481	20	80	120
Nitrogen,Nitrite (As N)	ND	10	9.175	91.75	10	9.669	96.69	5.243	20	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 68

2/17/2009 9:16:27 AM



Quality Control Report

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

Conoco Phillips COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09011207
Lab Batch ID: R264857

Method Blank

RunID: IC2_090131B-4901024 Units: mg/L
Analysis Date: 01/31/2009 15:10 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Analyte	Result	Rep Limit
Bromide	ND	0.50
Chloride	ND	0.50
Fluoride	ND	0.50
Ortho-phosphate (As P)	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC2_090131B-4901025 Units: mg/L
Analysis Date: 01/31/2009 15:27 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	10.00	9.550	95.50	85	115
Chloride	10.00	10.04	100.4	85	115
Fluoride	10.00	9.901	99.01	85	115
Ortho-phosphate (As P)	10.00	9.370	93.70	85	115

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

Sample Spiked: 09011208-04
RunID: IC2_090131B-4901032 Units: mg/L
Analysis Date: 01/31/2009 17:27 Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Bromide	ND	10	9.022	90.22	10	9.475	94.75	4.898	20	80	120
Chloride	12.39	10	22.86	104.7	10	23.43	110.5	2.497	20	80	120
Fluoride	0.5130	10	9.830	93.17	10	10.34	98.24	5.028	20	80	120
Ortho-phosphate (As P)	ND	10	8.591	85.91	10	9.094	90.94	5.688	20	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09011207 Page 69

2/17/2009 9:16:27 AM



Quality Control Report

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

Conoco Phillips

COP Faye-Burdette

Analysis: Ion Chromatography
Method: E300.0

WorkOrder: 09011207
Lab Batch ID: R264859

Method Blank

RunID: IC2_090209A-4901060 Units: mg/L
Analysis Date: 02/09/2009 17:30 Analyst: BDG

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09011207-01F	MW-2
09011207-02F	MW-4
09011207-03F	MW-3
09011207-04F	MW-1

Analyte	Result	Rep Limit
Chloride	ND	0.50
Sulfate	ND	0.50

Laboratory Control Sample (LCS)

RunID: IC2_090209A-4901061 Units: mg/L
Analysis Date: 02/09/2009 17:47 Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	10.62	106.2	85	115
Sulfate	10.00	10.09	100.9	85	115

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

Sample Spiked: 09011207-01
RunID: IC2_090209A-4901088 Units: mg/L
Analysis Date: 02/10/2009 0:20 Analyst: BDG

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	ND	500	440.7	84.64	500	463.2	89.15	4.986	20	80	120
Sulfate	270.7	500	707.6	87.38	500	732.5	92.37	3.461	20	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - 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
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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09011207 Page 70

2/17/2009 9:16:27 AM

*Sample Receipt Checklist
And
Chain of Custody*



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

Sample Receipt Checklist

Workorder:	09011207	Received By:	L_C
Date and Time Received:	1/31/2009 11:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	3.5°C	Chilled by:	Water Ice

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

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:



Page 1 of 3

Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

Project Name: Faye Burdette

P.O. Number

Sampled By:

Signature

Email: kelly.blanchard@tetratech.com

State: NM

Zip Code: 87110

SPL Workorder Number: 09011207

REQUESTED ANALYSIS

Preservative Type	Bottle Type	# of Containers	Volatile Organics by 8260	Semivolatile Org by 8270	TPH - DRO	TPH - GRO	Total Metals	General Chemistry ()
3	1	2	X					
3	4	2		X				
3	7	2			X			
3	1	2				X		
3	3	2					X	
3	3	2						X
3	1	2	X					
3	4	2		X				
3	7	2			X			
3	1	2				X		

Intact? ☒ Y ☐ N

Temperature: 35.5

Bottle Types: 1: 3-40ml Vials 2: 1L Glass 3: 1L Plastic 4: 1L Amber Glass 5: 8oz Plastic

Preservative Types: 1: NONE 2: HNO3 3: HCL 4: H2SO4

Received by:

Date

Time

1-30-09 1500

Received by:

Date

Time

1-31-09 11:00

Received by:

Date

Time

1-31-09 11:00

Page 1 of 3



Page 2 of 3

Chain of Custody Record

Client: Tetra Tech/ Conoco Phillips

Attention: Kelly Blanchard/Tetra Tech

Phone: 505-237-8440

Address: 6121 Indian School Road, NE Ste. 200

City: Albuquerque

State: NM

Zip Code: 87110

Project Name: Faye Burdette

P.O. Number:

Sampled By:

Signature

Email: kelly.blanchard@tetratech.com

SPL Workorder Number: 09011207

REQUESTED ANALYSIS

Sample ID	Collected		Sample Type			Matrix		Bottle Type	# of Containers	Volatile Organics by 8260	Semi-volatile Org by 8270	TPH - DRO	TPH - GRO	Total Metals	General Chemistry (*)
	Date	Time	Comp	Grab	Water	Soil									
MW-4	1-29-09	1500		X	X	X		3	2					X	
MW-4	1-29-09	1500		X	X	X		3	1						X
MW-3	1-29-09	1625		X	X	X		4	3	X					
MW-3	1-29-09	1625		X	X	X		4	3		X				
MW-3	1-29-09	1625		X	X	X		1	3			X			
MW-3	1-29-09	1625		X	X	X		3	2				X		
MW-3	1-29-09	1625		X	X	X		3	1					X	
MW-1	1-29-09	1700		X	X	X		3	2	X					

Turnaround Time Requirements

24 hr () 48 hr ()

72 hr () 5 wday ()

10 wday - Standard ()

Relinquished by: *Kelly Blanchard*

Relinquished by:

Relinquished by:

Remarks: (*) Alkalinity, Bromide, Chloride, Fluoride, orthophosphate, Sulfate, Nitrate, pH, Specific Conductance, TDS, Hardness

Bottle Types: 1: 3-40ml Vials 2: 1L Glass 3: 1L Plastic 4: 1L Amber Glass 5: 8oz Plastic

Preservative Types: 1: NONE 2: HNO3 3: HCL 4: H2SO4

Received by:

Date

Time

Received by:

Date

Time

Received by: *Kelly Blanchard*

Received by:

Received by:

